



November 7, 2008

DOCKET	
07-AFC-7	
DATE	NOV 07 2008
RECD.	NOV 12 2008

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Mr. Bob Worl  
Siting Program Manager  
California Energy Commission  
1516 Ninth Street, MS40  
Sacramento, CA 95814-5512

Re: Kings River Conservation District Community Power Plant Application for Certification (07-AFC-7) – Historical Resources Inventory and Evaluation Report for the Natural Gas Pipeline

Dear Mr. Worl:

Kings River Conservation District (KRCOD) hereby submits the attached Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant (KRCOD CPP) Natural Gas Pipeline. The attached document assesses whether architectural resources crossed by the proposed gas pipeline should be considered historical resources under the California Environmental Quality Act.

As General Manager of KRCOD, I hereby attest, under penalty of perjury, that the attached reports are true and accurate to the best of my knowledge. Please contact our consultant, Amy Cuellar of Navigant Consulting at (916) 631-3211 if you have any questions.

Sincerely,

David Orth  
General Manager

DO/mc

File No. 536.02.09  
L08-0309

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Historical Resources Inventory and Evaluation Report

for the

Kings River Conservation District Community Power Plant Project  
Fresno County

Supplemental Report for the Gas Pipeline Route

**Prepared for:**

Navigant Consulting  
3100 Zinfandel Drive, Suite 600  
Rancho Cordova, California 95670

**Prepared by:**

JRP Historical Consulting, LLC  
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Davis, California 95618

**October 2008**

## SUMMARY OF FINDINGS

Navigant Consulting contracted with JRP Historical Consulting (JRP) to prepare this Historical Resources Inventory and Evaluation Report on behalf of the Kings River Conservation District (KRCD). This report is a component of the environmental compliance documentation that KRCD is preparing for its Community Power Plant project, which will be located on a parcel just west of the City of Parlier (**Figure 1**). The purpose of this document is to comply with the California Environmental Quality Act (CEQA) as it pertains to historical resources, and to assess whether the architectural resources located within the project Study Area should be considered historical resources for the purposes of CEQA; that is, whether they are listed in, determined eligible for, or appear eligible for listing in the California Register of Historic Resources (CRHR). The properties are also evaluated for National Register of Historic Places (NRHP) eligibility, the requirements for which form the basis of CRHR eligibility. This study was conducted in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code.

This is a supplemental report to two previous environmental compliance reports prepared for the Kings River Conservation District Community Power Plant (KRCD CPP) project:

- Pacific Legacy, Inc., “Archaeological Survey Report for the Kings River Conservation District Community Power Plant, Fresno, Kings, and Tulare Counties, California,” March 2007 (Pacific Legacy 2007); and
- JRP Historical Consulting, LLC, “Historical Resources Inventory and Evaluation Report, Kings River Conservation District Community Power Plant Project, Fresno County,” July 2007.

This supplemental report will update the 2007 reports by inventorying and evaluating 16 irrigation canals along the proposed gas pipeline route through rural southern Fresno County and northern Tulare County (**Table 1**). As part of the 2007 study, Pacific Legacy recorded these canals on DPR 523 Primary Record forms and assigned each a map reference number; the canals were not evaluated at that time because the project was designed to avoid these potential resources. Changes in project design since the 2007 study have introduced the possibility that the proposed gas pipeline may physically impact the 16 historic-period irrigation canals within the survey corridor (Study Area). For the current study, then, JRP has revisited these potential historical resources and evaluated them for California Register and National Register eligibility. The update DPR 523 forms are attached here as **Appendix B**. A map of the Study Area (**Appendix A, Figure 2**) shows the map reference numbers assigned to each of the individual resources studied.

Under CEQA, changes to a historical resource could be considered a significant impact on the environment. This report concludes that none of the 16 resources evaluated herein appear to meet the criteria for listing in the CRHR and thus are not historical resources for the purposes of CEQA. This project will not affect any potential cultural resources; therefore, avoidance or mitigation measures will not be necessary.

**Table 1. Study Population: Canal Features Evaluated for this Study**  
 (Arranged by Map Reference Number)

Map Reference Number	Canal Name	County	Year Built	Eligible for CRHR or NRHP
PLI 14	Harp Ditch	Fresno	ca. 1876	No
PLI 15 / PLI 50	Cole Slough Canal	Fresno	ca. 1890	No
PLI 20	Selma Colony Ditch	Fresno	ca. 1890	No
PLI 30	Ward Drainage Canal	Fresno	1914	No
PLI 33	Kingsburg Branch Canal	Fresno	1878	No
PLI 37	Santa Fe Canal	Fresno	ca. 1900	No
PLI 55	West Section 20 Ditch	Tulare	1905	No
PLI 63	Caesar Canal	Tulare	ca. 1892	No
PLI 67	McClanahan Ditch	Tulare	1884	No
PLI 70	Grove Ditch	Tulare	1884 - 1891	No
PLI 77	Cross Creek Wasteway	Tulare	1901 - 1921	No
PLI 81	Goshen Ditch	Tulare	1874	No
PLI 85	Mill Creek Ditch	Tulare	1862	No
PLI 88	North Fork Persian Ditch	Tulare	1854	No
P-54-002171	Traver Canal	Tulare	1884	No
P-54-002172	Banks Ditch	Tulare	1893 - 1894	No

**TABLE OF CONTENTS**

SUMMARY OF FINDINGS ..... i

1. PROJECT DESCRIPTION..... 1

2. RESEARCH AND FIELD METHODS ..... 3

3. HISTORICAL OVERVIEW ..... 5

    3.1. Period of Pioneer Settlement of the Study Area ..... 5

    3.2. Irrigation in Southern Fresno County ..... 6

    3.3. Irrigation in Northern Tulare County..... 10

4. DESCRIPTION OF RESOURCES ..... 16

    4.1. Characterization of Resources within the Study Area ..... 16

5. FINDINGS AND CONCLUSIONS ..... 18

    5.1. Evaluation Criteria ..... 18

    5.2. Evaluation of Significance ..... 20

6. PREPARERS’ QUALIFICATIONS ..... 23

7. BIBLIOGRAPHY ..... 24

**ATTACHMENTS**

Appendix A: Figures

Appendix B: DPR 523 Forms

## 1. PROJECT DESCRIPTION

Kings River Conservation District (KRCD) proposes to develop the KRCD Community Power Plant (CPP), a nominal 565-megawatt (MW) natural gas-fired combined-cycle base load power plant. The plant will be located near the City of Parlier, in Fresno County, on an approximately 32-acre project site (**Figure 1**). Natural gas for the KRCD CPP will be provided by a new approximately 26-mile long, 20-inch diameter underground pipeline interconnection to the Southern California Gas Company (SCG) Line 7000 near the City of Visalia, California. The new gas pipeline will primarily follow existing roads and be located in the public right-of-way. Five construction staging areas have also been identified for use during construction of the gas pipeline, each with an approximate size of 200 feet by 200 feet. The KRCD CPP project site and associated linear facilities within the Study Area for this project area are shown on **Figure 2**.

JRP Historical Consulting, LLC (JRP), under contract with Navigant Consulting, has prepared this supplemental Historical Resources Inventory and Evaluation Report on behalf of KRCD to evaluate 16 canal features located along the proposed gas pipeline route. This report is a component of the environmental compliance documentation that KRCD is preparing for its Community Power Plant project. The purpose of this document is to comply with the California Environmental Quality Act (CEQA) as it pertains to historical resources, and to assess whether the architectural resources located within the project Study Area should be considered historical resources for the purposes of CEQA; that is, whether they are listed in, determined eligible for, or appear eligible for listing in the California Register of Historic Resources (CRHR). The properties are also evaluated for National Register of Historic Places (NRHP) eligibility, the requirements for which form the basis of CRHR eligibility. This study was conducted in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code.

In March 2007, Pacific Legacy produced “Archaeological Survey Report for the Kings River Conservation District Community Power Plant, Fresno, Kings, and Tulare Counties, California” (Pacific Legacy 2007). As part of that study, Pacific Legacy identified and recorded 16 irrigation canals along the proposed gas pipeline route that extends south from the plant site in Fresno County to the City of Visalia in Tulare County. Pacific Legacy assigned each of these canal features a field designation number and recorded it on a Primary Record form (attached to the original report as Appendix C). Separately, JRP Historical Consulting, LLC (JRP) prepared “Historical Resources Inventory and Evaluation Report, Kings River Conservation District Community Power Plant Project, Fresno County,” July 2007. As part of this report, JRP evaluated five irrigation canals within the Study Area for the project plant site, all of which are components of the Consolidated Irrigation District system of irrigation and drainage canals, branches, and laterals (attached to the original report as Appendix B).

JRP did not, in the 2007 report, inventory and evaluate the 16 irrigation canals identified by Pacific Legacy along the gas pipeline route because the project was designed to avoid these potential resources. Changes in project design since the 2007 study have introduced the possibility that the proposed gas pipeline may physically impact the 16 historic-period irrigation canals within the survey corridor (Study Area). Under CEQA, changes to a historical resource could be considered a significant impact on the environment. This supplemental report will build upon and expand the methods, historic contexts, and findings presented in JRP and Pacific Legacy's 2007 reports; will update the original DPR 523 forms for the 16 subject canals; and will evaluate each feature for California Register and National Register eligibility to determine if it is a historical resource for the purposes of CEQA.

## 2. RESEARCH AND FIELD METHODS

At the outset of the study, JRP consulted standard sources of information that list and identify known and potential historical resources to determine whether any of the canals in the Study Area had been previously evaluated. To identify locally-recognized landmarks, JRP examined the *Index of Historic Properties in Fresno County*, a listing of properties of local significance administered by the Fresno County Historical Landmarks and Records Advisory Commission, current through April 2007. The index is on file in the California History & Genealogy Room, Central Branch of the Fresno County Public Library. Review of the index did not identify any resources associated with the irrigation systems. JRP also examined the list of historical markers placed by the Tulare County Historical Society. The list is available on the organization's web site. No resources associated with the irrigation systems were included in the list.

JRP also reviewed the results of the record search that William Shapiro of Pacific Legacy, Inc., performed at the South San Joaquin Valley Information Center of the California Historical Resources Information System at California State University, Bakersfield (Information Center) in February 2007. This effort included review of inventories of California Historical Landmarks, California Points of Historical Interest, and National Register of Historic Places.<sup>1</sup> No historic resources associated with the irrigation systems were identified along the pipeline routs that had been previously listed, determined eligible for, or found to appear eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). The Traver Canal and Banks Ditch had been previously recorded by Carrie D. Willis and Allen Estes of Williams Self Associates, but were not evaluated for National or California register eligibility. Information regarding cultural resources and historic buildings within the Study Area was also requested from the Fresno County Library, Fresno County Historical Society, Tulare County Historical Society, Tulare County Planning Department, Tulare County Museum, and Reedley Museum.

JRP conducted field surveys of the irrigation canals between August 25-28, 2008, and on September 16, 2008. The survey recorded 16 irrigation canals, branches, or ditches at the locations where they intersected the Study Area corridor, as well as up to four additional comparison points elsewhere along the canal (where it is accessible via the public right-of-way). The intent of this sampling method is to characterize the salient features of the irrigation canal along its entire length and to better evaluate the historic integrity of the feature as a whole. Each recordation point was documented on a Linear Feature Record and plotted on a Location Map

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<sup>1</sup> California Office of Historic Preservation, *California Historical Landmarks* (Sacramento: California State Parks, 1996); California Office of Historic Preservation, *California Points of Historical Interest* (Sacramento: California State Parks, May 1992); National Park Service, National Register Information System, online database, accessed February 2007: <<http://www.cr.nps.gov/nr/research/nris.htm>>. Please refer to Section 7 for a full list of references consulted for this project.

included in the Department of Parks and Recreation (DPR) 523 form that was prepared for each canal; these are attached as **Appendix B**.

Investigation of the irrigation resources required research regarding the historical context of the districts and surrounding agricultural lands, as well as canal-specific research conducted in both archival and published sources. Over the course of the project, JRP contacted or conducted research at the following agencies and repositories:

- California Room, California State Library, Sacramento;
- Shields Library, University of California, Davis;
- Special Collections, Shields Library, University of California, Davis;
- California State Archives, Sacramento;
- Special Collections, Henry Madden Library, California State University, Fresno;
- Map Library, Henry Madden Library, California State University, Fresno;
- California History & Genealogy Room, Fresno County Public Library, Central Branch;
- Alta Irrigation District Offices, Dinuba, California;
- Kaweah Delta Water Conservation District, Farmersville, California;
- Persian Ditch Company, Farmersville, California;
- Goshen Ditch Company, Farmersville, California.

JRP then prepared a historic context to address the history of the irrigation districts and canals, and evaluated the properties under NRHP and CRHR criteria on the attached DPR 523 forms. The historic themes are discussed in Section 3. These themes – nineteenth and twentieth-century agricultural and irrigation developments in southern Fresno and northern Tulare counties – provide the historic context necessary to evaluate the significance of the properties located within the Study Area. Descriptions and historical evaluations of the properties are summarized in Sections 4 and 5. Refer to Section 6 for JRP staff professional qualifications and to Section 7 for a complete listing of materials consulted.

### 3. HISTORICAL OVERVIEW

#### 3.1. Period of Pioneer Settlement of the Study Area

The Study Area for this project is a narrow corridor that begins at the proposed KRCD plant site in southern Fresno County, east of Parlier, and extends about 26 miles to the south and east into Tulare County. The Study Area traverses the heart of the San Joaquin Valley – one of the nation’s richest agricultural regions. This now-fertile plain, however, was not always recognized for its agricultural potential. The Spanish and Mexican colonists who settled along the California coast during the late eighteenth and early nineteenth centuries initially dismissed the San Joaquin Valley as *terra incógnita*, the “unknown land.”<sup>2</sup> In 1853, the General Land Office agent responsible for surveying Township 15 South, Ranges 21 and 22 East, which encompasses the northern portion of the Study Area, described the land as “3rd rate & sandy and is noted for its large droves of wild horses.”<sup>3</sup>

The California Gold Rush of 1849 attracted the first wave of American settlement to what are now Fresno and Tulare counties. Throughout the 1850s, the highest concentrations of settlers were along the banks of the Kings and San Joaquin rivers and their tributaries. The plains during this period were sparsely populated and largely dedicated to stock raising, the first large-scale agricultural pursuit in both counties. From the late 1850s into the early 1870s, herds of cattle and sheep ranged the Study Area. Passage of the “no fence” law in 1874 by the California Legislature signaled the end of the cattle era in Fresno and Tulare counties, both of which entered into new periods in which intensive agriculture rose to a position of prominence that it still enjoys today.<sup>4</sup>

Several milestone events in the 1870s ushered in a transformative period in the history of both counties that had a fundamental effect on settlement and development patterns of the area. The first was the arrival of the railroad in the early 1870s, followed closely by the establishment of organized, large-scale irrigation concerns. In the wake of these developments, the land within and bordering the Study Area – once described as barren, arid, and desolate – began its transformation into a thriving agricultural district. The following discussion focuses on the advent of irrigation works in the Study Area, beginning with developments in southern Fresno County, and followed by those in northern Tulare County.

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<sup>2</sup> Warren A. Beck and Ynez D. Haase, *Historical Atlas of California* (Norman, Oklahoma: University of Oklahoma Press, 1974), 33.

<sup>3</sup> Quoted in J. Randall McFarland, *Centennial Selma: Biography of a California Community’s First 100 Years* (Selma: J. Randall McFarland in association with The Selma Enterprise, 1980), 9.

<sup>4</sup> Douglas Kyle, ed., *Historic Spots in California*, Fourth Edition (Stanford: Stanford University Press, 1990), 85-88; Charles Clough and William B. Secrest, *Fresno County – The Pioneer Years: From the Beginning to 1900* (Fresno: Panorama Books, 1984), 119-120; McFarland, *Centennial Selma*, 11.

### 3.2. Irrigation in Southern Fresno County

In southern Fresno County, the advent of large-scale irrigation works fundamentally shaped the development patterns of this once-arid plain. For well over a century, Fresno County has been revered as one of California's most productive agricultural regions, with the area surrounding Selma, Fowler, and Kingsburg receiving special acclaim as the "Raisin Capital of the World." This legacy of intensive and productive agriculture owes its existence to a network of irrigation canals that draws water from the county's two major rivers, the San Joaquin and the Kings. Several irrigation ditches and canals pass through the Study Area for this project, all of which carry water diverted from Kings River near Centerville. Each of these canals is currently owned and operated by the Consolidated Irrigation District (CID), which covers the territory southeast of Fresno and west of the Kings River, serving the agricultural districts around Del Rey, Parlier, Kingsburg, Selma, and Caruthers. The district is a quasi-public agency that formed in 1921, but its history dates to the late 1870s with the construction the Centerville and Kingsburg (C&K) Canal and its principal branches. Like all of the other canals and ditches in the Study Area, the C&K was privately built, owned, and operated, and only later was folded into the CID system.<sup>5</sup>

Irrigation in Fresno County reaches back into the 1860s. One of the county's first substantial irrigation efforts was the Centerville Ditch, which was built in 1868 and extended to the southwest from its headworks on the Kings River. The Sweem Ditch was built the following year, and also diverted water from the Kings River. M.J. Church acquired the rights to both ditches and incorporated them into the Fresno Canal and Irrigation Company, which he co-founded in 1871. Another early canal using Kings River water was the Gould Canal, built by the Kings River and Fresno Canal Company around 1870.<sup>6</sup>

Many settlers turned to natural waterways that could be modified to serve their irrigation needs, one such stream being the Lone Tree Channel. In 1870 the Lone Tree Ditch was adopted for irrigation purposes by a small partnership of independent operators. Between 1875 and 1876, a small group of settlers formed the Kingsburg Irrigation Company and constructed four branches off of the original Lone Tree Channel. One of these, the Pioneer Branch, later renamed the Harp Ditch, served the lands along the west side of Parlier.<sup>7</sup>

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<sup>5</sup> There are several excellent studies of the history of the Consolidated Irrigation District. See, for example: W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 209-214; J. Randall McFarland, *Water for a Thirsty Land: The Consolidated Irrigation District and Its Canal Development History* (Selma: The Consolidated Irrigation District, 1996).

<sup>6</sup> Paul H. Willison, *Past Present, and Future of the Fresno Irrigation District* [n.p.] (California State University, Special Collections, 1980), 68; Adams, *Irrigation Districts in California*, 204.

<sup>7</sup> I. Teilman and W.H. Shafer, *Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 36; McFarland, *Water for a Thirsty Land*, 15-18; Thomas Hinkley Thompson, *Official Historical Atlas Map of Fresno County* (Tulare: Thos. H. Thompson, 1891).

Irrigated agriculture began to develop in the area between Selma and Kingsburg in 1878 following completion of the C&K Canal and its branches, which diverted water from the Kings River at a point about two miles north of Centerville. The Centerville and Kingsburg Irrigation Ditch Company, an alliance of six area farmers, formed in 1876 to build the C&K Canal. The C&K then sold 50 shares of stock to raise funds to hire John E. Urton, known for engineering canals that could flow by gravity through high ground, to design and supervise construction of the C&K Canal, which began in March 1877. Urton suggested the canal be divided into two primary branches at a point about ten miles from the diversion point. One branch would go south to Kingsburg, while the other would travel southwest to the future site of Selma on the Southern Pacific railroad line. By early 1878, the canal was completed and delivering water to Selma and Kingsburg through its two branches.<sup>8</sup>

The Fowler area received its first irrigation water in 1882, following the completion of the Kirby Ditch. In 1881 Kirby, in partnership with H.A. Peterson and Abijah McCall, formed the Kirby Ditch Company and began construction on its ditch in January 1882. McCall was given the contract to perform the actual work, in which he first used a modified scraper that he invented to carve out the ditch. This was an early version of what became universally known as the “Fresno scraper,” a device that revolutionized canal construction techniques in the decades surrounding the turn of the twentieth century. The Kirby Ditch extended from the Lone Tree Canal in a generally southwesterly direction to today’s South Avenue, at which point it turned to the west and continued past Fowler to the Sierra Park Colony. Water was first turned into the ditch in 1882.<sup>9</sup>

The following year an even larger canal was built to serve Fowler and its surrounding district. This ambitious project was the Fowler Switch Canal, which again involved the talents of Abijah McCall. This time, McCall partnered with Frank Dusy (who, incidentally, shares credit with McCall for inventing the Fresno scraper) and C.L. Walter to form the Fowler Switch Canal Company. Construction began in March 1882, and like the Kirby Ditch that preceded it, benefited from the use of the Fresno scraper. Work progressed rapidly, and by early June 1883 the canal began carrying Kings River water to Fowler and points south, terminating southwest of Selma, near the Washington Colony.<sup>10</sup>

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<sup>8</sup> Adams, *Irrigation Districts in California*, 204; McFarland, *Water for a Thirsty Land*, 22-25, 54-55.

<sup>9</sup> Virginia E. Thickens, “Pioneer Agricultural Colonies of Fresno County,” *California Historical Society Quarterly* 25 (March 1946), 174; McFarland, *Water for a Thirsty Land*, 28; McFarland, *Centennial Selma*, 55-56; Ernestine Winchell, “Fresno Memories: The Kirby Ditch,” *Fresno Morning Republican*, 25 January 1925; Thompson, *Official Historical Atlas Map of Fresno County*, 1891.

<sup>10</sup> Carl Ewald Grunsky, “Irrigation Near Fresno, California,” *United States Geological Survey* (Washington: Government Printing Office, 1898), 48; J. Randall McFarland, *Village on the Prairie: The Story of Fowler’s First 100 Years* (Fowler: Fowler Mothers’ Club and The Ensign Publishing Company, 1972), 10; McFarland, *Water for a Thirsty Land*, 29-30.

The Centerville and Kingsburg Canal, Kirby Ditch, and Fowler Switch Canal made settlement of the Study Area possible. Until 1878, the year that water was first turned into the C&K Canal, the agricultural district southeast of Fresno was devoted almost exclusively sheep raising and dry farming of wheat. Only a handful of hardy individuals made permanent residences on the plain between the current locations of the towns of Fowler, Selma, and Parlier. In the wake of irrigation developments, this all began to change in the 1880s as new settlers flooded into the region, eager to take advantage of low land prices and a steady flow of water. Within a very short period, alfalfa, grapes, and orchard crops such as nuts and peaches replaced wheat as the dominant agricultural commodities. These high-value crops made it possible for independent farmers to make a living on a relatively small plot of land, and subdivision of the large wheat ranches ensued. By the end of the 1880s, farm tracts as small as 10, 20, and 40 acres were common throughout Fresno County, including within the Study Area.<sup>11</sup>

Construction of irrigation works in the late nineteenth century was closely related to another Fresno County phenomenon, the development of rural agricultural communities known as “colonies.” Some colonies were inhabited by residents with common ethnic or religious identity, or who came from a common locality, usually a city or state east of the Mississippi River, while others were purely speculative ventures of land development companies. All provided prospective settlers with the opportunity to purchase a small agricultural lot in a larger tract with access to irrigation water, the rights for which usually remained with the colony company. The colony system in Fresno County began in the 1870s. The prototype was the Central California Colony, organized by Bernhard Marks in 1875, and laid out along the Fresno Canal and Irrigation Company’s main canal. The colony venture was a success, eventually covering 3,480 acres south of Fresno and was referred to as “a smiling beauty-spot on the arid plains” in an 1882 account.<sup>12</sup> Another early and successful venture was the Washington Colony, founded in 1878 and located eight miles south of Fresno, not far from the Central California Colony. Colonizing activities in the county peaked during the 1880s; by the early 1890s there were no less than 75 colonies – some large, some quite small – located throughout Fresno County. Among the later, smaller colonies to develop was the Selma Colony, established about 1890 to the southeast of the town of Selma. This colony covered half of Section 16, Township 16 South, Range 22 East, and was served by Selma Colony Canal. By the end of the 1890s Fresno County’s colony period had effectively come to an end.<sup>13</sup>

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<sup>11</sup> Elliott, pub., *History of Fresno County, California: with illustrations, descriptive of its scenery, farms, residences, public buildings ... from original drawings, with biographical sketches* (San Francisco: W. W. Elliott & Co., 1882), 106-107; Thickens, “Pioneer Agricultural Colonies,” passim; Thompson, *Official Historical Atlas Map of Fresno County*, 1891.

<sup>12</sup> Elliott, pub., *History of Fresno County*, 114. See also: Thickens, “Pioneer Agricultural Colonies,” 26-32.

<sup>13</sup> Muriel Emery Wardlaw, *The Early History of Fresno County: Articles Which Appeared in the Ash Tree Echo, 1966-1987* (Fresno: Fresno County Library and Fresno County Genealogical Society, 2001), 168-171; Thickens, “Pioneer Agricultural Colonies,” passim; Elliott, pub., *History of Fresno County*, 111-115; Teilman & Shafer, *Historical Story of Irrigation in Fresno and Kings Counties*, 53-54; McFarland, *Water for a Thirsty Land*, 18; Thompson, *Official Historical Atlas Map of Fresno County*, 1891; William Harvey, Sr. *Atlas of Fresno County*,

Joining the national trend towards large scale, centralized structures in business and government, the companies controlling the C&K, Kirby, Selma Colony, Santa Fe, and Fowler Switch canals (among others) organized into the Consolidated Canal Company, a holding company of the Fresno Canal and Irrigation Company, on August 12, 1901. Within short order, engineer Ingvar Teilman oversaw improvements on the system's major canals. Teilman combined the Centerville & Kingsburg Canal and the Fowler Switch Canal intakes on the Kings River with that of the Fresno Canal. To accomplish this feat, Teilman designed a concrete dam and headgate across the Kings River for both the Consolidated Canal Company's canals and the Fresno Canal. Those improvements replaced the brush dams that formerly had to be rebuilt yearly, following summer flooding or occasionally after winter floods.<sup>14</sup>

Two decades after the formation of the Consolidated Canal Company, the era of privately-owned irrigation works in this part of southern Fresno County came to an end with the formation of the Consolidated Irrigation District (CID). Organized on August 23, 1921, CID was part of a larger trend toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler Switch, Harp Ditch, Selma Colony Canal, Santa Fe Canal, and their various branches. Most of the canals and ditches were unlined over their entire lengths, and practically all of the canal control structures were timber and in dire need of replacement.<sup>15</sup>

Since the initial formation of the district, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. In 1938-39, using federal funds, the district lined several miles of canals with concrete, including a two-mile segment of the Fowler Switch Canal in the vicinity of Sanger. In the decades after World War II, CID realigned or piped portions of 11 district canals to accommodate construction of modern Highway 99, which began in 1959. Also in the post-war period, particularly after 1955, the district began to install underground pipelines along many of its canals and laterals to reduce maintenance costs and water loss through seepage. Between 1955 and 1961 alone, the district installed nearly 40 miles of pipe along various conduits. Some of the largest piping projects, completed in the 1980s and 1990s, were along sections of the C&K Canal. The Selma Branch was piped where it passed

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*California* (Fresno: William Harvey, 1907); W.C. Guard, *Atlas of Fresno County, California* (Fresno: W.C. Guard, 1909).

<sup>14</sup> Teilman and Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties*, 55; Adams, *Irrigation Districts in California*, 210; McFarland, *Water for a Thirsty Land*, 63.

<sup>15</sup> Huber, "Engineering Report, Consolidated Irrigation District," 1; Adams, *Irrigation Districts in California*, 209-211; Teilman and Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirsty Land*, 101-104.

through urban Selma, and portions of the Kingsburg Branch through the town of Kingsburg were piped in 1992-1993.<sup>16</sup>

### 3.3. Irrigation in Northern Tulare County

The northern portion of Tulare County, though which the Study Area passes, is predominately agricultural in use and character, with lands devoted row and orchard crops such as corn, grapes, tree fruits, and nuts, and to a lesser extent used for stockraising, grazing, and dairying. The communities of Visalia, Reedley, Dinuba, and Traver are all located near or along the proposed gas pipeline route, and have historically served as key shipping and service centers for the surrounding agricultural districts. The advent of large-scale irrigation works, whose roots date back to the construction of the Persian Ditch near Visalia in 1853-54 but really began with the establishment of the '76' Land and Water Company in 1882, stimulated settlement and promoted crop diversity in a region that had previously been almost exclusively devoted to wheat. The '76' Land and Water Company irrigation system, predecessor to today's Alta Irrigation District (AID) system, has provided irrigation service to the northeastern corner of Tulare County since the early 1880s. These irrigation works, coupled with the San Joaquin mainline of the Southern Pacific Railroad, which first reached this part of the state in the early 1870s, provided the means to produce and then transport crops.

In the early years of California statehood, Visalia, Tulare County, with four creeks supplying water to the area, was one of the few locations in the Central Valley which attracted settlers. Initial American settlement in the vicinity of Visalia dates to the winter of 1852-1853, when a group of Anglo-Americans built a fortified stockade, dubbed Fort Visalia. In the spring of 1853, the settlers moved beyond the stockade and began to farm small tracts of land around Mill Creek and immediately began to build short and crude irrigation works. Water was diverted by means of temporary brush dams constructed across the lower courses of the streams running west out of the Sierras. The earliest of these ditches were built in the vicinity of Visalia in 1853 and spread out through the Kaweah River and Kings River deltas in the 1860s. Most of these early, rudimentary ditch systems in the Central Valley were destroyed by the great floods of 1862 and 1868.<sup>17</sup>

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<sup>16</sup> Adams, *Irrigation Districts in California*, 211; Teilman and Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties*, 55; Huber, "Engineering Report, Consolidated Irrigation District," 29; McFarland, *Water for a Thirty Land*, 101-105, 150-151, 155.

<sup>17</sup> Annie Mitchell, *A Modern History of Tulare County* (Visalia: Limited Editions of Visalia, 1974), 15; Eugene L. Menefee and Fred A. Dodge, *History of Tulare and Kings Counties, California* (Los Angeles: Historic Record Company, 1913), 16, accessed [www.calarchives4u.com/history/tulare/tul1913-ch14.htm](http://www.calarchives4u.com/history/tulare/tul1913-ch14.htm) on August 7, 2008; Donald J. Pisani, *From the Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1950-1931* (Berkeley, California: University of California Press, 1984), 83-91; Wallace Smith, *Garden of the Sun: A History of the San Joaquin Valley, 1772 - 1939* (Los Angeles: Lymanhouse, 1939), 448; Kathleen Edwards Small, *Early History of Tulare County California* (Exeter: Bear State Books, 2001), 297-298.

The Persian Ditch, built by James Persian, a Tulare County pioneer who settled in Visalia in 1853, is a remnant of this first generation of Visalia irrigation works. During his active years in Visalia in the 1850s and 1860s, Persian was a prominent citizen of the emerging Tulare County settlement. The ditch that bore his name was most likely small and dedicated to serving his property. Little is known about how the Persian Ditch was actually constructed, but it is likely that Persian enlisted the assistance of adjacent landowners who might also benefit from Persian Ditch water. In 1895, the Persian Ditch Company was organized and took over the Persian's privately-owned ditch. This mutual water company was a cooperative in which its stockholder purchased stock proportional to the amount of land he or she intended to irrigate, and the accumulated revenue was used for construction expenses. Annual assessments were levied for operation and maintenance expenses. The company provided water to thirteen stockholders. As the market for Tulare County agricultural products increased, diversified farming displaced grain farming and Visalia landowners greatly expanded their irrigated acreage. The company re-organized in 1925 and all the previous by-laws were retained, but the delivery of water was limited to the south half of Township 18 South, Range 23 East; the south half of Township 18 South, Range 25 East; Township 19 South, Range 23 East; and Township 19, South Range 24 East.<sup>18</sup>

The early ditches of Tulare County developed under a system of county laws that encouraged private development of irrigation systems. Laws promulgated between 1854 and 1868 limited the involvement of public officials. As a result, independent ditches flourished in the area surrounding Visalia. The Goshen Ditch, built in the mid 1870s, is among these. Southern Pacific Railroad established the town of Goshen along its San Joaquin mainline in 1872, and settlers began canal construction in 1874 to serve the area surrounding the newly established town. Two separate groups selected two diversion points along the St. James River. The upper diversion was located approximately three and a half miles north of Visalia and the lower diversion was about two miles downstream (northwest of the first diversion). The upper ditch, which diverted water closer to Visalia, traveled a nearly westerly route, and the lower ditch proceeded in a southwesterly direction. The two merged about a mile and a half north of Goshen where the route turned south into the town. A slough was previously in the area and appears to have been used for segments of the canal. Early accounts of the canal indicate that it was uneven in width and poorly constructed. The first flood carried away the upper canal headgate and eroded the banks of the canal greatly increasing the canal's width. The founders of the upper branch took over both branches of the canal and rebuilt them in 1881-1882.<sup>19</sup>

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<sup>18</sup> Annie R. Mitchell, *The Way it Was: The Colorful History of Tulare County* (Fresno: Valley Publishers, 1976), 36; Mitchell, *Modern History of Tulare County*, 48; Carl Ewald Grunsky, *Water Supply and Irrigation Papers of the USGS Bulletin 18: Irrigation Near Fresno, California* (Washington, D.C.: Government Printing Office, 1898), 13; Persian Ditch Company, Articles of Incorporation, October 31, 1925, on file at California State Archives, Sacramento.

<sup>19</sup> Pisani, *From the Family Farm to Agribusiness*, 43-44; Grunsky, *Water-Supply and Irrigation Papers of the USGS No. 18*, 20-21.

In 1911 the Goshen Ditch Company incorporated under the laws of the State of California. The company was a mutual water company which provided water to stockholders who included C.S. Huntley, N.R. W. Huntley, Peter Malloch, P.T. Clark, H.B. McClure and E.J. Logsdon. The other investors included local farmers. Despite the availability of water, only 1,867 acres of the approximately 5,760 acres included in the service area were irrigated in 1931.<sup>20</sup> Goshen Ditch today is owned by the Goshen Canal Company and managed and operated by the People's Ditch Company.

The Persian and Goshen ditch companies were relatively small endeavors in comparison to the works of the '76' Land and Water Company, the first major irrigation company in Tulare County. The company was founded in 1882 to serve the semi-arid region previously dominated by the '76' Ranch, owned by Darwin and Ferguson. The land and water company adopted its name from the ranch, which had collapsed under the combined forces of droughts, introduction of the "no fence" law, and construction of the railroad. Peter Yapple Baker and D.K. Zumwalt, the founders of the '76' Land and Water Company, raised capital through sale of stock among several other investors including H.P. Merritt, Charles Traver, C.F.J. Kitchener, I.H. Jacobs, Thomas Fowler, and Francis Bullard. County residents received news of the development project with enthusiasm. The '76' Land and Water Company was the first in Tulare County to undertake an advertizing campaign to draw people to its newly irrigated land. The company offered a total of 30,000 acres of land for sale to settlers along with water rights equaling 40 miner inches attached to each 40-acre tract. The company also offered leases and financing. Owners and lessees served by the canal paid an annual fee for the maintenance of the canal system. Town lots for Traver, the recently-platted town along the Southern Pacific mainline, also sold well and it quickly became an important regional shipping point.<sup>21</sup>

Construction of the company's main canal, the '76' Canal, began in August of 1882 with P.Y. Baker serving as "construction supervisor." The canal diverted water from Kings River approximately thirteen miles northeast of Reedley and continued in a general southeasterly direction along the foothills for about nine miles. The main canal had a 100-foot wide bottom and was over five feet deep. South of Wahtoke Lake the canal system used Kennedy Slough (Traver Creek) to bring water southwest. The Traver Canal, one of two principal branches of the main canal, drew water from the mouth of the slough about six miles northeast of Traver. The other main branch was the McClanahan Ditch, which branched off of Traver Canal about four miles southwest of Kennedy Slough in lands belonging to A.E. McClanahan, a farmer turned real estate agent. The Traver Canal and McClanahan Ditch were both completed in 1884 and began

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<sup>20</sup> Menefee and Dodge, *History of Tulare and Kings Counties*, 255-256, 589; California Division of Water Resources, *Bulletin No. 29 San Joaquin River Basin* (Sacramento, California: State Printing Office, 1931), 119.

<sup>21</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 26-27; Small, *Early History of Tulare County*, 183-184.

deliveries the following year, supplying water to 2,000 acres surrounding Traver. Owners and lessees served by the canal paid an annual fee for the maintenance of the canal system.<sup>22</sup>

Originally, the Traver Canal and McClanahan Ditch did not return water to the river or other drainage. The canals simply ended near the Southern Pacific Railroad tracks. As a result, the water spread underground west of Traver. The water table rose from 50 feet to two feet and alkali soon sterilized the soil of that region. The increasing alkalinity coupled with construction of the Southern Pacific eastern valley line through Dinuba in 1888 ushered in a period of decline in Traver; the town eventually rebounded, but for a time it became little more than a flag stop along the main railroad route.<sup>23</sup>

In 1887 California passed the Wright Act allowing residents to form and operate their own irrigation districts. The residents in the area served by the '76' Canal and its branches were increasingly dissatisfied with the '76' Land and Water Company. The company offered leases with "privilege of purchase" for water rights at an established, contracted price. As property values increased with settlement, the company attempted to annul the privilege of purchase contracts. Lessees sued and won the right to purchase their land at the lower contracted rates.<sup>24</sup>

Continuing animosity towards the '76' Land and Water Company stemming from the privilege of purchase controversy, coupled with and the company's inability to deliver water reliably because of ongoing water rights litigation, prompted the landowners to form an irrigation district under the Wright Act shortly after it was passed. Because the main canal's diversion point was the furthest upstream on the Kings River, they selected "Alta," meaning "high," for the name of the district. The Board of Directors, consisting of P.Y. Baker, formerly of the 76 Land and Water Company, T.L. Reed, J.D. Van Noy, E.E. Giddings, and J.E. Toler, authorized \$675,000 worth of bonds, of which \$410,000 were used to purchase the existing '76' Canal system. Another \$133,000 in bonds was used to expand the irrigation system. The district hired James Sibley to design a larger system and constructed additional branches between 1888 and 1890 increasing irrigated land from the original 2,000 acres to 19,000 acres. During this period the drainage problem with the McClanahan and Traver Canals were resolved. J.S. Hurst constructed

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<sup>22</sup> *Memorial and Biographical History of the Counties of Fresno, Tulare and Kern, California* (Chicago: Lewis Publishing Co, 1891) 405; Grunsky, *Water-Supply and Irrigation Papers of the USGS No. 18*, 52; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988), 21; Jewell, "Agricultural Development in Tulare County," 25-27; Small, *Early History of Tulare County*, 181; Alfred Bannister, *Map of Tulare County* (San Francisco: Lith. Britton & Rey, 1884); Thomas H. Thompson, *Historical Atlas of Tulare County* (Visalia: Thomas Thompson, 1892).

<sup>23</sup> Harold J. Enns, "The Alta Irrigation District: A Prototype of Individual Initiative in Water Development," Master's Thesis, Fresno State College, 1967, 36-37.

<sup>24</sup> Morison, *The Alta Empire*, 22.

an extension of the McClanahan Ditch that connected it to the Traver Canal in Section 18, Township 17 South, Range 23 East. The Traver Canal drained into Kings River.<sup>25</sup>

In the early 1890s, district engineers surveyed the location and specifications for new branches and laterals. Private individuals and contractors would then construct the canals and the district would purchase the completed works with bonds. Two such “expansion” canals located within the Study Area were the Caesar Canal and Banks Ditch, both built between 1892 and 1894. The minutes of the AID Board of Directors record the acceptance of five sections of the Banks Ditch along Avenue 360 between 1893 and 1894. J.E. Baker constructed three segments east of Section 24 of Township 17, Range 23, and R.F. Morgan constructed two segments west of Section 24 of Township 17, Range 23, including the portion within the Study Area. At this time the ditch was called the Elbow Ditch. The Caesar Canal diverted water from Traver Canal and followed a generally southwesterly route between Kingsburg and Traver, eventually ending near the Kings River. The AID purchased Caesar Canal from its owner, C.W. Clark, in 1895. That same year the AID Board of Directors declared its irrigation system complete.<sup>26</sup>

The completion of the district irrigation system coincided with and was a driving force behind more intensive land use in northern Tulare County. In the decades surrounding the turn of the twentieth century, land values within the district steadily rose and more and more of the larger land holdings were subdivided and converted to small farm plots. Mirroring trends in southern Fresno County, the 1890s witnessed the end of the wheat-growing era in northern Tulare County; in the first decade of the twentieth century the most common farm size in the district was 20 acres and planted to assorted fruits and nuts, alfalfa, figs, citrus, olives, and other truck crops. Several fruit packing companies were established in the 1890s including the Traver Fruit and Raisin Company and the Dinuba Fruit and Raisin Company. The district’s population increased three-fold between 1890 and 1910.<sup>27</sup>

While the agricultural region served by the AID prospered during the 1890s and early 1900s, the district itself entered a period of decline. After the district declared its system complete in 1895, its administrators turned their attention to other problems including water rights litigation and defending the legitimacy of its bonds. The bond payment system that had financed the expansion between 1888 and 1895 was judged illegal in 1898, and the district’s finances were thrown into disarray. In addition, the notification of the original bond sale had only been posted in Tulare County, but the irrigation district operated in both Fresno and Tulare counties. As a

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<sup>25</sup> Adams, *Irrigation Districts in California*, 27-28; Small, *Early History of Tulare County California*, 188; Morison, *The Alta Empire*, 26-27; Alta Irrigation District (AID), Board of Directors Books, Volume 1 1888-1894, on file at AID Office, Visalia.

<sup>26</sup> AID, Board of Directors Books Volume I, 1888-1894; Morison, *The Alta Empire*, 26-27; Adams, *Irrigation Districts in California*, 27-28.

<sup>27</sup> Menefee and Dodge, *History of Tulare and Kings Counties*; Morison, *The Alta Empire*, 45, 48.

result, many landowners in the district refused to pay assessments for bond repayment and the district amassed over \$600,000 of debt. In 1902 bond holders and the district and residents reached a compromise which paid bondholders 75% of the bond value.<sup>28</sup>

In the wake of these financial difficulties, funds for canal maintenance were extremely limited and the condition of the system entered a period of neglect and deterioration that lasted nearly two decades. Funding for maintenance and improvements began to rebound in the late 1910s and early 1920s. As late as 1922 most of the district's major canals remained unlined, open ditches and retained their original wooden engineering features. System-wide replacement of the wood checkgates, drops, and diversion gates began in earnest in the mid 1920s. Since that time all original wooden engineering features have been replaced with concrete structures.<sup>29</sup> The district made additional system-wide improvements during the Great Depression with Federal assistance, which included \$10,000 in funding through the Works Progress Administration (WPA) used to install pipelines along several of its canals.<sup>30</sup>

As the country emerged from the Great Depression, the Federal government took over flood control on navigable waterways. The Kings River was among the first investigated for flood control measures under the new program. In 1937 federal studies on flood control dams for the Kings River began. While supported by Congress, the Department of Reclamation objected to the project because it believed that the dam served irrigation needs more than flood control needs. Despite objections a contract with the Army Corps of Engineers was signed in 1944 for the Pine Flat Dam. With the dam completed in 1954 the Alta Irrigation District had access to 100,000 acre-feet (10% of the reservoir capacity) of water storage. This additional water extended the district's water delivery season into August in most years, rather than ending in early July, as had been case previously.<sup>31</sup> With its water supply thus secured, AID continues to serve northern Tulare County with a system of canals that provides irrigation to 130,000 acres of farm and ranch land.

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<sup>28</sup> California Department of Engineering, Frank Adams, *Bulletin No 2. Irrigation Districts in California, 1887-1915* (California State Printing Office, 1916) 27-28; Small, *Early History of Tulare County*, 188; Morison, *The Alta Empire*, 26-27.

<sup>29</sup> AID, Detailed Engineering Drawings, Sheets 69 and 84, 1922, on file at AID Office; AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1944-1980); Enns, "The Alta Irrigation District," 68; Victor M. Cone, *Irrigation in the San Joaquin Valley, California*, US Department of Agriculture, Office of Experimental Stations Bulletin 239 (Washington, D.C.: Government Printing Office, 1909), 37.

<sup>30</sup> Morison, *The Alta Empire*, 50.

<sup>31</sup> Morison, *The Alta Empire*, 49; Charles L. Kaupke, *Forty Years on Kings River, 1917-1957* (Fresno: Hume Printing and Lithography, 1957), 28-40.

## **4. DESCRIPTION OF RESOURCES**

### **4.1. Characterization of Resources within the Study Area**

Irrigation structures have long been a central component of the landscape within the Study Area. Canals and ditches of the Consolidated Irrigation District, Alta Irrigation District, and independent companies cross through the Study Area, carrying Kings River and Kaweah Delta water from northeast to southwest. The irrigation features include major canals like the Kingsburg Branch of the Centerville and Kingsburg Canal and the Traver Canal, as well as small delivery canals and laterals like the West Section 20 Ditch and Grove Canal. All the ditches were constructed as open, earthen channels. Because of the ephemeral nature of earthen canals and constant use since their construction, all the canals have been altered from their original construction to varying degrees.

All of the irrigation canals and ditches have had their timber engineering features replaced with concrete structures. For example, road culverts dating from the 1920s through 1940s cross the canals and ditches, like the one where Saginaw Road crosses the Selma Colony Ditch (PLI- 20, Segment SC-3). The simple box, board-formed culverts are found through out Fresno and Tulare Counties bridging Consolidated Irrigation District, Alta Irrigation District, and independent canals. Concrete distribution gates and drop gates are found along the canals and ditches. Drop gates contain two types of controls: individually placed wood boards (see P-54-2172, Segment BD-2), and screw-operated metal gates (e.g., PLI-67, Segment MD-1). Only in a few instances are there motor controlled gates (PLI-67, Segment MD-3). Delivery gates are commonly located in vertical concrete pipes within the CID and independent canals. Within the AID the gates are commonly placed within concrete boxes.

The independent canals, Goshen Ditch (PLI-81), Mill Creek Ditch (PLI-85), and North Fork Persian Ditch (PLI-88), have experienced the most realignment. These canals have been realigned altering their service areas. Other realignments took place to solve initial engineering issues. The Traver Canal (P-54-2171) was extended to provide an appropriate outlet for excess water. The Cole Slough Canal (PLI-15 & 50) and the Cross Creek Waste Way (PLI-77) terminuses have also been altered.

Several canals have been piped in areas of urban expansion. The North Fork of the Persian Ditch (PLI-88) has been piped under the Visalia Municipal Airport. The expansion of the City of Parlier has resulted in the piping of the Harp Ditch (PLI-14) and a small segment of the Santa Fe Canal (PLI-37). A short segment of Caesar Canal (PLI-63) has been piped under a vineyard.

Several of the small- to medium-sized canals have been lined with concrete. These include portions of the Santa Fe Canal (PLI-37), the West Section 20 Ditch (PLI-55), the Caesar Canal (PLI-63), and the Grove Canal (PLI-70). The Caesar Canal is unusual in that only the east side of the canal has been lined (PLI-63, CC-3). All other lined segments have steep slopes and a flat bottom.

While the majority of the canals remain earthen, most have been regularly maintained and groomed with modern machinery. Machinery was observed in operation along the Persian Ditch (PLI-88, NF-1) and recent activity was observed along the Selma Colony Ditch (PLI-20 SC-2). Machine maintenance alters the geometry and dimensions of canals; most canals, as a result, have a modern appearance.

## 5. FINDINGS AND CONCLUSIONS

### 5.1. Evaluation Criteria

JRP used the criteria of the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP) to evaluate the historic significance of the properties within the Study Area. The State of California references cultural resources in the California Environmental Quality Act (CEQA—Public Resources Code (PRC) Division 13, Sections 21000-21178); archaeological and historical resources are specifically treated under Sections 21083.2 and 21084.1, respectively. California PRC 5020.1 through 5024.6 (effective 1992) creates the California Register of Historical Resources (CRHR) and sets forth requirements for protection of historic cultural resources. The criteria for listing properties in the CRHR are in Section 15064.5(a)(2)-(4) of the CEQA Guidelines, which provide the criteria from Section 5024.1 of the California Public Resources Code. The CRHR is in the California Code of Regulations Title 14, Chapter 11.5. The CRHR criteria closely parallel those of the NRHP. The eligibility criteria for listing properties in the NHRP are codified in Code of Federal Regulations 36 Part 60 and explained in guidelines published by the Keeper of the National Register.

Eligibility for listing in either the NHRP or CRHR rests on twin factors of significance and integrity. A property must have both significance and integrity to be considered eligible. Loss of integrity, if sufficiently great, will overwhelm historical significance a property may possess and render it ineligible. Likewise, a property can have complete integrity, but if it lacks significance, it must also be considered ineligible.

*Historic significance* is judged by applying the NRHP and CRHR criteria. The NRHP criteria are identified as Criteria A through D, the CRHR as Criteria 1 through 4. The NRHP guidelines explain that a historic resource’s “quality of significance in American history, architecture, archeology, engineering, and culture” is determined by meeting at least one of the four main criteria. Properties may be significant at the local, state, or national level:

- NRHP Criterion A (CRHR Criterion 1): association with events or trends significant in the broad patterns of our history;
- NRHP Criterion B (CRHR Criterion 2): association with the lives of significant individuals;
- NRHP Criterion C (CRHR Criterion 3): a property that embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, or that possesses high artistic values;
- NRHP Criterion D (CRHR Criterion 4): has yielded, or is likely to yield information important to history or prehistory.

In general, NRHP Criterion D (CRHR Criterion 4) is used to evaluate historic sites and archaeological resources. Although buildings and structures can occasionally be recognized for the important information they might yield regarding historic construction or technologies, the properties within the Study Area for this project are building types that are well documented. Thus, these properties are not principal sources of important information in this regard.

Certain property types are usually excluded from consideration for listing in the NRHP, but can be considered if they meet special requirements in addition to meeting the regular criteria. The following are the seven Criteria Considerations that deal with properties usually excluded from listing in the National Register:<sup>32</sup>

- Consideration A: Religious Properties
- Consideration B: Moved Properties
- Consideration C: Birthplaces and Graves
- Consideration D: Cemeteries
- Consideration E: Reconstructed Properties
- Consideration F: Commemorative Properties
- Consideration G: Properties that have Achieved Significance within the Past Fifty Years

*Integrity* is determined under NRHP guidelines through applying seven factors to the historic resource. Those factors are location, design, setting, workmanship, materials, feeling, and association. These seven can be roughly grouped into three types of integrity considerations. Location and setting relate to the relationship between the property and its environment. Design, materials, and workmanship, as they apply to historic buildings, relate to construction methods and architectural details. Feeling and association are the least objective of the seven criteria, pertaining to the overall ability of the property to convey a sense of the historical time and place in which it was constructed.

The CRHR definition of integrity and its special considerations for certain properties are slightly different from those for the NRHP. Integrity is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The CRHR further states that eligible resources must “retain enough of their historic character or appearance to be recognizable as historical resources and to

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<sup>32</sup> USDI, National Park Service, “How to Apply the National Register Criteria for Evaluation,” *National Register Bulletin 15* (Washington, D.C.: Government Printing Office, 1990, revised 1991, 1995, and 1997), 25, 41-43; USDI, National Park Service, “Guidelines for Evaluating and Nominating Properties that have Achieved Significance within the Last Fifty Years,” *National Register Bulletin No. 22* (Washington, D.C.: Government Printing Office, 1979, revised 1990 and 1996).

convey the reasons for their significance” and it lists the same seven aspects of integrity used for evaluating properties under the NRHP criteria. The CRHR’s special considerations for certain properties types are limited to: 1) moved buildings, structures, or objects; 2) historical resources achieving significance within the past fifty years; and 3) reconstructed buildings.

Under CEQA Guidelines, Section 15064.5 (a), a “historical resource” includes:

- A resource listed in or eligible for the California Register of Historical Resources;
- A resource listed in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code;
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines historically significant, provided the determination is supported by substantial evidence in light of the whole record;
- A resource so determined by a lead agency as defined in Public Resources Code sections 50203.1(j) or 5024.1.
- Historical resources listed in, or determined eligible for, the NRHP are automatically listed in the CRHR, Section 5024 (d)(1)(2) of the Public Resources Code.

## 5.2. Evaluation of Significance

The resources that are the subject of this report have been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines outlined in Section 5024.1 of the California Public Resources Code. Each canal is evaluated in greater detail on the individual DPR 523 forms provided in **Appendix B**. None of the 16 resources evaluated appear to meet the significance criteria as outlined in these guidelines because they do not meet the criteria for listing in the CRHR under Criteria 1, 2, 3 or 4 (NRHP Criteria A, B, C or D), and none appear to be a historical resource for the purposes of CEQA.

There are 16 irrigation canals covered by this supplemental report, as shown in **Table 1**. Several of these canals, including the Harp Ditch (PLI 14), Kingsburg Branch of the Centerville and Kingsburg Canal (PLI 33), McClanahan Ditch (PLI 67), Goshen Ditch (PLI 81), North Fork Persian Ditch (PLI 88) and Traver Canal (P-54-2171), represent major water conveyances built during the 1870s and early 1880s (the North Fork Persian Ditch was built in 1854). These were among the first irrigation canals to reach the communities they served. Without these early and major canals, the development of intensive agriculture on small parcels that characterizes the Study Area would not have been possible. These canals, therefore, have the potential for significance under Criteria A and 1 for associations with agricultural developments in southern

Fresno and northern Tulare counties, provided that they retain integrity to the period in which they achieved their significance.

Establishing a defensible period of significance for irrigation canals can be challenging because their importance to the local agricultural and economic underpinnings of communities they serve continues to the present. In this way, irrigation systems and their individual components are similar to a number of public works projects including state and local road systems, railroads, municipal water and sewer systems, and other major utility systems. As members of a class of infrastructure that delivers benefits to broad constituencies, irrigation canals have become vital, indispensable elements the communities they serve. They are also common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. These considerations are useful in appreciating how significance should be assessed for such properties because, in a sense, every example of this type could be described as important.

Following National Register guidelines, the period of significance under Criterion A (1) should cover the span of time in which the property made significant contributions to the broad patterns of our history.<sup>33</sup> The guidelines further state that “continued use or activity does not necessarily justify continuing the period of significance. The period of significance is based upon the time when the property made the contributions or achieved the character on which significance is based.”<sup>34</sup> For the irrigation canals studied here, their potential for significance lies with their role in the transformation of the agricultural character of southern Fresno County and northern Tulare County from arid plains devoted to stockraising and dry farming to the intensively farmed district that it is today. Their period of significance should be restricted to the time frame that this change took place. As discussed in the historic context above, in southern Fresno County this important historical trend began in the 1870s and early 1880s with the construction of the Harp Ditch, the Centerville and Kingsburg Canal and its two principal branches, the Fowler Switch, among others (all part of the CID system). In northern Tulare County, which today is served principally by the Alta Irrigation District system, the trend began in the 1880s, with the construction of the ‘76’ Canal and its two branches serving the Traver area: Traver Canal and McClanahan Ditch. In both locales, the trend had culminated by the turn of the twentieth century, by which time the Study Area had been transformed into the growing region that it is today: irrigated farms on relatively small parcels devoted to cultivation of a diverse range of crops including raisins, nuts, tree fruits, corn, and alfalfa. The period of significance for the potentially eligible canals evaluated as part of this study, then, would begin with the year that they were built and end about 1900.

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<sup>33</sup> USDI, NPS, “How to Apply the National Register Criteria for Evaluation,” 12-13.

<sup>34</sup> USDI, NPS, “How to Complete the National Register Registration Form,” *National Register Bulletin 16A* (Washington, D.C.: Government Printing Office, 1990), 42.

Like nearly every canal in the CID and AID systems, the subject canals that pass through the Study Area bear little resemblance to their appearance during their potential period of significance. In general, the canals have neatly groomed walls and a highly engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. Additionally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. Finally, several of the canals have been lined in concrete or piped underground for large portions of their total length. Lacking integrity to their potential periods of significance, the canals in the Study Area do not appear to be eligible for the NRHP or CRHR, nor are they historical resources for the purposes of CEQA.

## **6. PREPARERS' QUALIFICATIONS**

This report was prepared under the direction of Rand F. Herbert (MAT in History, University of California, Davis, 1977), a principal at JRP with nearly 30 years professional experience working as a consulting historian and architectural historian on a wide variety of historical research and cultural resource management projects as a researcher, writer, and project manager.

Staff Historian Bryan Larson contributed to the report and supervised fieldwork and research. Mr. Larson holds a B.A. in History from the University of California, Los Angeles, and an M.A. in Public History from California State University, Sacramento. He has been with JRP since 1998 conducting historic survey and evaluation studies.

Staff Historian Cheryl Brookshear prepared contributed to the report, prepared DPR 523 forms, conducted fieldwork, and assisted in research. Ms. Brookshear holds a M.S. in Historic Preservation from the University of Pennsylvania. She has been with JRP since 2006 and has conducted various historic survey and evaluation studies.

Research Assistants Jarma Jones and Joseph Freeman aided in fieldwork, research, report preparation, DPR 523 form preparation, and editing. Jarma Jones holds a M.A. in History from New Mexico State University and has been with JRP since 2006. Shawn Riem recently graduated with her M.A. in Public History from California State University, Sacramento and has worked and interned for JRP since 2006.

Rebecca Flores assisted with report and graphics production.

Based on their level of education and experience, Mr. Herbert, Mr. Larson, and Ms. Brookshear qualify as historian / architectural historian under the United States Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

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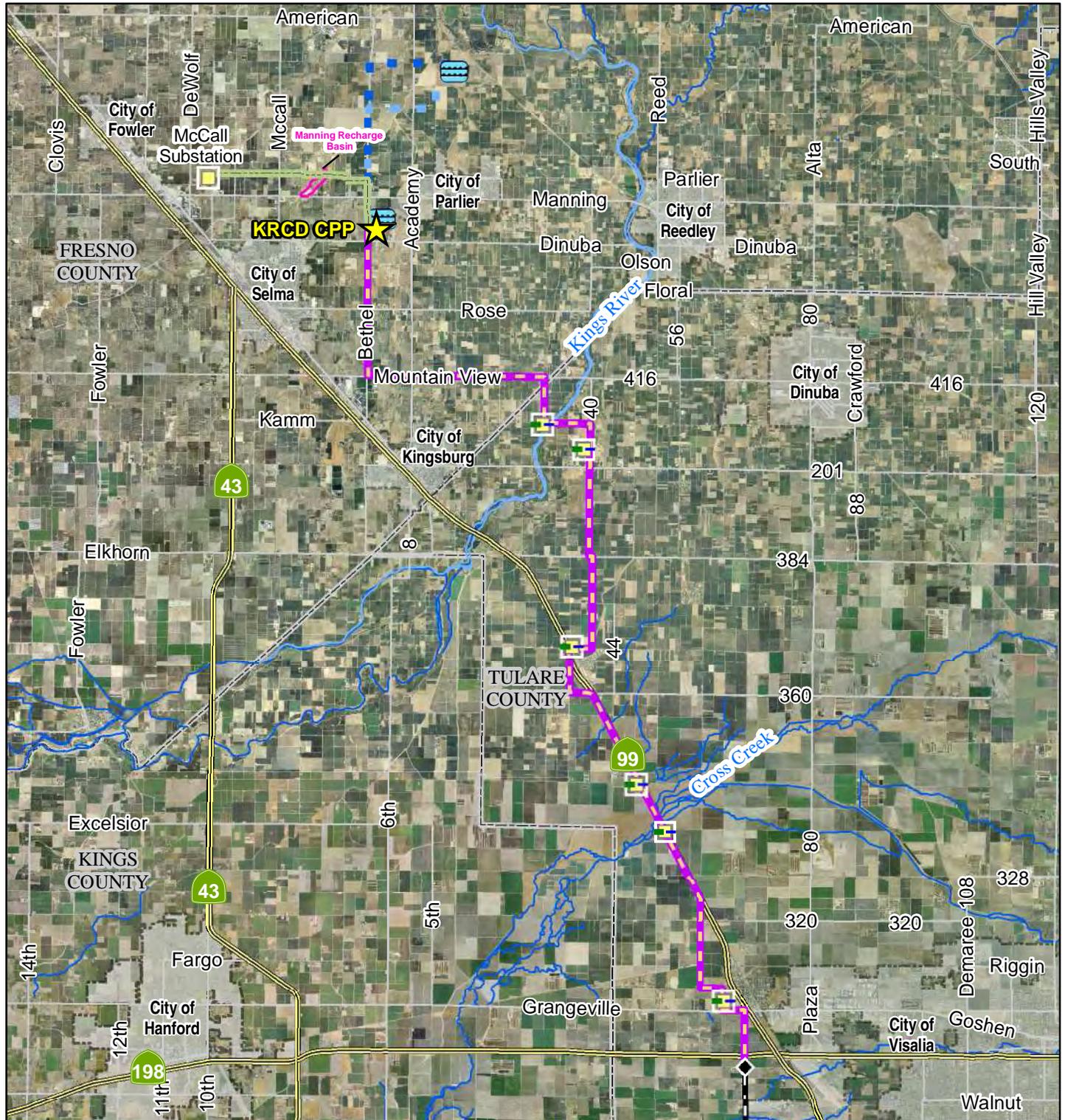
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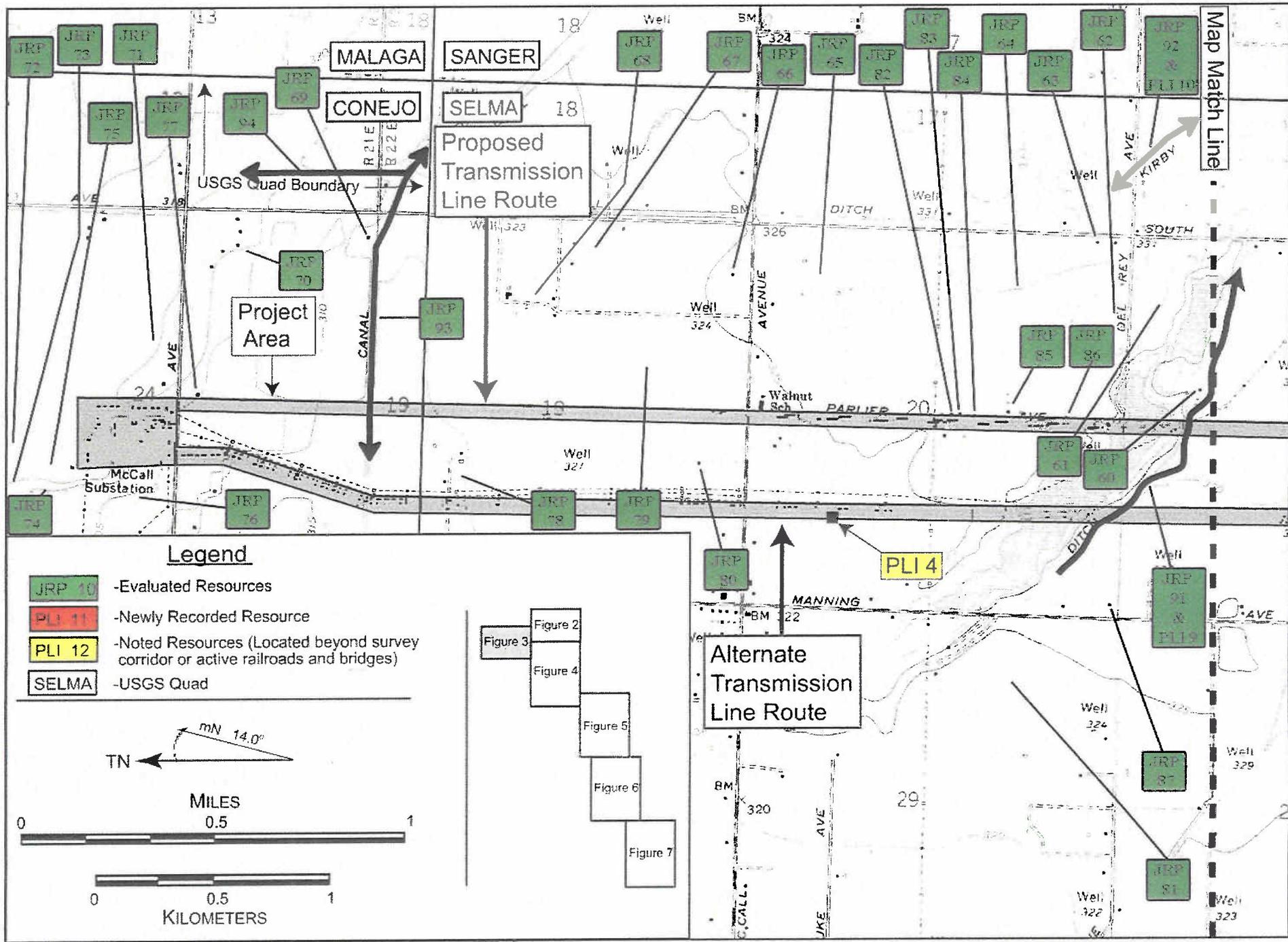
# Kings River Conservation District Community Power Plant



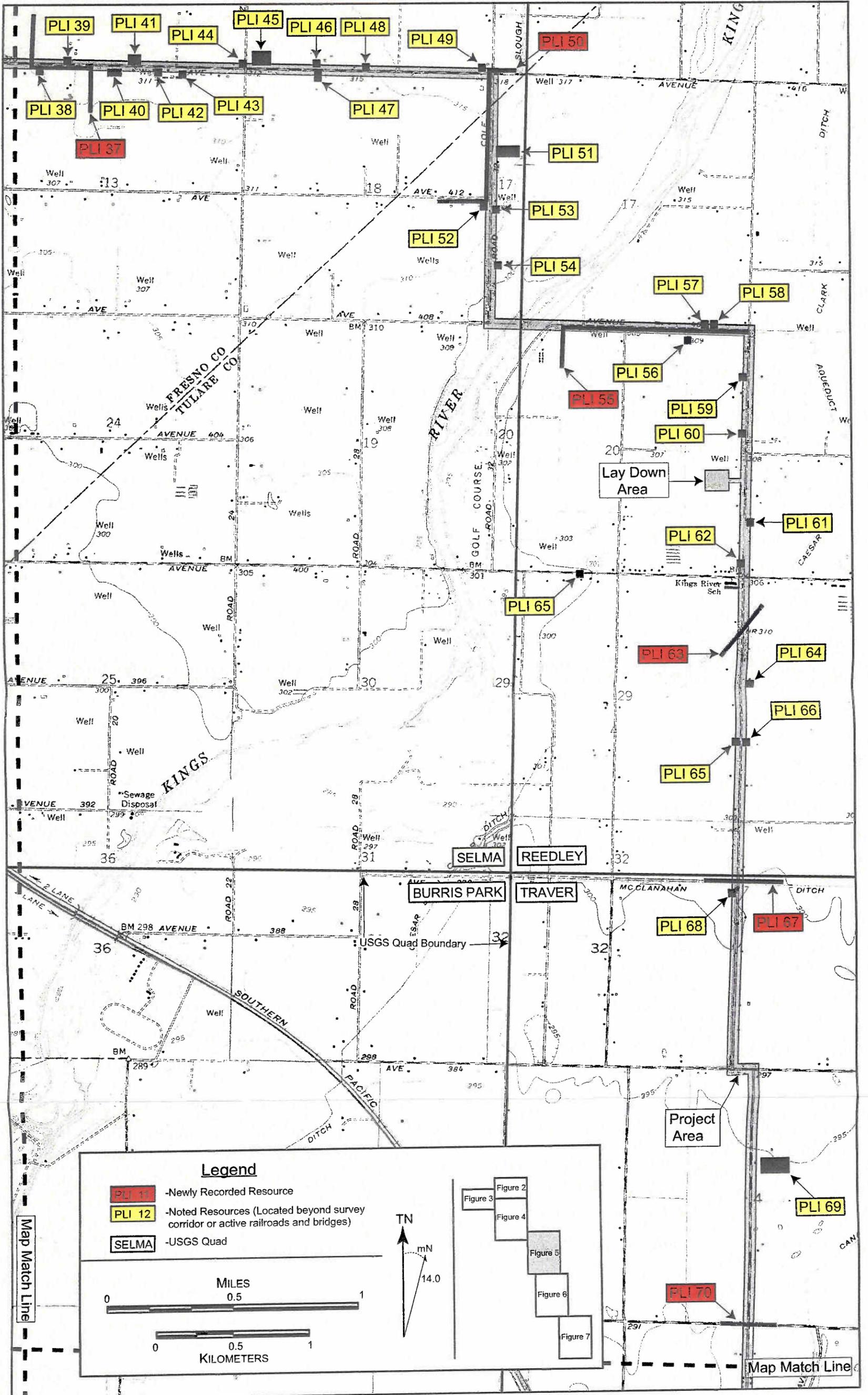
<ul style="list-style-type: none"> <li> KRCD Community Power Plant</li> <li> Freeway</li> <li> Major Street</li> <li> City Boundary</li> <li> County Boundary Line</li> <li> Substation</li> <li> Proposed Transmission Line</li> <li> Waste Water Percolation Ponds</li> <li> Proposed Water Supply Pipeline - Option 1</li> <li> Proposed Water Supply Pipeline - Option 2</li> <li> Natural Gas Connection Point</li> <li> Proposed Natural Gas Staging / HDD Area</li> <li> Proposed Natural Gas Pipeline</li> <li> SoCal Gas 7000 Line</li> <li> Manning Recharge Basin</li> </ul>	<h3>Power Plant Overview</h3> <p>N 0 1 2 3 4 5 Miles</p> <p>1:200,000 Scale</p>	<p><b>KRCD COMMUNITY POWER PLANT</b></p> <p><i>Energy for our Future</i></p>
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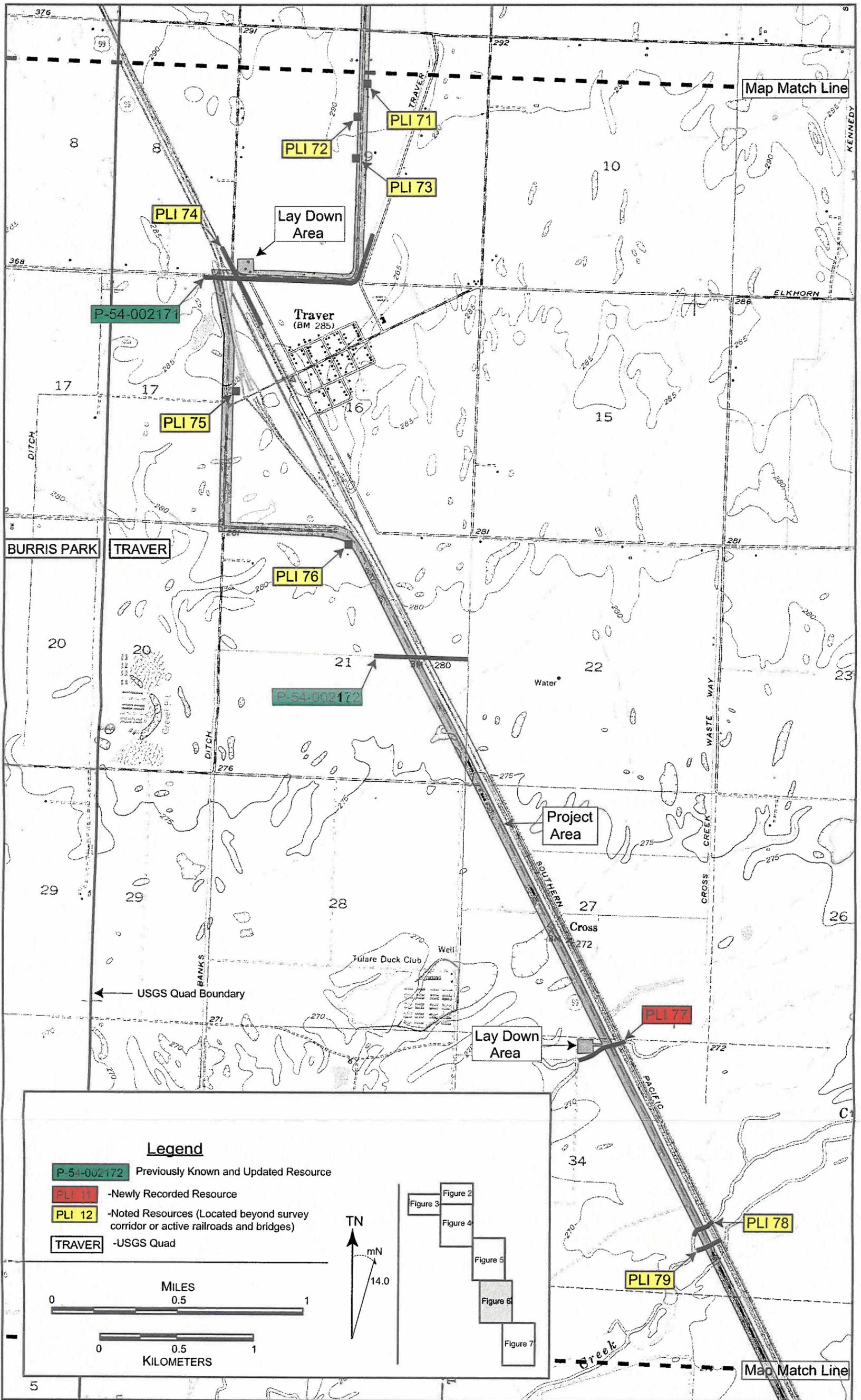
Identified Resources within the Project Area



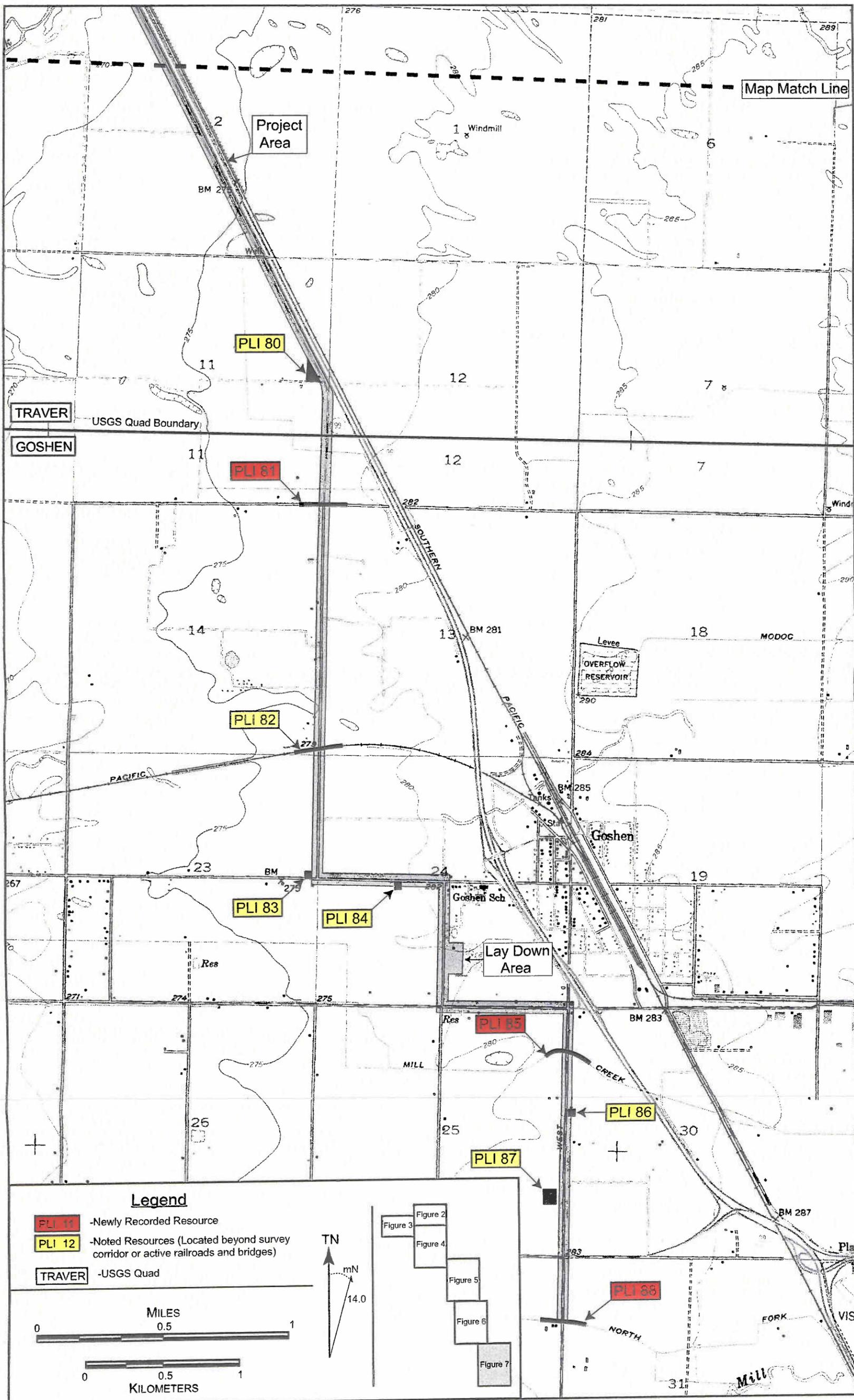




Identified Resources within the Project Area



Identified Resources within the Project Area



Identified Resources within the Project Area

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

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

Page 1 of 10

\*Resource Name or # (Assigned by recorder) P-54-002171

**P1. Other Identifier:** Traver Canal

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare / Kings

\*b. USGS 7.5' Quad See Linear Feature Records; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Traver Canal, a conduit within the Alta Irrigation District (AID) system of canals, has been previously recorded at various locations and given the designation P-24-002171. The intent of this form is to inventory and evaluate the entire canal through a method of sampling representative segments. The canal draws water from Travers Creek near the intersection of Road 64 and Avenue 416, west of Dinuba. It continues along a southwesterly course to its terminus at Kings River, west of Traver, within Kings County. The canal is recorded in three locations for this study: Segments TC-1 and TC-2 are located outside of the Study Area and are recorded for comparison purposes; Segment TC-3 is located within the Study Area. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

P5b. Description of Photo: (View, date, accession #) Beginning of Traver Canal at Road 64 and Road 416 (Segment TC-1), camera facing west, August 27, 2008.

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
1884

\*P7. Owner and Address:  
Alta Irrigation District  
P.O. Box 715  
Dinuba, CA 93618

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones / C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)  
Intensive

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



\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

DPR 523A (1/95)

\*Required Information

B1. Historic Name: Traver Canal

B2. Common Name: Traver Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed 1884

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features: \_\_\_\_\_

B9. Architect: P.Y. Baker b. Builder: 76 Land and Water Company

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Traver Canal does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: William Morison, *The Alta Empire* (Dinuba: Alta Irrigation District, 1988); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear / Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Traver Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** TC-1

**\*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.)

UTM (east end): Zone 11; 282634mE / 4047086mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 12, 13.

UTM (west end): Zone 11; 280124mE / 4047145mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 15.

This segment crosses Avenue 416/El Monte Way near Road 62 west of Dinuba before turning east along Avenue 416 toward Road 52.

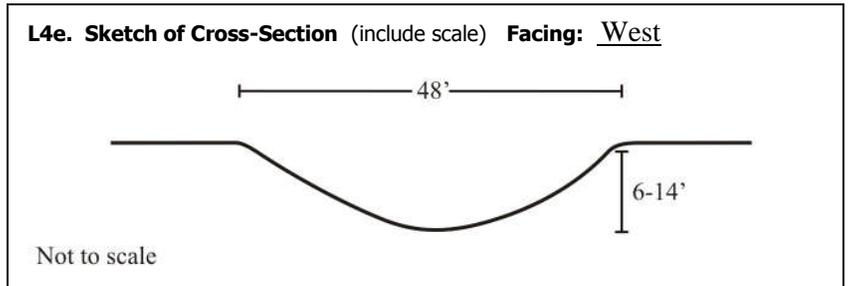
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is outside of the Study Area and was recorded for comparison purposes. This marks the beginning of Traver Canal, where it draws water from Traver Creek (Kennedy Slough) that approaches Avenue 416 (El Monte Way) from the north. North of Avenue 416 the creek has been engineered and has a flat bottom and earthen banks. The channelized creek passes under the road through a three-channel concrete box culvert. South of the road the canal has a shallow U-shaped configuration. A roughly ¼ mile segment west of Road 62 is lined in concrete.

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

- a. **Top Width** 48 feet
- b. **Bottom Width** unknown
- c. **Height or Depth** 6-14 feet
- d. **Length of Segment** 1.5 miles

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



**L5. Associated Resources:**

Culverts

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in a rural area surrounded by orchards, open land, and encroaching light industrial and large-lot subdivision developments.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**

Camera facing north from Avenue 416 / El Monte Way. This section is a channelized portion of Traver Creek. The photograph on the Primary Record Form shows the canal that runs along the south side of Avenue 416.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Traver Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** TC-2

**\*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.)

UTM (north end): Zone 11; 279174mE / 4042348mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 34.

UTM (south end): Zone 11; 279128mE / 4040750mN

USGS 7.5' Quad Traver Date 1949, (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 3.

This segment of Traver Canal parallels Road 48 from south of Avenue 392 to Avenue 384.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is a comparison point located outside of the Study Area. Traver Canal at this location is unlined and has a shallow "U" shape. Approximately ¼ mile south of Avenue 392 the McClanahan Ditch diverts from the west side of the Traver Canal. About 100 feet south of the McClanahan diversion is a cast concrete checkgate bearing a "December 7, 1925" date stamp. The checkgate has three open gates which can be closed with board slats.

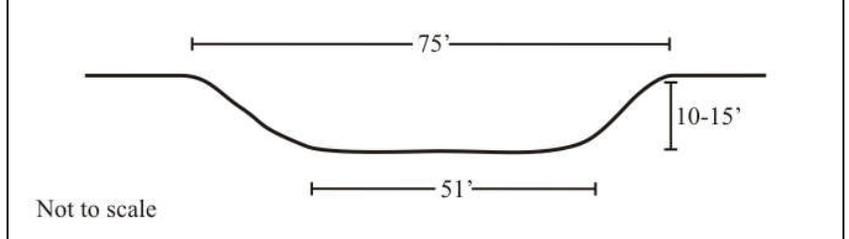
**L4. Dimensions:** (in feet for historic features and meters for prehistoric features)

- a. **Top Width** 75 feet
- b. **Bottom Width** 51 feet
- c. **Height or Depth** 10-15 feet
- d. **Length of Segment** 1 mile

**L5. Associated Resources:**

Check gate, McClanahan Ditch headgate

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



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

Traver canal is located in a rural agricultural area surrounded by vineyards and orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing north along canal segment, concrete checkgate at center.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Traver Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** TC-3

**\*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.)

UTM (east end): Zone 11; 277527mE / 4037546mN

UTM (west end): Zone 11; 276780mE / 4037562mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 17S R 23E Sec 16.

This segment is located along Avenue 368 between Road 40 and Burke Drive, just north of Traver.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of Traver Canal is located with the Study Area. It is unlined and has a very shallow “U” shape with a broad bottom. The walls are somewhat overgrown with weeds and grasses and carry narrow dirt access. Avenue 368 crosses over the canal via a concrete bridge with four concrete circular columns supporting the center.

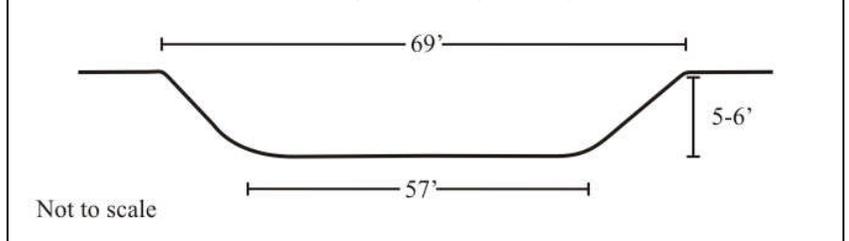
**L4. Dimensions:** (in feet for historic features and meters for prehistoric features)

- a. **Top Width** 69 feet
- b. **Bottom Width** 57 feet
- c. **Height or Depth** 5-6 feet
- d. **Length of Segment** ½ mile

**L5. Associated Resources:**

Concrete road bridge

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



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located in a rural agricultural area surrounded by vineyards, orchards and cornfields.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**

Camera facing north along canal segment from Avenue 368 road bridge.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

**L11. Date:** August 26, 2008

### **B10. Significance (continued):**

Traver Canal, built in 1884, is one of the original irrigation canals of the 76 Land and Water Company, the forerunner of the Alta Irrigation District. It was one of two principal branches of the company's main canal, the '76 Canal, which originated in southern Fresno County near the community of Reedley (the other main branch canal, the McClanahan Ditch, is recorded separately). The company was founded in 1882 to serve the semi-arid region previously dominated by the '76' Ranch, owned by Darwin and Ferguson. The land and water company adopted its name from the ranch, which had collapsed under the combined forces of droughts, introduction of the "no fence" law, and construction of the railroad. Peter Yaple Baker and D.K. Zumwalt conceived the '76' Land and Water Company as the first large-scale settlement and irrigation project in Tulare County. In order to raise capital, stock was divided among seven investors, H.P. Merritt, P.Y. Baker, Charles Traver, D.K. Zumwalt, C.F.J. Kitchener, I.H. Jacobs, Thomas Fowler, and Francis Bullard. County residents received news of the project with enthusiasm. The '76' Land and Water Company was the first in Tulare County to undertake an advertizing campaign to draw people to its newly irrigated land. They offered a total of 30,000 acres of land for sale to settlers along with water rights equaling 40 miner inches attached to each 40-acre tract. The company also offered leases and financing. Owners and lessees served by the canal paid an annual fee for the maintenance of the canal system. Town lots for Traver, the recently-platted town along the Southern Pacific mainline, also sold well and it quickly became an important regional shipping point.<sup>1</sup>

Construction of the company's '76' Canal began in August of 1882 with P.Y. Baker as "construction supervisor." The canal diverted water from Kings River approximately thirteen miles northeast of Reedley and continued in a general southeasterly direction along the foothills for about nine miles. The main canal had a 100-foot wide bottom and was over five feet deep. South of Wahtoke Lake the canal system used Kennedy Slough (Traver Creek) to bring water southwest. The Traver Canal began at the southern end of the slough, about six miles northeast of Traver. The Traver Canal began deliveries in 1884, supplying water to 2,000 acres on the north side of Traver and following essentially the same course as the current canal as far west as the Southern Pacific Railroad. By 1892 the canal has been extended west to drain into the Kings River.<sup>2</sup>

Originally, the Traver Canal, like the others in the '76' Land and Water Company system, did not return water to the river or other drainage. The canal simply ended near the Southern Pacific Railroad tracks. As a result, the water spread underground west of Traver. The water table rose from 50 feet to two feet and alkali soon sterilized the soil of that region. The increasing alkalinity coupled with construction of the Southern Pacific eastern valley line through Dinuba in 1888 ushered in a period of decline in Traver; the town eventually rebounded, but for a time it became little more than a flag stop along the main railroad route.<sup>3</sup>

In 1887 California passed the Wright Act allowing residents to form and operate their own irrigation districts. The residents in the area served by the '76' Canal and its branches voted to form their own district the following year. Because the canal's

<sup>1</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 26-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 183-184.

<sup>2</sup> *Memorial and Biographical History of the Counties of Fresno, Tulare and Kern, California* (Chicago: Lewis Publishing Co, 1891) 405; Carl Ewald Grunsky, *Irrigation Near Fresno, California USGS Water Supply and Irrigation Papers No. 18* (Washington, D.C.: Government Printing Office, 1898) 52; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988), 21; Jewell, "Agricultural Development in Tulare County," 25-27; William Hammond Hall, *Topographic and Irrigation Map of the Great Central Valley of California* (San Francisco: Lith. Britton & Rey, 1887); Small, *Early History of Tulare County*, 181; Alfred Bannister, *Map of Tulare County* (San Francisco: Lith. Britton & Rey, 1884); Thomas H. Thompson, *Historical Atlas of Tulare County* (Visalia: Thomas Thompson, 1892); US Census Bureau, MS Census 1900, Tulare County, Kaweah township, ed 61 sheet 5; US Census Bureau, MS Census 1910, Fresno County, 8<sup>th</sup> Judicial Township, ed 65, sheet 3.

<sup>3</sup> Harold J. Enns, "The Alta Irrigation District: A Prototype of Individual Initiative in Water Development" Master's Thesis, Fresno State College, 1967, 36-37.

diversion point was further up the Kings River than any other irrigation district, they selected “Alta,” meaning “high,” for the name of the district. The Board of Directors, consisting of P.Y. Baker who had left the ‘76’ Land and Water Company, T.L. Reed, J.D. Van Noy, E.E. Giddings, and J.E. Toler, authorized \$675,000 worth of bonds, of which \$410,000 were used to purchase the existing ‘76’ Canal system. Another \$133,000 in bonds was used to expand the irrigation system. The district hired James Sibley to design a larger system and constructed additional branches between 1888 and 1890 increasing irrigated land from the original 2,000 acres to 19,000 acres. During the early 1890s the Traver Canal was extended west to Kings River, thus solving its drainage problem. The canal west of the railroad tracks was 40 feet wide at this time.<sup>4</sup>

In 1895, AID declared the system complete and turned its attention to other problems including water rights litigation and defending the legitimacy of its bonds. For the next several decades funds for canal maintenance were extremely limited and the condition of system began to deteriorate. Funding for maintenance and improvements rebounded in the 1920s, at which time the district began to systematically replace all of Traver Canal’s original wooden engineering features, such as check gates and drops, with concrete structures. The Traver Canal remains a principal component of the AID irrigation water delivery system, and has been regularly upgraded and maintained up to the present.<sup>5</sup>

### Evaluation

As discussed above, the Traver Canal was one of original delivery canals of the 76 Land and Water Company, the first major irrigation company in Tulare County. The canal fundamentally shaped the settlement and agricultural patterns of this part of the county, opening it up to the intensive farming that characterizes the region to this day. The Traver Canal is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with late nineteenth century agricultural development of rural Tulare County. However, the Traver Canal does not appear eligible for the NRHP or CRHR because it does not retain integrity to its potential period of significance, 1884-1900. The potential period of significance begins with the canal’s date of construction and ends when ownership of the canal passed out of the hands of its builders and original operators, the 76 Land and Water Company.

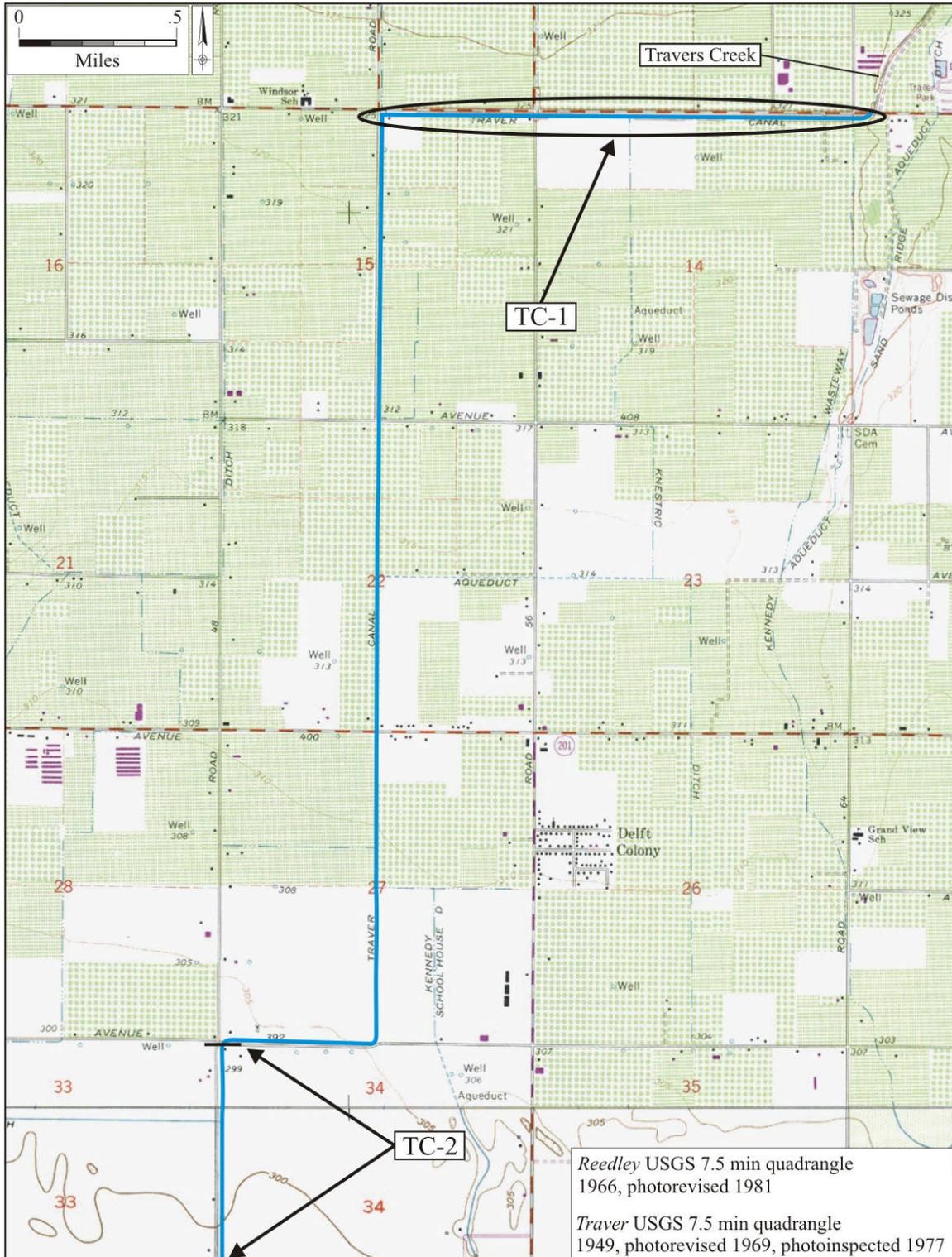
Similarly the canal is associated with Peter Yaple Baker, prominent local businessman and canal promoter (Criterion B or 2). Baker was associated with the canal system through out his adult life and as its major proponent significant within the local community. However, the canal system and irrigation district does not retain integrity to the period of his association with it.

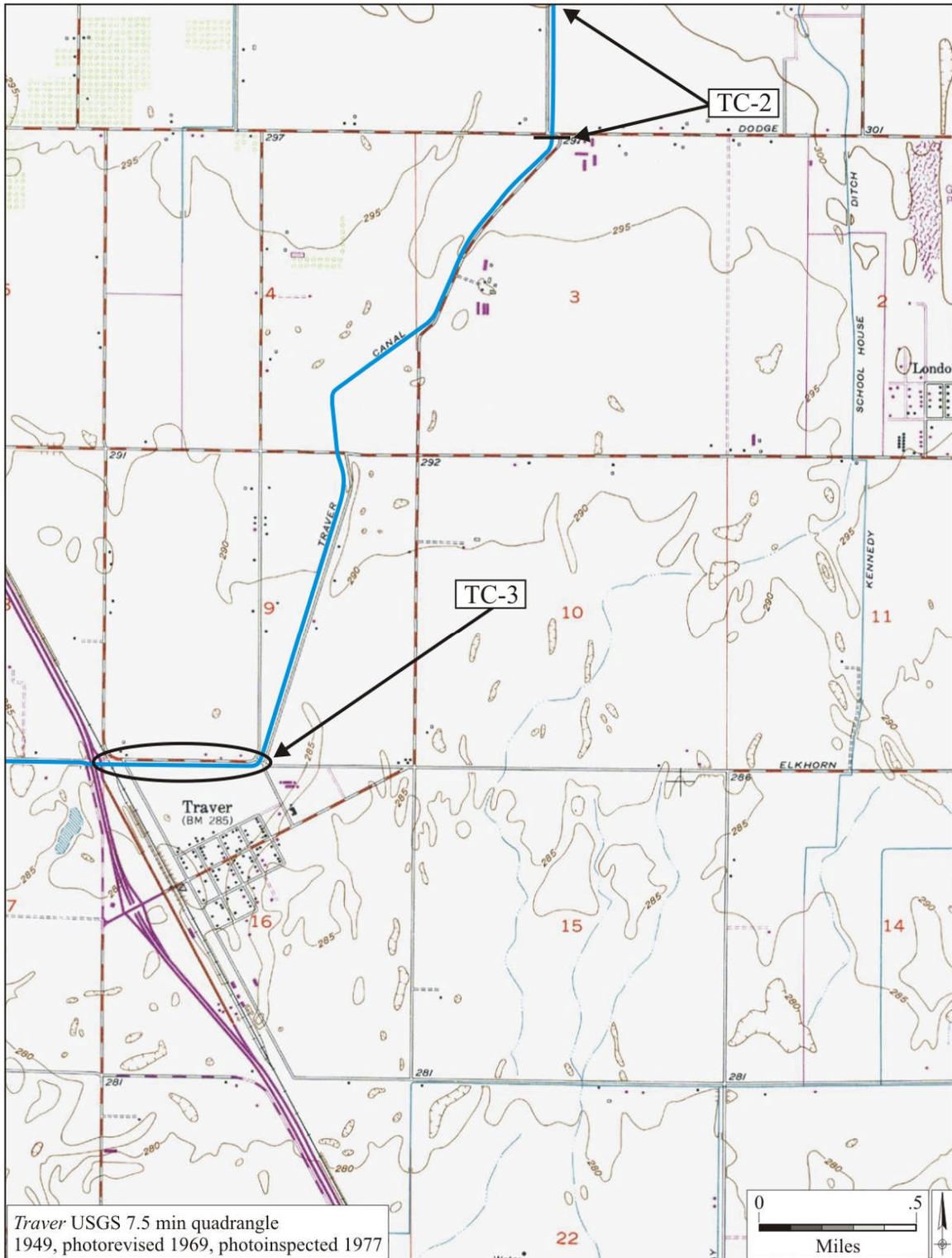
The Traver Canal bears little resemblance to its appearance during its potential period of significance. Over its entire length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, all observed water control structures, bridges, and culverts along the canal are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its potential period of significance, the Traver Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

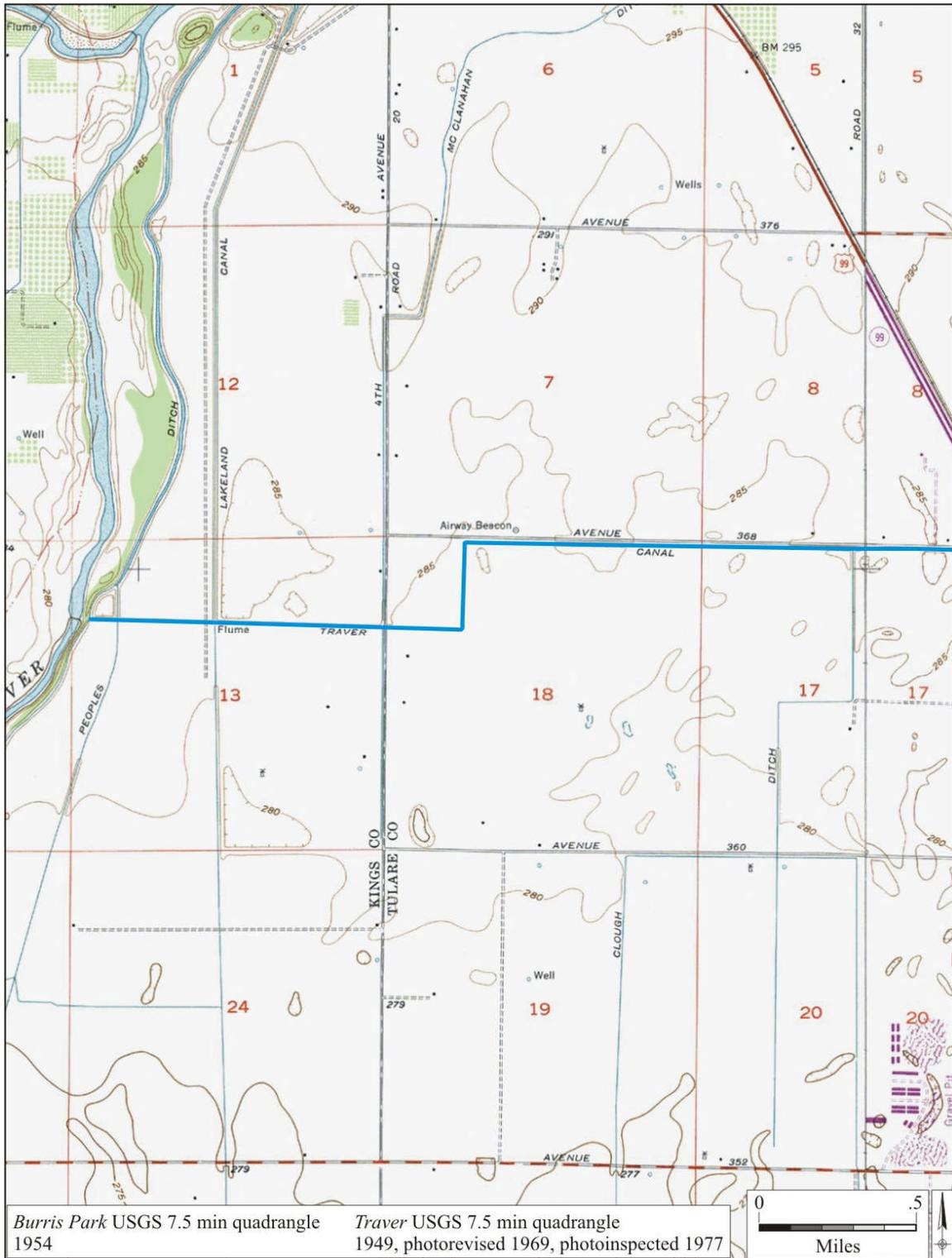
<sup>4</sup> Frank Adams, *Irrigation Districts in California*, Bulletin No. 29, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; Small, *Early History of Tulare County*, 188; Morison, *The Alta Empire*, 22, 26-27; Alta Irrigation District (AID), Board of Directors Books, Volume 1: 1888-1894, Minutes, December 6, 1892, and January 3, 1893, on file at AID Offices, Visalia.

<sup>5</sup> AID, Detailed Engineering Drawings, Sheets 39, 41, 53-54, 69-71, 86-88, 104, 1922, on file at AID office; AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1944-1980).

**Location Maps:**







**P1. Other Identifier:** Banks Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad See Linear Feature Records; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Banks Ditch, a conduit within the Alta Irrigation District (AID) system of canals, has been previously recorded at various locations and given the designation P-24-002172. The intent of this form is to inventory and evaluate the entire canal through a method of sampling representative segments. From its point of diversion off Button Ditch, at the intersection of Avenue 384 and Road 132, the ditch flows south and west for a distance of 18 miles, terminating south of the town of Traver. The ditch is earthen with concrete engineering structures at all observed locations. For this project the canal was recorded at three locations: Segments BD-1 and BD-2 are outside the Study Area and recorded for the purposes of comparison, and Segment BD-3 is located within the Study Area. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Representative view of Banks Ditch along Avenue 360, facing west from east of Alta Avenue.

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

1893-1894 (Director's Minutes, Alta Irrigation District)

\*P7. Owner and Address:

Alta Irrigation District

P.O. Box 715

Dinuba, CA 93618

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

\*P9. Date Recorded: August 26, 2008

\*P10. Survey Type: (Describe) Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 12

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) P-54-002172

B1. Historic Name: Banks Ditch; Elbow Ditch

B2. Common Name: Banks Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction between 1893 and 1894; concrete engineering features added and the ditch extended beginning in the 1920s.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: J. Sibley b. Builder: Haden and Danielson; J.E. Baker; R.F. Morgan

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. Banks Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks significance and integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Banks Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** BD-1

\*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.)

UTM: Zone 11; 296091mE / 4040106mN

USGS 7.5' Quad Monson Date 1949 (photorevised 1969); T 17S R 25E Sec 5.

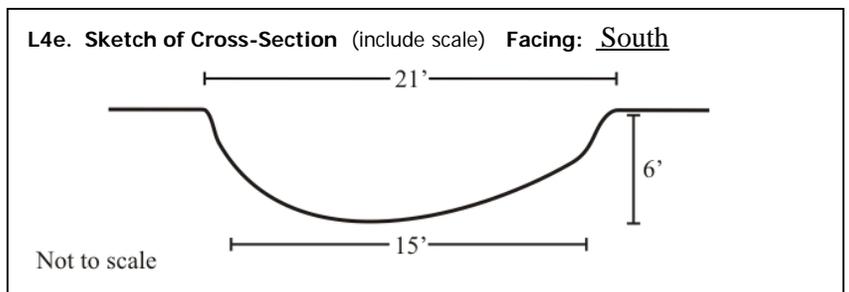
This segment is located at the intersection of Road 132 and Avenue 384 south of the town of Cutler.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment marks the beginning of the canal; it is recorded here as a comparison point. The ditch at this location is unlined and has a shallow, U-shaped geometry. A board-formed concrete headgate with a metal undershot gate is located just south of the canal's intersection with Button Ditch, from which it draws water.

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

- a. **Top Width** 21 feet
- b. **Bottom Width** 15 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet



**L5. Associated Resources:**

Concrete headgate located just south of Button Ditch.

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in an agricultural area surrounded by vineyards, orange groves, and orchards; a residence is located to the east.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of Banks Ditch at its point of diversion from Button Ditch (visible at bottom of the photograph), camera facing south.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Banks Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** BD-2

\*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.)

UTM (east end): Zone 11; 290939mE / 4035460mN

USGS 7.5' Quad Monson Date 1949 (photorevised 1969); T 17S R 24E Sec 23.

UTM (west end): Zone 11; 278286mE / 4035876mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 22.

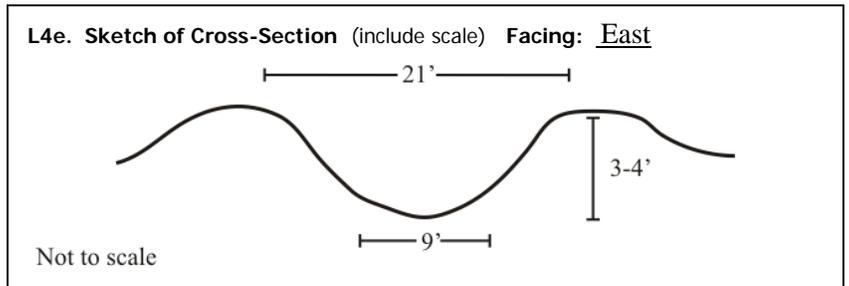
This segment is located along Avenue 360 between Road 48 and Road 112, southeast of Traver.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is located east of the Study Area, but is recorded here as a comparison segment. The canal is unlined and has a uniform “U” shape along this nearly eight-mile long segment. Concrete engineering structures are located at regular intervals along the segment. These include board-formed concrete diversion gates for smaller laterals, consisting of a small box with a metal gate, and poured concrete checkgates with grooves for wood board gates. The westernmost checkgate is date-stamped February 23, 1928. The walls of the canal have short sections of concrete lining on the downstream side of each checkgate.

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

- a. **Top Width** 21 feet
- b. **Bottom Width** 9 feet
- c. **Height or Depth** 3-4 feet
- d. **Length of Segment** 8 miles



**L5. Associated Resources:**

Checkgates, diversion gates

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in an agricultural area surrounded by orchards.

**L7. Integrity Considerations:** See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:** Camera facing east along Avenue 360, showing a typical checkgate.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Banks Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** BD-3

\*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.)

UTM: Zone 11; 277908mE / 4035111mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 21.

This segment of Banks Ditch crosses the Highway 99 Frontage Road, also known as Diagonal Road 60, between Avenue 360 to the north and Avenue 362 to the south.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

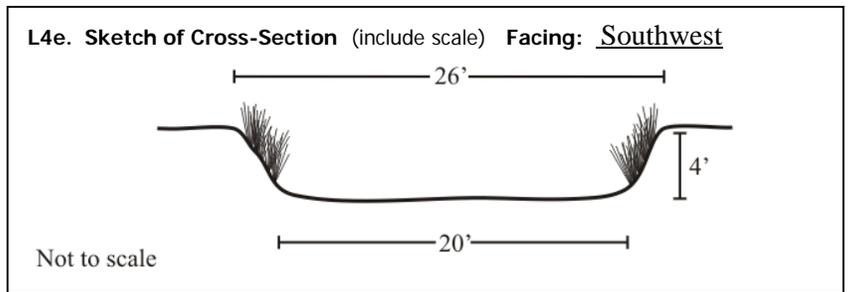
The ditch at this location is shallow and earth-lined. It is essentially U-shaped with a broad bottom. The banks are untended and covered with weeds and grasses. A simple concrete box culvert carries the canal under the frontage road.

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

- a. **Top Width** 26 feet
- b. **Bottom Width** 20 feet
- c. **Height or Depth** 4 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in an agricultural area adjoining a major transportation route that includes State Highway 99 and the Southern Pacific railroad tracks. The surrounding acreage is planted to corn, alfalfa, and orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southwest, showing frontage road in the foreground.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

### **B10. Significance (continued):**

Banks Ditch was constructed between 1893 and 1894 by Alta Irrigation District, which continues to own and operate the canal. Alta Irrigation District (AID) was formed in 1888 following passage of the Wright Act the previous year, which allowed landowners to organize and operate their own irrigation districts. In 1890, the new district purchased the canals and water rights of the 76 Land and Water Company, the first enterprise to build large-scale irrigation works in northern Tulare County beginning in the early 1880s. At the time, the 76 Land and Water Company system consisted of the 76 Canal, or main canal (located outside of the Study Area for this project); Traver Canal and McClanahan Ditch, branches of the main canal that served the western portion of the district surrounding Traver (both recorded separately); and several smaller laterals.<sup>1</sup>

The newly-formed irrigation district immediately began an expansion program to provide irrigation water to portions of the district not covered by the existing 76 Company system. District organizers hired James Sibley to plan and design the expansion program. Because the district was not able to sell sufficient bonds to cover construction costs, the district began a process of “purchasing” necessary canals from those who constructed them. In practice, however, the district laid out the ditches and created the specifications that individual builders would follow. The minutes of the Board of Directors record the acceptance of five sections of the Banks Ditch along Avenue 360 between 1893 and 1894. J.E. Baker constructed three segments east of Section 24 of Township 17, Range 23, and R.F. Morgan constructed two segments west of Section 24 of Township 17, Range 23, including the portion within the Study Area. At this time the ditch was called the Elbow Ditch.<sup>2</sup>

In 1895, AID declared the system complete and turned its attention to other problems including water rights litigation and defending the legitimacy of its bonds. For the next several decades funds for canal maintenance were extremely limited and the condition of system began to deteriorate. The district began to rectify the neglect between 1911 and 1922 by gradually increasing the assessments for maintenance. During this period Banks Ditch was extended to drain into the Cross Creek channels and minor alterations were made in the area surrounding the Southern Pacific Railroad line. Increased funds were also used for the systematic replacement of wooden control and engineering features with concrete structures. Between 1938 and 1941 the route of the canal east of Road 112 was altered to accommodate construction at Sequoia Field.<sup>3</sup> Banks Ditch remains an operating component of the AID irrigation water delivery system, and has been regularly upgraded and maintained up to the present.<sup>4</sup>

### Evaluation

As discussed above, Banks Ditch was one of several canals built in the 1890s and added to the existing Alta Irrigation District system. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Tulare County (Criterion A or 1). Canals, like other forms of infrastructure, are common elements of the landscape,

<sup>1</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, “Agricultural Development in Tulare County 1870-1900,” Master’s Thesis, University of Southern California, June 1950, 25-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 181-184; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988).

<sup>2</sup> Alta Irrigation District (AID), Board of Directors Books Volume I, 1888-1894, on file at AID Office, Visalia; Morison, *The Alta Empire*, 26-27.

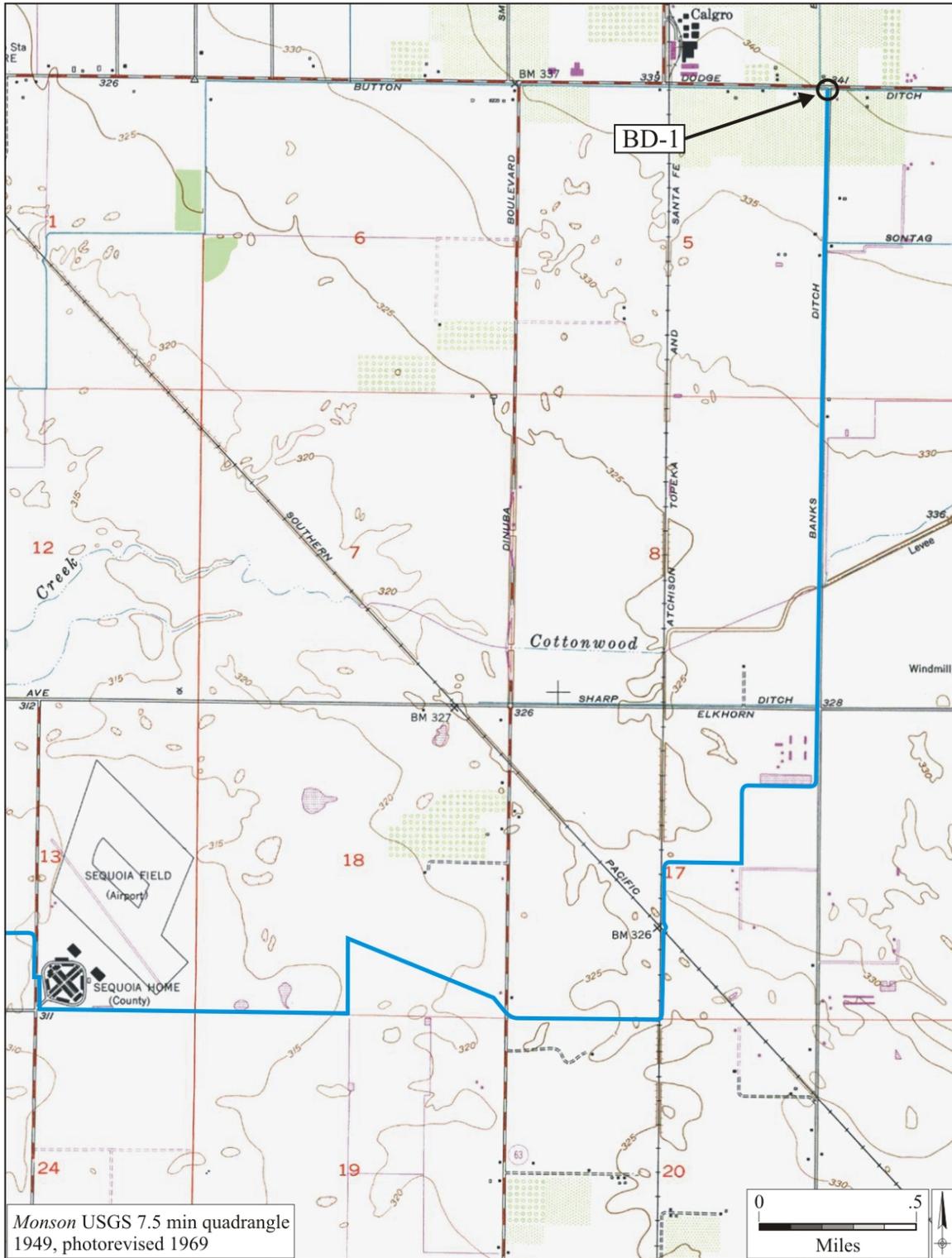
<sup>3</sup> Victor M. Cone, *USDA Bulletin 239: Irrigation in the San Joaquin Valley, California* (Washington D.C.: Government Printing Office, 1911), Inset Map; Harold J. Enns, “The Alta Irrigation District: A Prototype of Individual Initiative in Water Development in California,” Master’s Thesis in History, California State College, Fresno, 1967, 68-69; AID, “Miscellaneous Ditch Data” [chart], 1924, on file at AID office; AID, “Map of Alta Irrigation District 1921 updated 1938,” on file at AID office; Gerald Carroll, “Sequoia Field Getting Long-Planned Improvements,” *Visalia Times-Delta* (September 23, 2008).

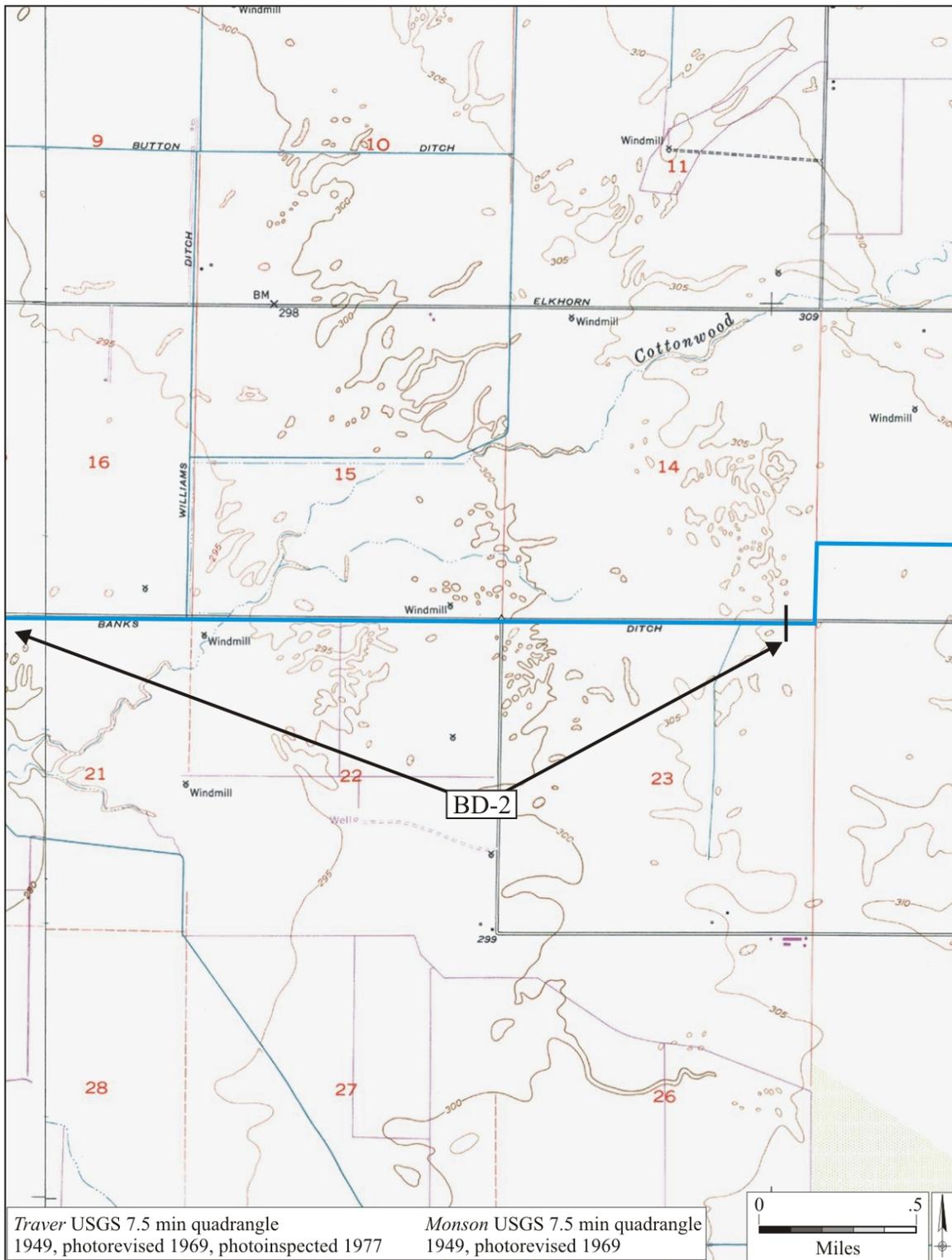
<sup>4</sup> AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1944-1980).

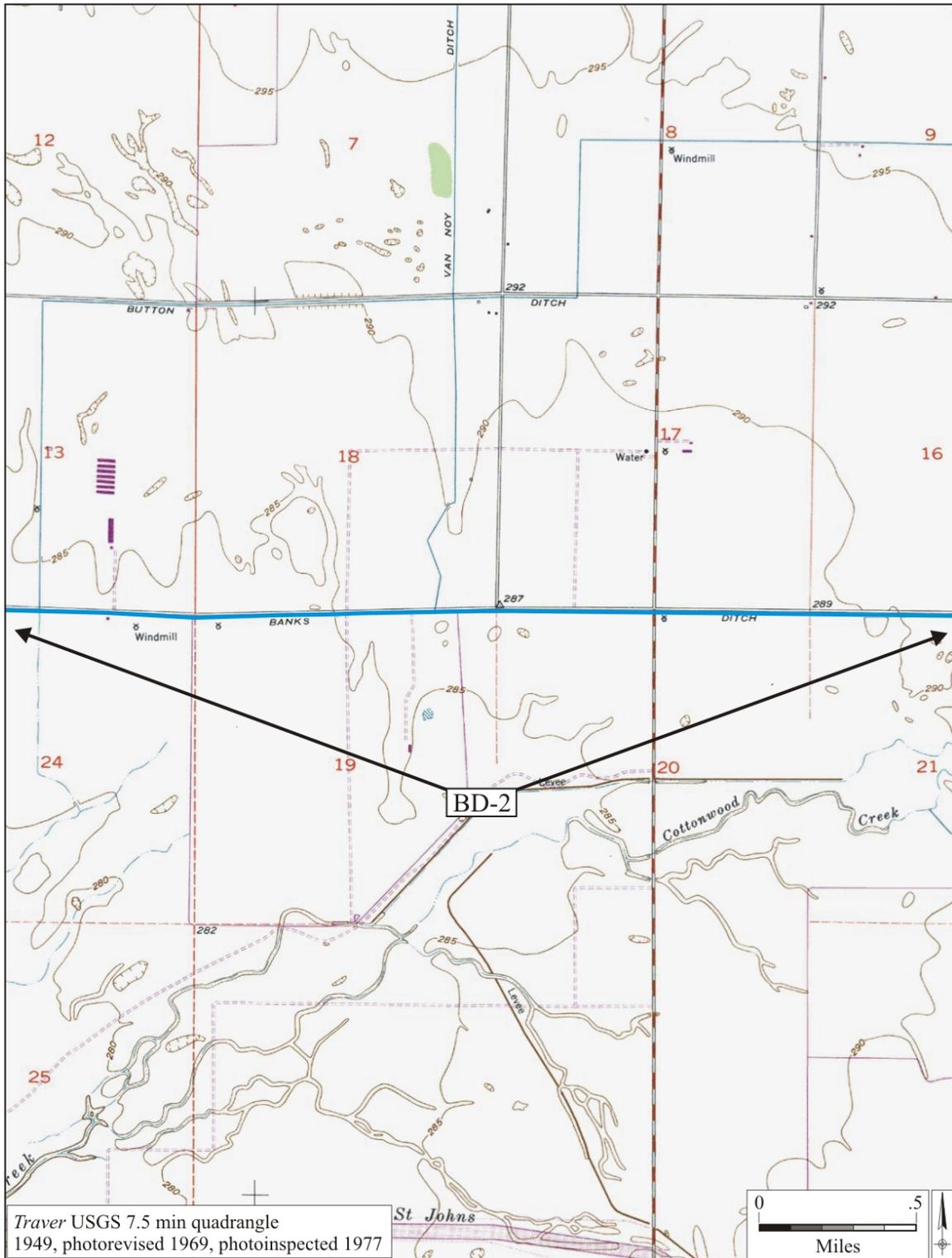
particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of their abundance, it is necessary to evaluate the canals within the context of the irrigation developments and their impact in the region as a whole. Banks Ditch is a later addition to a system whose foundation dates to 1882-84 with the completion of the 76 Land and Water Company system. It is this initial system – which included such pioneer ditches as the Traver Canal and McClanahan Ditch – that made significant contributions to the transformation of the lands within the Alta Irrigation District from arid plains to intensively farmed land by bringing large quantities of water to the region. Banks Ditch was a second-generation canal built after the pioneer period of large-scale irrigation had reached maturity. Additionally, Banks Ditch does not appear associated with any historically significant individual (Criterion B or 2), nor does it embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3).

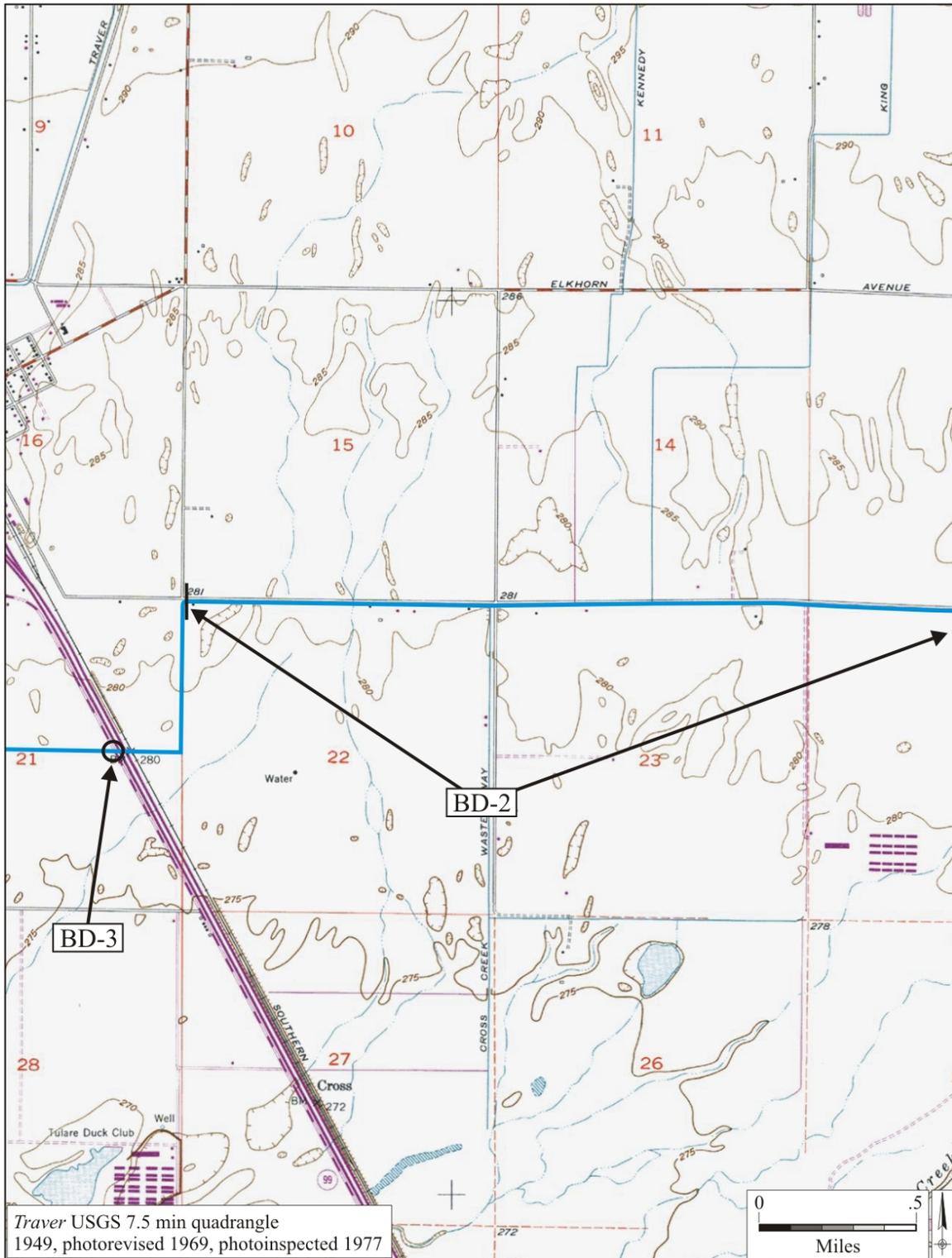
Even if Banks Ditch were historically significant, the historic integrity of the ditch has been compromised. Over its entire length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, the portion of the ditch in the vicinity of Sequoia Field has been realigned to accommodate the airfield. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking significance and integrity, Banks Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

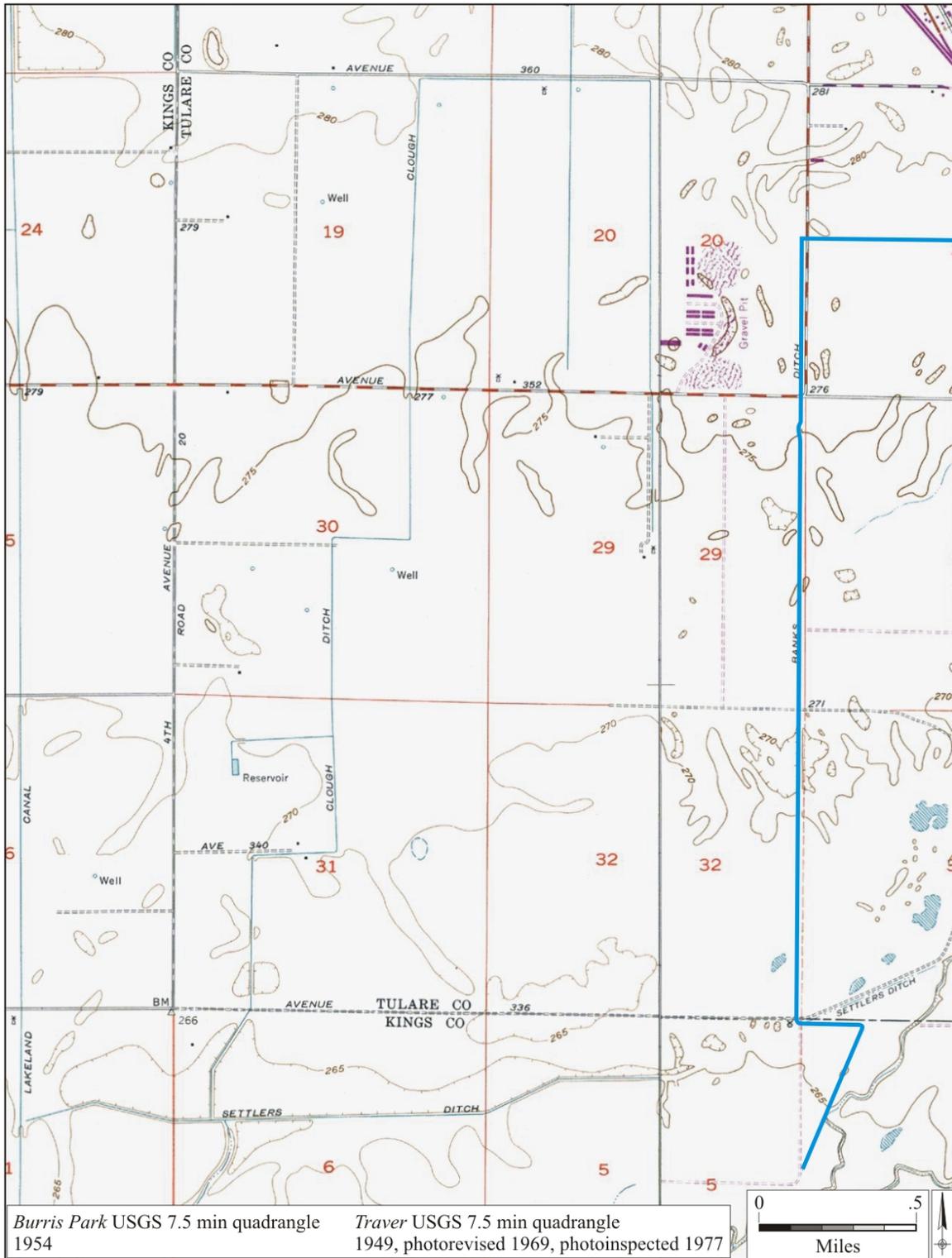
**Location Maps:**











**P1. Other Identifier:** Harp Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Fresno

\*b. USGS 7.5' Quad See Linear Feature Records: M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Harp Ditch is a conduit of Consolidated Irrigation District (CID) system of irrigation canals. From its headgates at the Lonetree Channel south of Sanger, the Harp Ditch runs southeast to its terminus south of Rose Avenue, east of Selma. The above-ground portions are earthen and have concrete engineering features; this includes the segment within the Study Area, Segment HD-1, and the southern portion of Segment HD-2. There are two sections outside of the Study Area that are piped: the area north of Manning Avenue (Segment HD-2) and Segment HD-3, across Huntsman Avenue. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Harp Ditch in the foreground, piped under and north of Manning Avenue (Segment HD-2), camera facing north, August 28, 2008.

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

Circa 1876 (McFarland, Water for a Thirsty Land)

\*P7. Owner and Address:

Consolidated Irrigation District  
2255 Chandler Street  
Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 28, 2008

\*P10. Survey Type: (Describe)

Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 9

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 14

B1. Historic Name: Harp Ditch; Pioneer Branch; Branch of the Lone Tree Channel

B2. Common Name: Harp Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed circa 1876; expanded between 1946 and 1964

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features: None

B9. Architect: Unknown b. Builder: Kingsburg Irrigation Company

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Harp Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks integrity to its historic appearance. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Harp Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** HD-1

\*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.)

UTM: Zone 11; 272581mE / 4058701mN

USGS 7.5' Quad Sanger Date 1965 (photorevised 1981); T 15S R 22E Sec 2, 11.

The Harp Ditch crosses Lincoln Avenue less than a ¼ mile east of Mendocino Avenue, south of Sanger.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

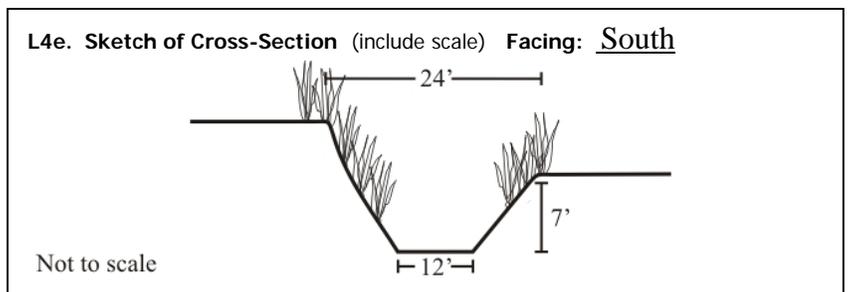
This segment is within the Study Area. At this location, the Harp Ditch is an unlined earthen ditch with a flat bottom and steep, uneven sides. The east bank has a berm and is higher than the west bank; both sides carry a dirt access road. The ditch crosses under Lincoln Avenue via a board-formed concrete culvert and siphon.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 7 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in a rural agricultural area surrounded by orchards and a farmstead.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southeast showing culvert/siphon outlet at bottom.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110,  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L1. Historic and/or Common Name:** Harp Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** HD-2

\*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.)

UTM: Zone 11; 273390mE / 4053823mN

USGS 7.5' Quad Selma Date 1964 (photoinspected 1981); T 15S R 22E Sec 24, 25.

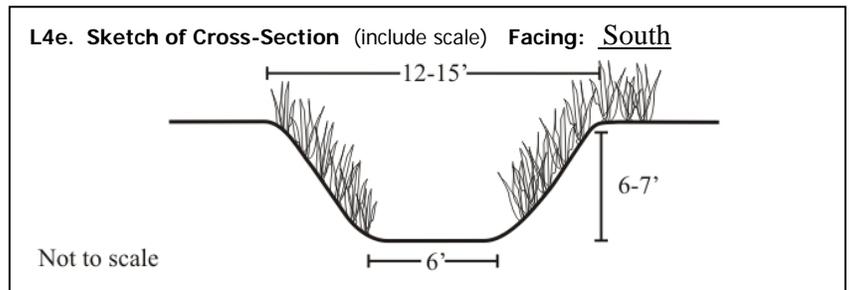
This segment of Harp Ditch crosses Manning Avenue approximately ¼ mile west of Newmark Avenue, west of Parlier.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is a comparison point outside the Study Area. Harp Ditch is piped north of Manning Avenue and continues under the road through an underground pipeline capped with a concrete box culvert. The pipeline empties into a cast concrete box on the south side of Manning Avenue; water empties into the open canal channel by way of a concrete pipe. The canal is lined with concrete for the first 20 feet, after which it is unlined with a flat bottom and uneven walls overgrown with vegetation.

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

- a. **Top Width** 12-15 feet
- b. **Bottom Width** 6 feet
- c. **Height or Depth** 6-7 feet
- d. **Length of Segment** 100 feet



**L5. Associated Resources:**

Culvert and pipeline

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch segment is located within the city limits of Parlier. Residential subdivision development is underway north of Manning Avenue. South of Manning Avenue is still agricultural, mainly planted to vineyards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing south from Manning Avenue, showing pipeline outlet and canal.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L1. Historic and/or Common Name:** Harp Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** HD-3

\*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.)

UTM: Zone 11; 273600mE / 4051402mN

USGS 7.5' Quad Selma Date 1964 (photoinspected 1981); T 15S R 22E Sec 36.

This segment of Harp Ditch crosses Huntsman Avenue, south of the town of Parlier.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is a comparison point outside the Study Area. This segment of Harp Ditch is piped under orchard lands surrounding Huntsman Avenue. A large steel irrigation tank located on the south side of the road provides the only surface manifestation of the ditch at this location.

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

- a. **Top Width**       n/a
- b. **Bottom Width**       n/a
- c. **Height or Depth**       n/a
- d. **Length of Segment**       n/a

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

      n/a      

**L5. Associated Resources:**

Water tank

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in a rural agricultural area surrounded by orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**

Camera facing southwest, showing the irrigation tank

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

## **B10. Significance (continued):**

### Canal History

The route of the Harp Ditch began as a branch of the Lone Tree Channel, which diverts from the Fowler Switch Canal northeast of Sanger. In 1870 the Lone Tree Ditch was adopted for irrigation purposes by a small partnership of independent operators. Between 1875 and 1876, settlers forming the Kingsburg Irrigation Company constructed four branches off of the original Lone Tree Canal, one of which was the Pioneer Branch, which was later renamed the Harp Ditch. The Harp Ditch appears as a branch of the Lone Tree Channel from 1891 through 1911, after which it disappears on local maps until 1946.<sup>1</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger movement toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler Switch, and Lone Tree Channel, and their various branches. The Lone Tree Channel and its branches remained part of the Fresno Canal and Irrigation Company until 1921 when it was transferred to the Consolidated Canal Company and later to CID. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s with the assistance of Works Progress Administration (WPA) funding. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. This included reactivating the Harp Ditch and its later expanding it. Between 1946 and 1964 the last mile of the Harp Ditch was rerouted between Dinuba Avenue and Huntsman Avenue.<sup>3</sup>

### Evaluation

Harp Ditch was among the first canals to bring irrigation water to the area between Sanger and Selma. The ditch is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with early irrigation developments in southern Fresno County. However, Harp Ditch does not appear eligible for the NRHP or CRHR because it does not retain integrity to its nineteenth century appearance. As discussed above, about two miles of the nearly eight-mile ditch (or roughly 25 percent) have been piped; these include segments north of Manning Road near Parlier and at its terminus south of Huntsman Road. Additionally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents

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<sup>1</sup> I. Teilman and W.H. Shafer, *Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 36; J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996), 18; Thos. H. Thompson, *Official Historical Atlas Map of Fresno County* (Tulare: Thos. H. Thompson, 1891); William Harvey, Sr. *Atlas of Fresno County, California* (Fresno: William Harvey, 1907); W.C. Guard, *Atlas of Fresno County, California* (Fresno: W.C. Guard, 1909); W.C. Guard, *Atlas of Fresno County, California* (Fresno: W.C. Guard, 1911); Progressive Map Service, *Progressive Atlas of Fresno County* (Dinuba: Progressive Map Service, 1913); USGS, *Selma Quadrangle* (Washington D.C.: USGS, 1924, 1946, 1964); USGS, *Sanger Quadrangle* (Washington D.C.: USGS, 1965);

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 209-211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirsty Land*, 19, 101-104.

<sup>3</sup> USGS, *Selma Quadrangle* (Washington, D.C.: USGS, 1946); USGS, *Selma Quadrangle* (Washington, D.C.: USGS, 1964); McFarland, *Water for a Thirsty Land*, 138-139.

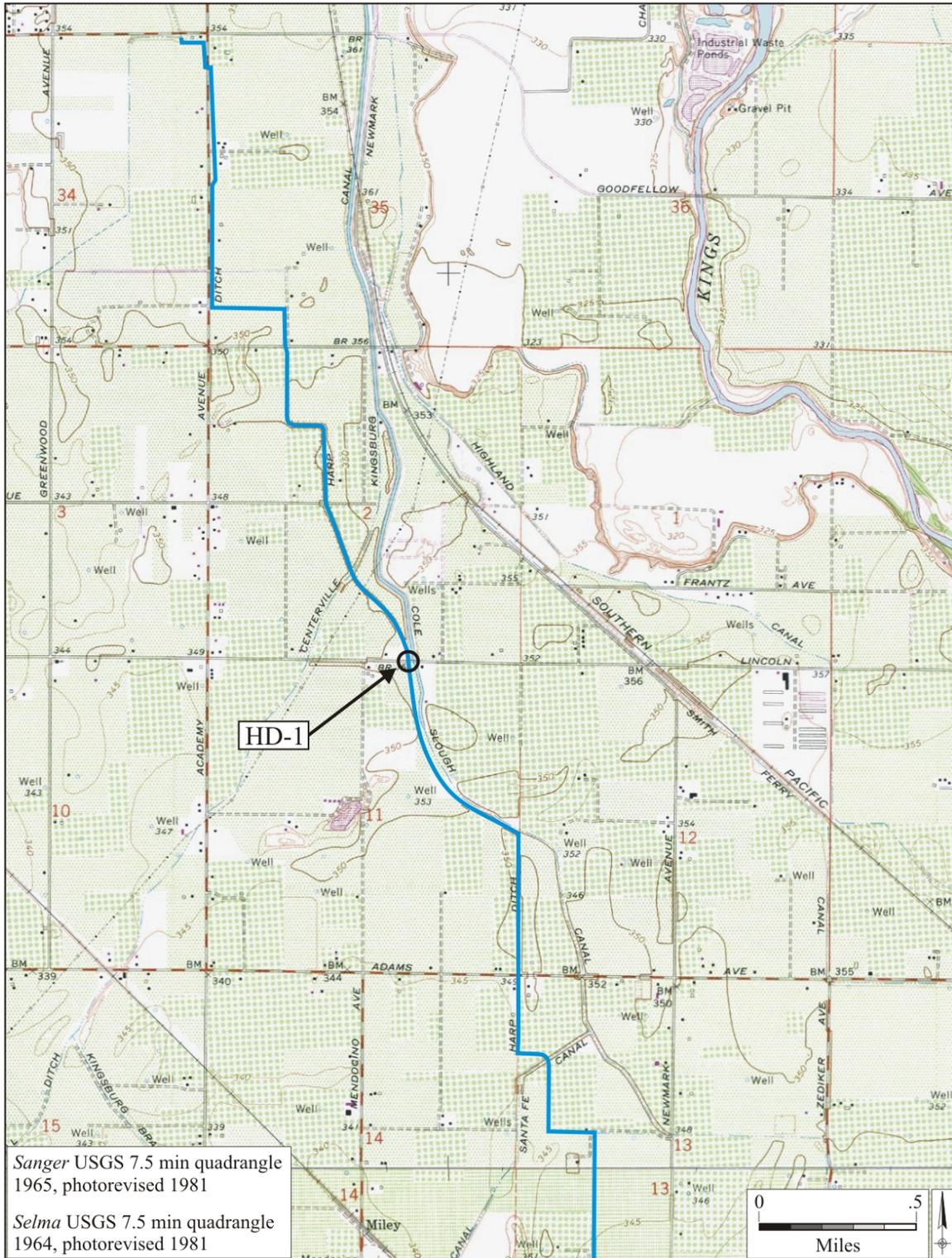
Page 7 of 9

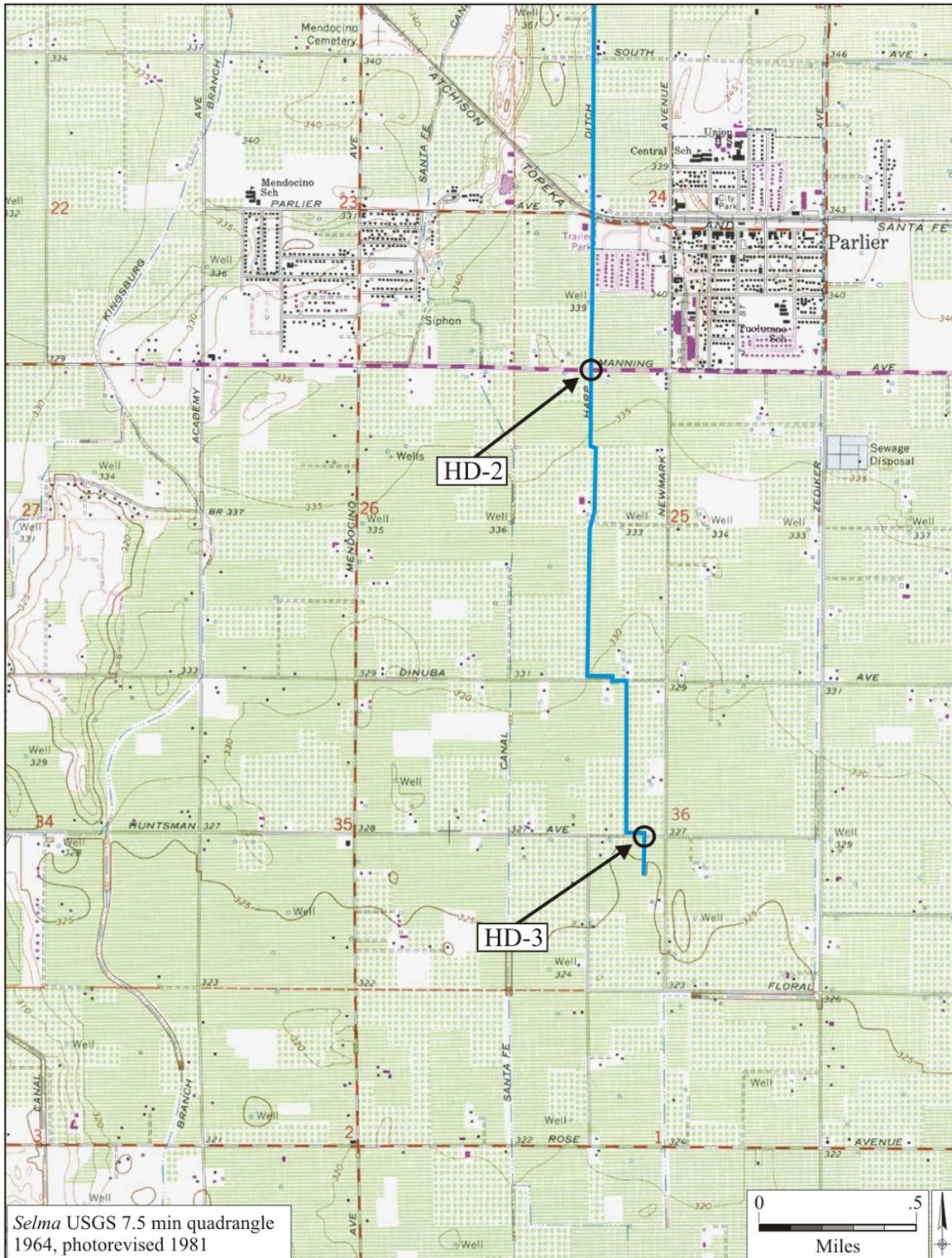
\*Resource Name or # (Assigned by recorder) Map Reference PLI 14

\*Recorded by J. Jones/C. Brookshear \*Date August 28, 2008  Continuation  Update

and purposes, it is a modern conveyance structure. Lacking integrity to its original construction, the Harp Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

**Location Maps:**





**P1. Other Identifier:** Cole Slough Canal

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Fresno

\*b. USGS 7.5' Quad See Linear Feature Records: \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Cole Slough Canal is a conduit within the Consolidated Irrigation District (CID) system of canals. From its headgates at the Centerville-Kingsburg Canal north of Parlier, Cole Slough Canal travels in a generally southerly direction through southern Fresno County until it discharges into Cole Slough, south of Kingsburg. All observed portions of the canal include steeply-sloped unlined walls, a flat bottom, and concrete engineering features. For this project the canal was recorded at four locations: Segment CS-1, at Lincoln Avenue; Segment CS-2, parallel to South Avenue; Segment CS-3, at Floral Avenue; and Segment CS-4, parallel to Mountain View Avenue. Segments CS-1 and CS-4 are located within the Study Area, while the other two segments were recorded for purposes of comparison; each is described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Cole Slough Canal west of Mountain View Avenue (Segment CS-4), camera facing south, August 27, 2008

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
Circa 1890 (Thompson, Historical Atlas of Fresno County, 1891)

\*P7. Owner and Address:  
Consolidated Irrigation District  
2255 Chandler Street  
Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110,  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 12

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 15 / PLI 50

B1. Historic Name: Cole Slough Canal

B2. Common Name: Cole Slough Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Originally constructed prior to 1890; lengthened during the 1890s; concrete engineering structures added beginning in the 1930s.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Cole Slough Canal does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Cole Slough Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CS-1

\*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.)

UTM: Zone 11; 272615mE / 4058701mN

USGS 7.5' Quad Sanger Date 1965 (photorevised 1981); T 15S R 22E Sec 2, 11.

This segment crosses Lincoln Avenue approximately ¼ mile east of Mendocino Avenue.

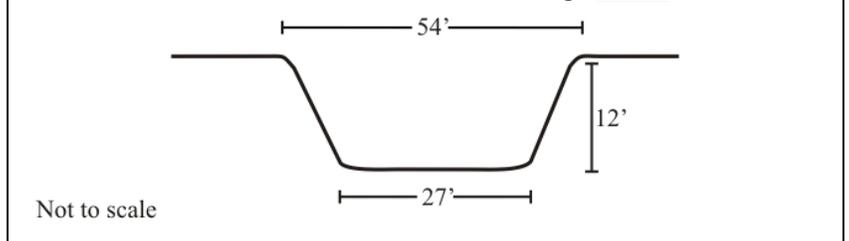
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of Cole Slough Canal is located within the Study Area. At this location, the canal has a flat bottom and steep, unlined graded walls. A board-formed concrete double box culvert carries the canal under Lincoln Avenue. Just southwest of the road culvert is a circular diversion gate contained within a recently constructed concrete retaining wall.

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

- a. **Top Width** 54 feet
- b. **Bottom Width** 27 feet
- c. **Height or Depth** 12 feet
- d. **Length of Segment** 100 feet

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



**L5. Associated Resources:**

Culvert, diversion gates

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is set in a rural agricultural area surrounded by orchards and a farmstead.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing north from Lincoln Avenue, edge of culvert visible at bottom of frame.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L1. Historic and/or Common Name:** Cole Slough Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CS-2

\*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.)

UTM (east end): Zone 11; 275792mE / 4055340mN

USGS 7.5' Quad Selma Date 1964 (photoinspected 1981); T 15S R 23E Sec 19.

UTM (west end): Zone 11; 274625mE / 4055375mN

USGS 7.5' Quad Selma Date 1964 (photoinspected 1981); T 15S R 22E Sec 13, 24.

This segment of Cole Slough Canal is located along South Avenue east of Zediker Avenues, just northeast of Parlier.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

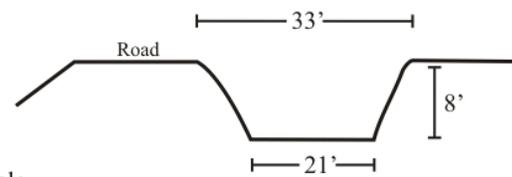
This segment is located southeast of the Study Area and is recorded here for comparison purposes. Cole Slough Canal at this location has a flat, sandy bottom and embankments overgrown with weeds and other vegetation.

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

- a. **Top Width** 33 feet
- b. **Bottom Width** 21 feet
- c. **Height or Depth** 8 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

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



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is set in a rural agricultural area surrounded by vineyards and orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8b. Description of Photo, Map, or Drawing:**  
View of Cole Slough Canal facing west from end of segment, South Avenue visible at right.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L8a. Photograph, Map, or Drawing.**



**L1. Historic and/or Common Name:** Cole Slough Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CS-3

\*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.)

UTM: Zone 11; 276539mE / 4050491mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 15S R 23E Sec 32, T 16S R 23E Sec 5.

This segment of Cole Slough Canal crosses Floral Avenue approximately ¼ mile east of Smith Avenue.

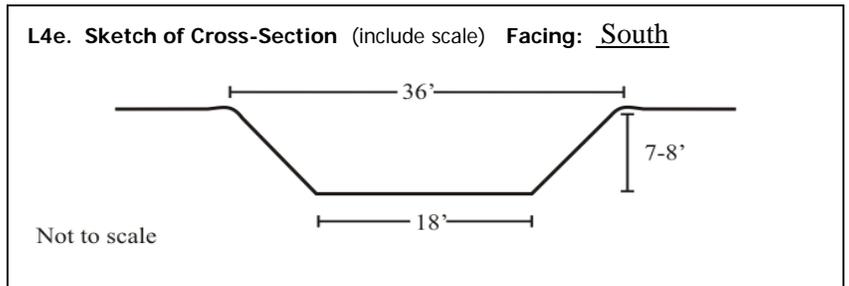
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is a comparison point outside of the Study Area. The canal is unlined at this location and has a flat, sandy bottom with steep graded walls. The profile of the canal changes as it crosses Floral Avenue: to the north the canal is narrow and deep, to the south it becomes wider and shallower. The portion north of the road is 27 feet wide at the top and 18 feet wide at the bottom; on the south side the top width increases to 36 feet. The canal passes under Floral Avenue via a concrete box culvert that also serves as a checkgate. A 50-foot segment of the walls on the south side of the culvert are lined with river stone and rubble riprap set in concrete.

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

- a. **Top Width** 27-36 feet
- b. **Bottom Width** 18 feet
- c. **Height or Depth** 7-8 feet
- d. **Length of Segment** 100 feet

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



**L5. Associated Resources:**

Concrete culvert and checkgate.

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is set in a rural agricultural area surrounded by orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southwest across Floral Avenue.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L1. Historic and/or Common Name:** Cole Slough Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CS-4

\*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.)

UTM (northeast end): Zone 11; 276193mE / 4047342mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 23E Sec 8.

UTM (southwest end): Zone 11; 275980mE / 4047344mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 23E Sec 7.

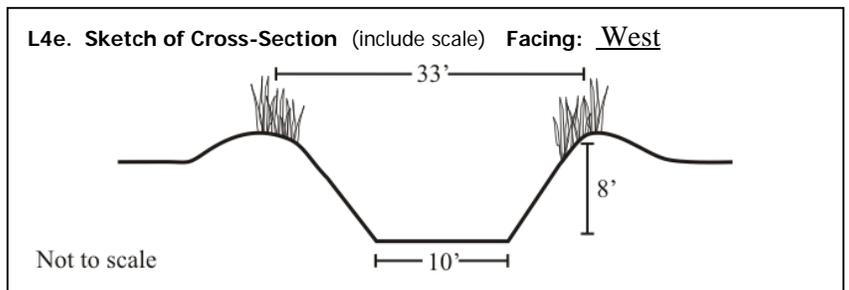
This segment runs parallel to Mountain View Avenue for about ¼ mile, beginning at the Tulare-Fresno county line and continuing west to Smith Avenue.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is located within the Study Area. At this location the Cole Slough Canal is unlined with a flat bottom and steep, overgrown walls. The sides of the canal are built up with earthen berms. A short segment of the canal south of Mountain View Avenue is lined with smooth river stone set in concrete, after which the canal resumes its earthen construction. The canal passes under Mountain View Avenue via a concrete culvert that runs diagonally under the intersection of Mountain View Avenue and Smith Avenue. Just south of this intersection is a single diversion gate in a vertical concrete pipe. The board-formed concrete structure has a timber board checkgate at its mouth.

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

- a. **Top Width** 33 feet
- b. **Bottom Width** 10 feet
- c. **Height or Depth** 8 feet
- d. **Length of Segment** 0.25 mile



**L5. Associated Resources:**

Concrete culvert, diversion gate, checkgate

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal passes through a rural agricultural area surrounded by vineyards and orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing east from atop the Mountain View / Smith Avenue culvert structure.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

Cole Slough Canal began as a small irrigation ditch that later became the east branch of the Centerville & Kingsburg (C&K) Canal; the original construction of ditch is unknown. However, by 1891 the lower portion, closest to the Kings River, is identified on the county atlas map as the River Bend and Cole Slough Ditch. John P. Clark, the secretary of the Centerville and Kingsburg Canal Company, acquired the ownership of the Cole Slough Canal for the irrigation company in the 1890s and, through an agreement with the Fresno Canal and Irrigation Company, expanded the canal across the Cole Slough to the Laguna de Tache Grant. This, in turn, allowed Clark to negotiate for water rights on the grant in exchange for relinquishing an injunction against the current landowners. The water rights included the additional construction of three ditches in the area that were completed in 1903.<sup>1</sup>

The Consolidated Canal Company purchased the Centerville and Kingsburg Irrigation Ditch Company's 44 miles of water rights and property in 1901. On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger movement toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Santa Fe Canal, Selma Colony Canal, and the Fowler Switch Canal, as well as their various branches, which included the Cole Slough Canal. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of the district's first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. In 1938-39, using federal funds, CID lined several miles of canals with concrete. Additionally, in 1940, the district replaced old wooden structures with 33 checks and 41 concrete and steel gates along its various canals; this is the likely period when the Cole Slough Canal's structures were updated with concrete. Finally, a section of the Cole Slough Canal was altered in 1948 during the effort to build a new bridge carrying El Monte Way over the Kings River.<sup>3</sup>

### Evaluation

The Cole Slough Canal does not meet the criteria for listing in the NRHP or the CRHR. The canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). As discussed above, Cole Slough Canal was privately built in about 1890 and was incorporated into the Consolidated Irrigation District system in 1921. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Fresno County (Criterion A

<sup>1</sup> I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties* (Fresno: Williams & Son, 1943), 55; J. Randall McFarland, *Water for a Thirsty Land: The Consolidated Irrigation District and Its Canal Development History* (Selma: Consolidated Irrigation District, 1996), 52-55; Thos. H. Thompson, *Official Historical Atlas Map of Fresno County* (Tulare: Thos. H. Thompson, 1891).

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 209-211; Teilman and Shafer, *Story of Irrigation*, 55; McFarland, *Water for a Thirsty Land*, 101-104.

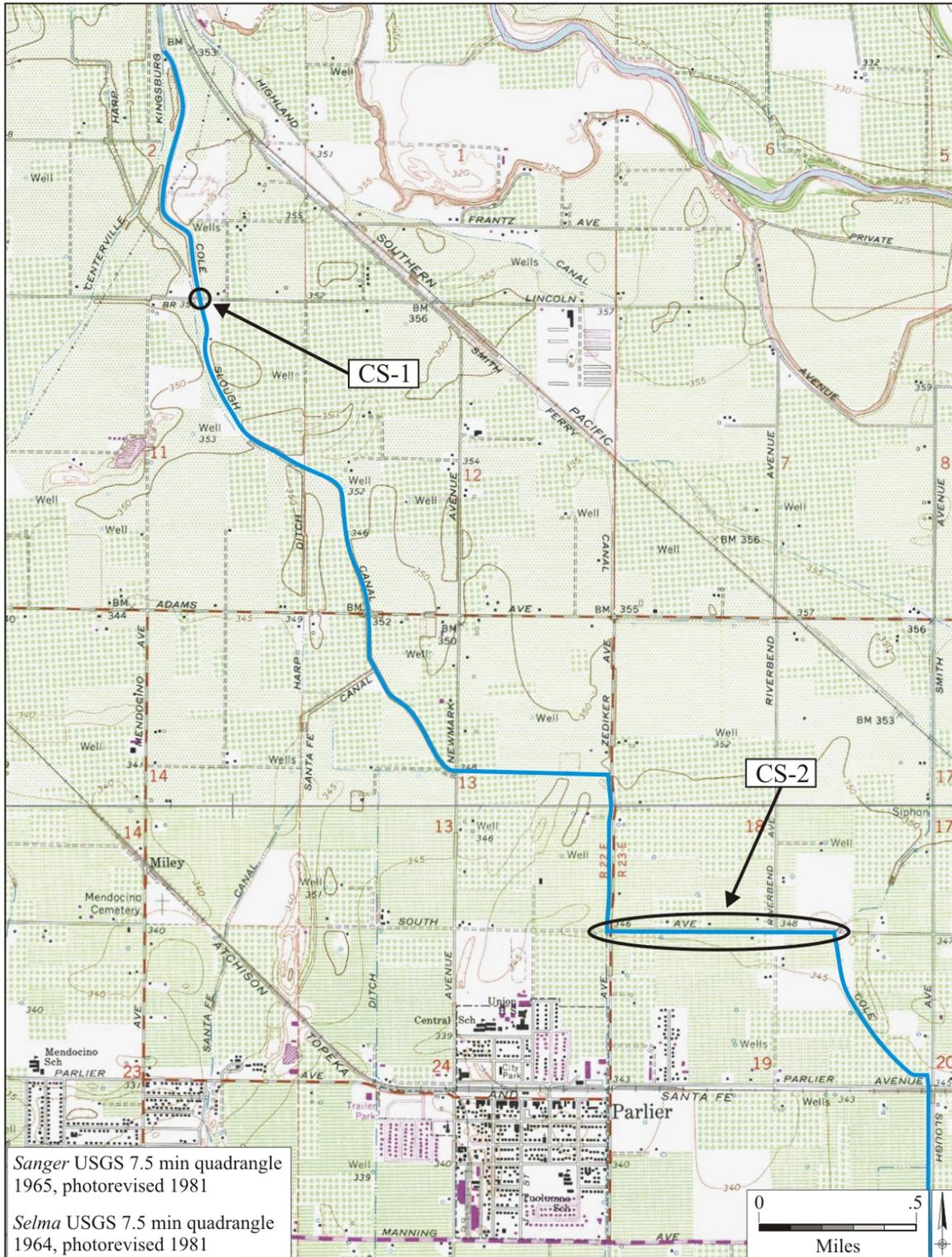
<sup>3</sup> Adams, *Irrigation Districts in California*, 211; Teilman and Shafer, *Story of Irrigation*, 55; Huber, "Engineering Report, Consolidated Irrigation District," 29; McFarland, *Water for a Thirsty Land*, 101-105, 138, 150-151; "WPA Helps Put Water District Ahead 25 Years," *Fresno Bee* (August 12, 1940), 3-B.

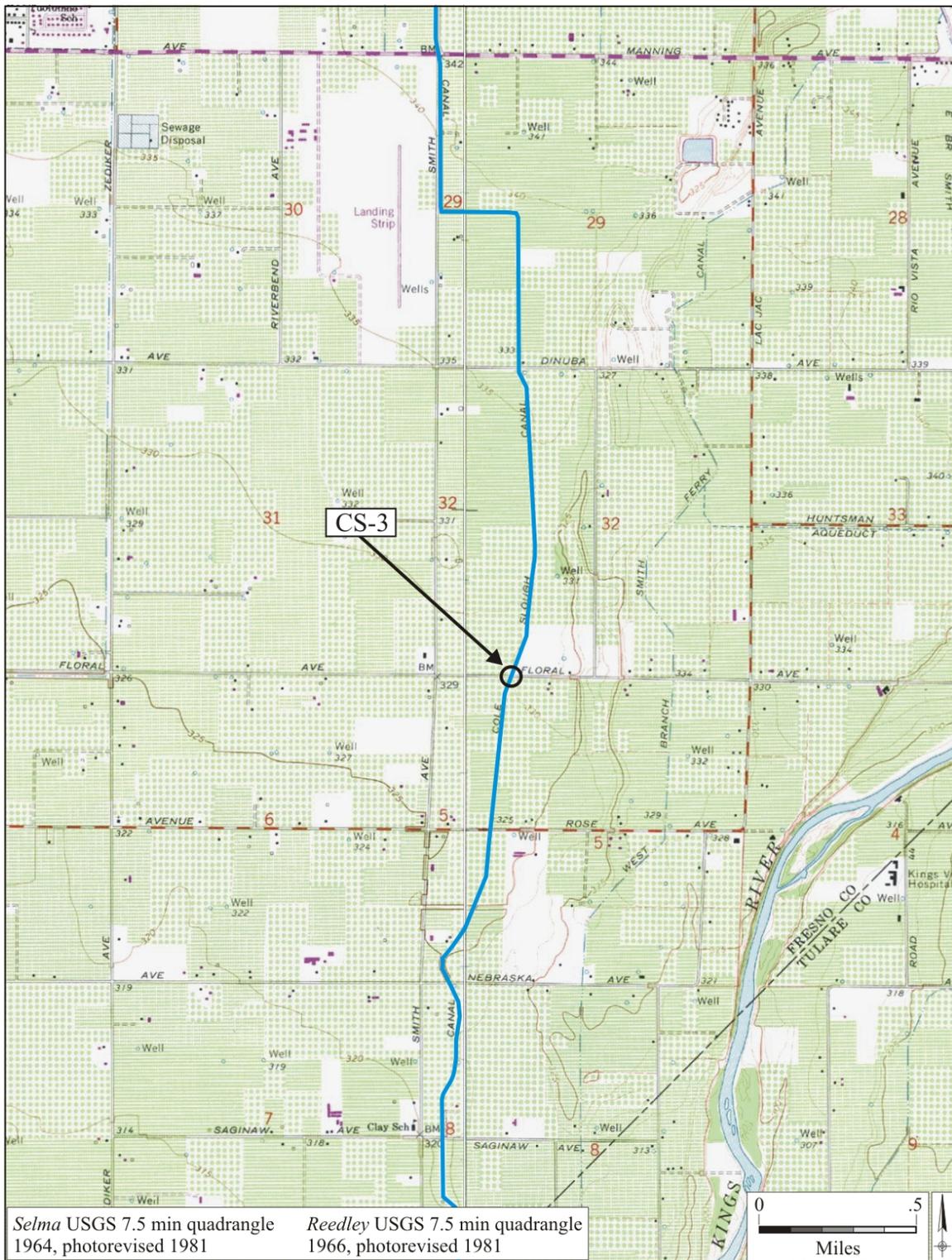
or 1). Canals, like other forms of infrastructure, are common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of their abundance, it is necessary to evaluate canals within the context of irrigation development and their impact in the region as a whole. In comparison to larger, earlier canals, such as the Centerville and Kingsburg Canal and its two main branches, as well as the Fowler Switch Canal, the Cole Slough Canal was built relatively late in the history of irrigation works in this part of Fresno County and served a small constituency of farmers. The Cole Slough Canal was a second-generation canal built after the pioneer period of large-scale irrigation had already reached maturity.

Additionally, Cole Slough Canal does not appear associated with any historically significant individual (Criterion B or 2), nor does this heavily modified resource embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3).

Even if the Cole Slough Canal were historically significant, the integrity of the ditch has been compromised. Over most of its length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking significance and integrity to its original construction, the Cole Slough Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

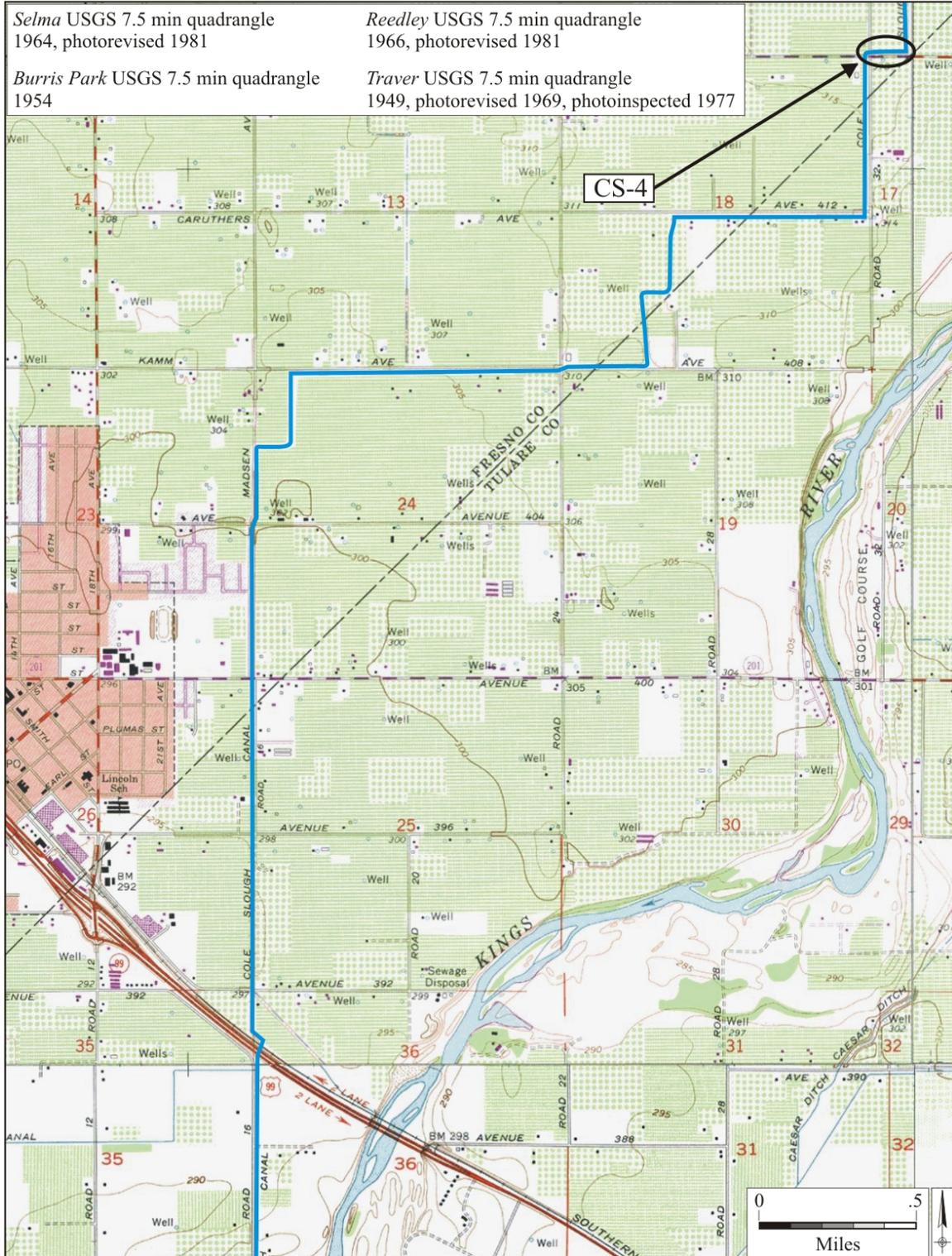
**Location Maps:**

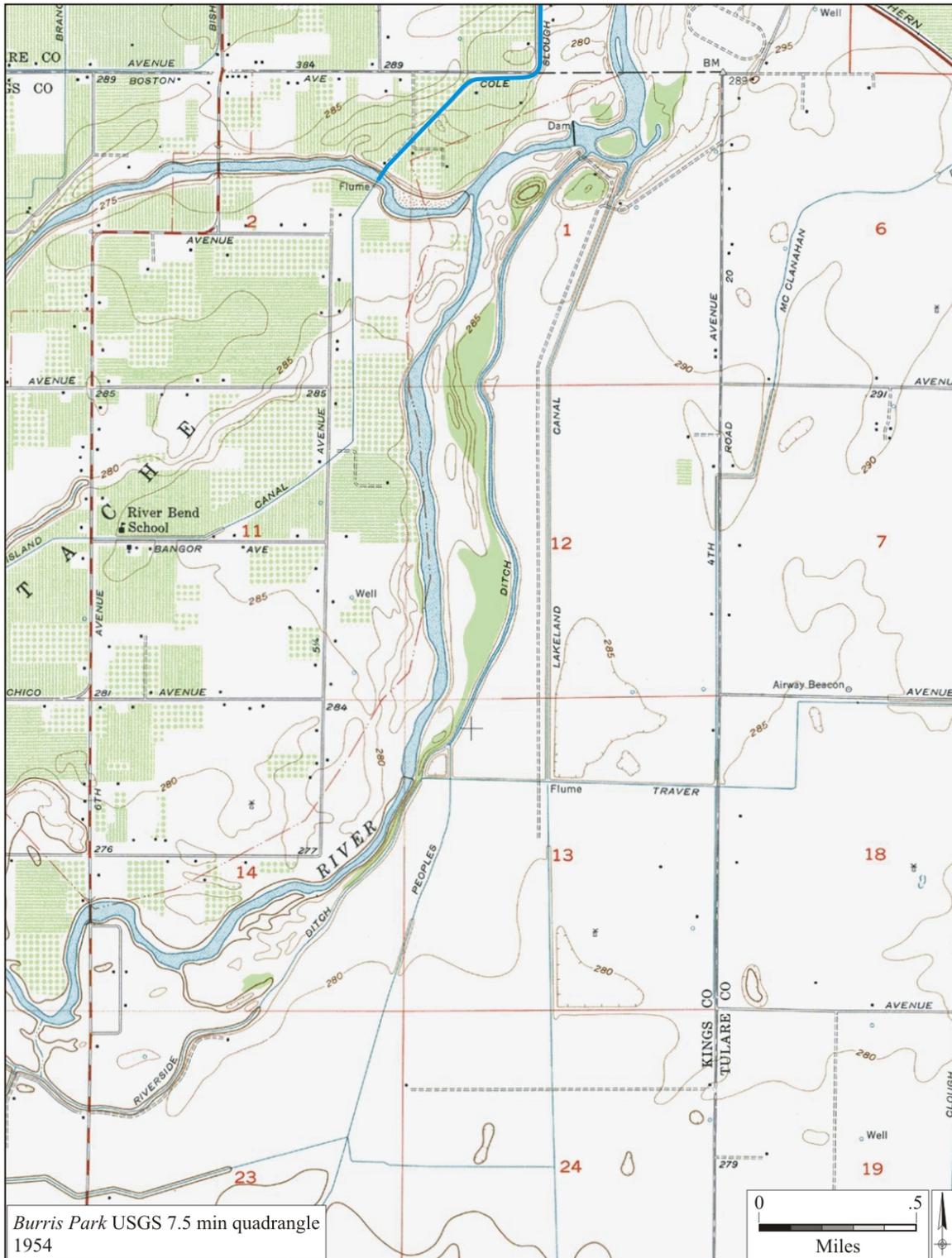




Selma USGS 7.5 min quadrangle  
 1964, photorevised 1981

Reedley USGS 7.5 min quadrangle  
 1966, photorevised 1981





**P1. Other Identifier:** Selma Colony Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Fresno

\*b. USGS 7.5' Quad Selma Date 1964 (photorevised 1981) T 15S, 16S R 22E; M.D. B.M.

c. Address \_\_\_\_\_ City Selma Zip 93662

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Selma Colony Ditch is a conduit within the Consolidated Irrigation District (CID) system of irrigation canals. From its headgates at its diversion point on the Kingsburg Branch Canal, the ditch runs along a southwesterly course through southern Fresno County to its terminus at the Ward Drainage Canal, north of the Cole Slough. For this project the ditch was recorded at three locations: Segments SC-1 and SC-3 are located outside of the Study Area and were recorded for comparison purposes; Segment SC-2 is located within the Study Area along Bethel Avenue, northeast of Selma. The observed portions of the ditch are of earthen construction with concrete and metal engineering features and short segments lined with river rock. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Selma Colony Ditch along Bethel Avenue, camera facing south southeast, August 27, 2008.

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
Circa 1890

\*P7. Owner and Address:  
Consolidated Irrigation District  
2255 Chandler Street  
Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 9

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 20

B1. Historic Name: Selma Colony Ditch

B2. Common Name: Selma Colony Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Built circa 1890; concrete structures replaced original wooden ones in 1940; canal extended to the south between 1926 and 1954.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: None

B9. Architect: Unknown b. Builder: Santa Fe Corporation

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Selma Colony Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-1

\*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.)

UTM: Zone 11; 270823mE / 4051532mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

This segment marks the head of the Selma Colony Ditch; it is located north of Huntsman Avenue, between Bethel and Academy avenues.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

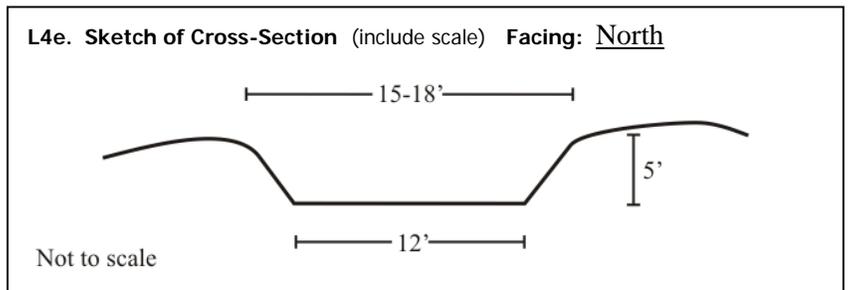
This is a comparison point outside the Study Area. The Selma Colony Ditch diverts water from the Kingsburg Canal at this location. The headgate is board-formed cast concrete with a rectangular cross section. It has three screw-operated gates, protected from the north by a metal trash grate. The canal at this location has a flat bottom with uniform banks. The section immediately adjacent to the headgate is lined with smooth river stone set in concrete. The walls are unlined beyond this section. The canal passes under Huntsman Avenue via a concrete box culvert with wooden railings.

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

- a. **Top Width** 15-18 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 5 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete headgates, culvert, pipes



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The Selma Colony Ditch headgates are adjacent to a residence; the canal is otherwise surrounded by vineyards and vacant land.

**L7. Integrity Considerations:**

**L8a. Photograph, Map, or Drawing.**



See "Significance Statement," Section B10.  
**L8b. Description of Photo, Map, or Drawing:**  
Selma Colony Ditch headgates, view facing southwest, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-2

**\*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.)

UTM (north end): Zone 11; 269736mE / 4051515mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

UTM (south end): Zone 11; 269675mE / 4049936mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 3.

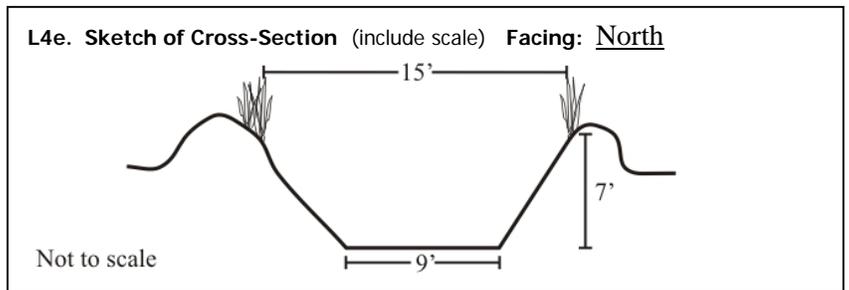
This segment runs along the east side of Bethel Avenue between Rose and Huntsman avenues.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of the Selma Colony ditch is located within the Study Area. The ditch is earth-lined with a flat bottom and gently curved, machine-groomed walls topped with narrow berms. Several concrete engineering features are located along this one-mile long segment, including six diversion gates in vertical concrete pipes; a drop gate, located less than 1/8 mile south of Huntsman Avenue; a board-formed concrete checkgate located less than 1/4 mile south of the drop gate; and three culverts that carry the canal under field and farm access roads. A larger, board-formed concrete box culvert bearing the date "August 1947" carries the canal under Floral Avenue. At Rose Avenue, the canal is piped underground and turns to the west.

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

- a. **Top Width** 15 feet
- b. **Bottom Width** 9 feet
- c. **Height or Depth** 7 feet
- d. **Length of Segment** 1 mile



**L5. Associated Resources:**

Concrete culverts, diversion gates, checkgate, and drop gate

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This segment of Selma Colony Ditch is located in a rural setting comprised of scattered residences, vacant parcels, and vineyards.

**L8a. Photograph, Map, or Drawing.**



**L7. Integrity Considerations:** This segment was recently reshaped. At the time of survey, tire tracks from the equipment used to reshape the canal were visible along the bottom and sides.

**L8b. Description of Photo, Map, or Drawing:** View of Selma Colony Ditch within the Study Area, camera facing south along Bethel Avenue from Huntsman Avenue, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-3

\*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.)

UTM: Zone 11; 269205mE / 4048333mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 9.

This segment is located at Saginaw Avenue between Bethel Avenue and the Southern Pacific Railroad tracks.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

At this point the Selma Colony Ditch is earth-lined and has a shallow “U” shape. It passes under Saginaw Avenue via a board-formed concrete culvert with a 1927 date stamp, from which it continues to the west before turning south again. South of the road is a concrete checkgate followed by a short segment of river stone riprap lining. Directly south of the lined section is a trash rack and piped lateral canal.

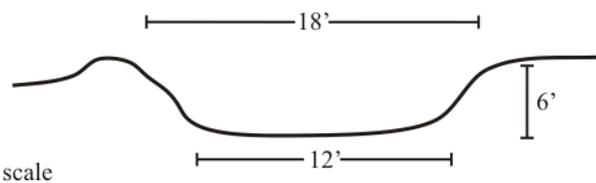
**L4. Dimensions:** (in feet for historic features and meters for prehistoric features)

- a. **Top Width** 18 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert, overpour check gate, pipeline

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



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The Selma Colony Ditch is located in a rural residential and agricultural setting consisting mainly of vineyards.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**

Selma Colony Ditch along Saginaw Road, camera facing west, showing checkgate in the foreground, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

The Selma Colony Ditch was constructed near the end of the nineteenth century by the Santa Fe Corporation, headed by John P. Clark. This canal was one of many small irrigation ditches that Clark's company built to bring water to tracts of land near Selma. It diverts from the Kingsburg Branch of the Centerville & Kingsburg (C&K) Canal and runs southwest, passing through the Selma Colony lands and extending further south. The Selma Colony appears to have developed after the initial boom of Fresno County colonizing. It was a small colony, only comprising half of Section 16, Township 16 South, Range 22 East, located along the Southern Pacific Railroad between the towns of Selma and Kingsburg. The original construction date of the canal is unknown, though it probably occurred about 1890.<sup>1</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger trend toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler Switch, Selma Colony Ditch, and Santa Fe Canal, and their various branches. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s with the assistance of Works Progress Administration (WPA) funding. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. By 1940, the Selma Colony Ditch was one of many canals to receive a concrete structure as part of the renovation. Between 1926 and 1954 the Selma Colony Ditch was extended from Elkhorn Avenue to the Ward Drainage Ditch, a distance of about one-quarter mile.<sup>3</sup>

### Evaluation

The Selma Colony Ditch does not meet the criteria for listing in the NRHP or the CRHR. The canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). As discussed above, Selma Colony Canal was privately built near the turn of the twentieth century and incorporated into the Consolidated Irrigation District system in 1921. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Fresno County (Criterion A or 1). Canals, like other forms of infrastructure, are common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of their abundance,

<sup>1</sup> A general plan of the canal is shown in the 1891 county atlas, although it is not clear whether the line indicates a proposed route or the presence of an actual, constructed canal. It was certainly in place by 1901, the year in which seven miles of the Selma Colony ditch were transferred to the newly incorporated Consolidated Canal Company. See: I. Teilman & W.H. Shafer, *Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 53-54; J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996), 18; Thos. H. Thompson, *Official Historical Atlas Map of Fresno County* (Tulare: Thos. H. Thompson, 1891); William Harvey, Sr. *Atlas of Fresno County, California* (Fresno: William Harvey, 1907); W.C. Guard, *Atlas of Fresno County, California* (Fresno: W.C. Guard, 1909).

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929, 209-211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirsty Land*, 101-104.

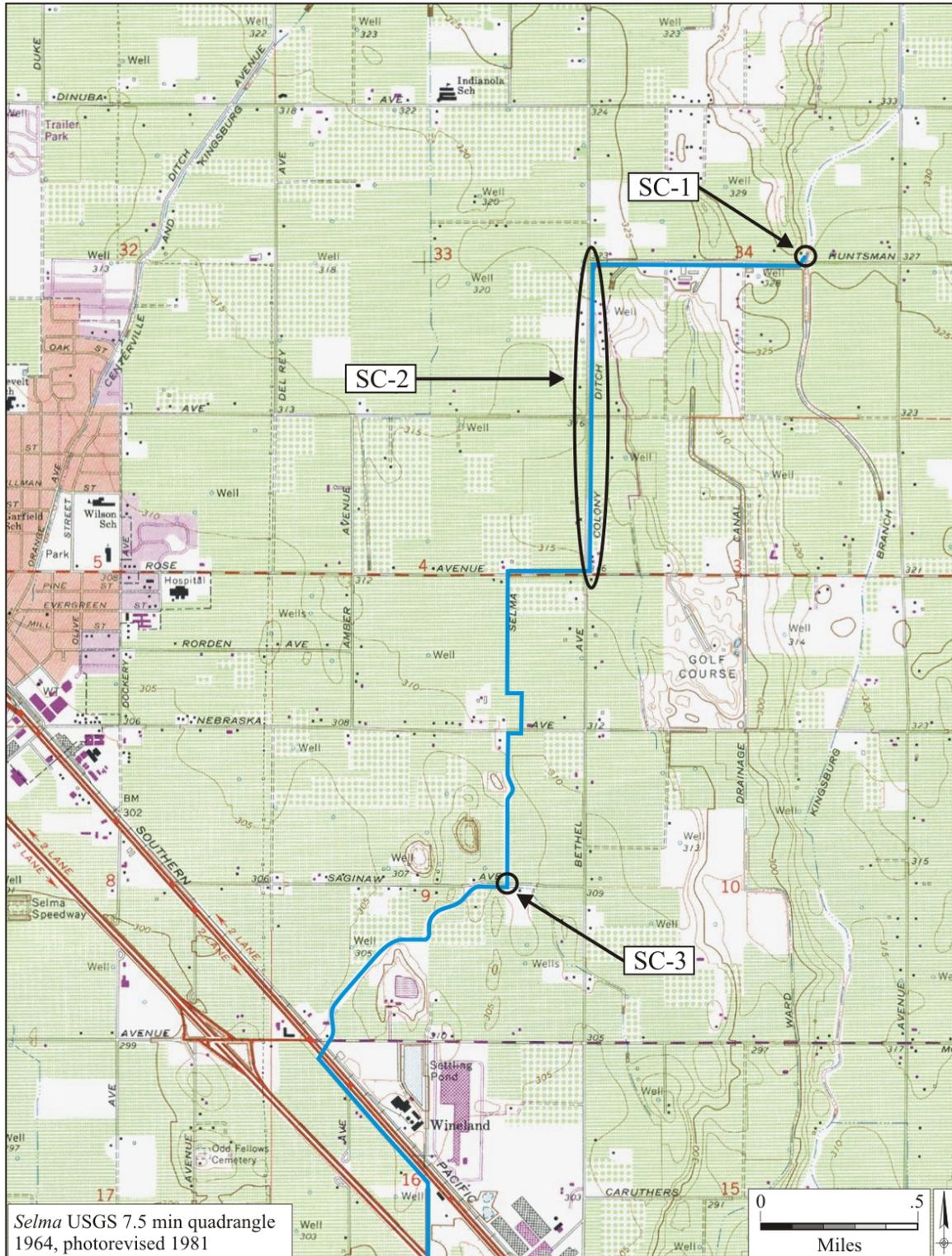
<sup>3</sup> Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; "WPA Helps Put Water District Ahead 25 Years," *The Fresno Bee* (August 12, 1940), 3-B; USGS, *Burriss Park Quadrangle* (Washington D.C.: USGS, 1924); USGS, *Burriss Park Quadrangle* (Washington D.C.: USGS, 1954).

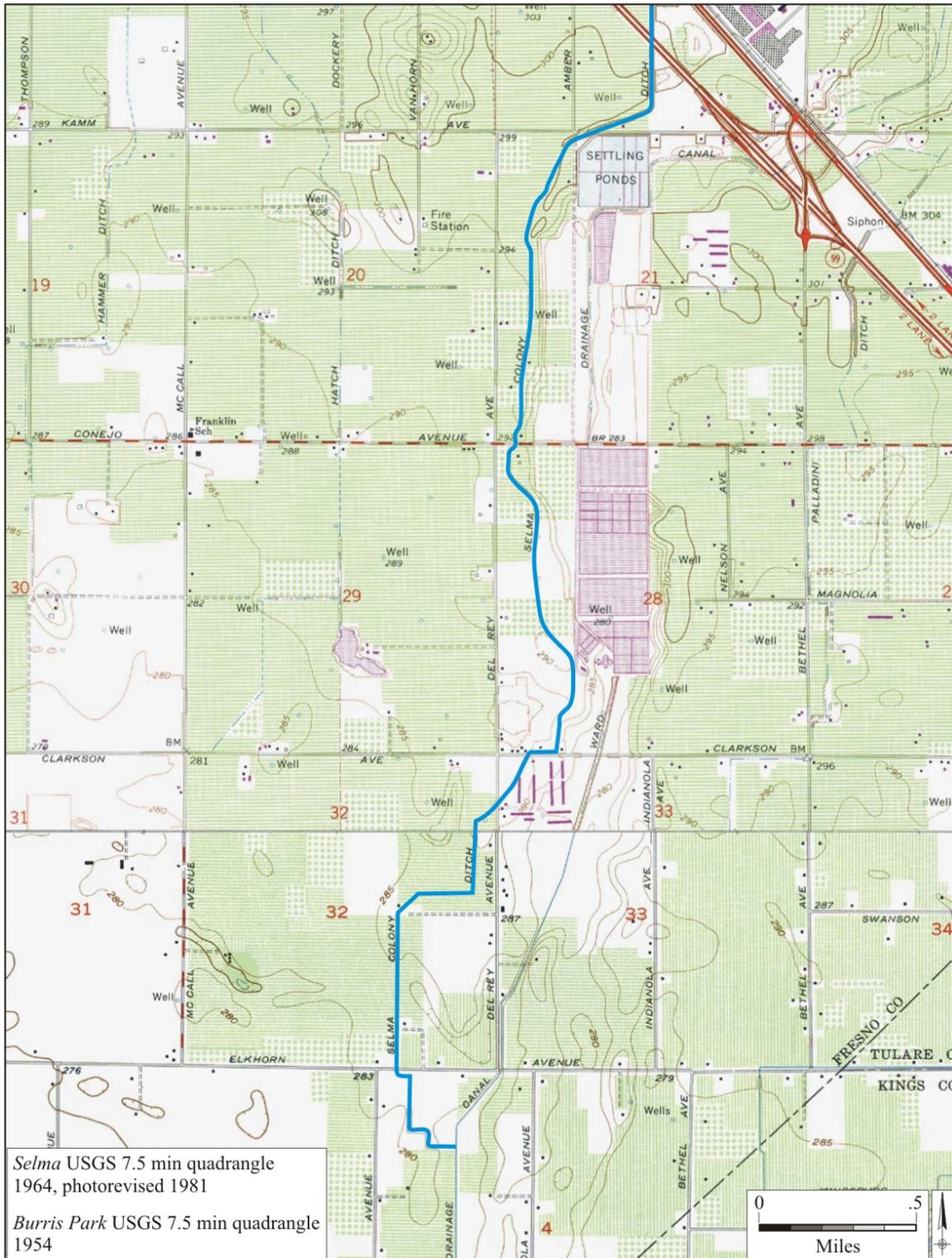
it is necessary to evaluate canals within the context of irrigation development and their impact in the region as a whole. In comparison to larger, earlier canals, such as the Centerville and Kingsburg Canal and its two main branches, as well as the Fowler Switch Canal, the Selma Colony Canal was built relatively late in the history of irrigation works in this part of Fresno County and served a small colony south of the town of Selma. The Selma Colony Canal was a second-generation canal built after the pioneer period of large-scale irrigation had already reached maturity. Likewise, that canal does not appear significant for its association with the Selma Colony, which was a small-scale endeavor established near the end of the period of colony development in Fresno County.

Additionally, Selma Colony Canal does not appear associated with any historically significant individuals (Criterion B or 2), nor does this heavily modified resource embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3). The canal was one of many constructed under the leadership of John P. Clark and his Santa Fe Corporation.

Even if the Selma Colony Canal were historically significant, the integrity of the ditch has been compromised. The ditch has been regularly machine-groomed and enlarged with modern maintenance equipment, and it was extended one-quarter of a mile to its current terminus at the Ward Drainage Canal. Another quarter-mile segment has been piped under current roadways, all of which have altered the original shape and dimensions of the channel. Additionally, all observed water control structures, bridges, and culverts are concrete and metal replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its original construction, the Selma Colony Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

**Location Maps:**





**P1. Other Identifier:** Selma Colony Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Fresno

\*b. USGS 7.5' Quad Selma Date 1964 (photorevised 1981) T 15S, 16S R 22E; M.D. B.M.

c. Address \_\_\_\_\_ City Selma Zip 93662

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Selma Colony Ditch is a conduit within the Consolidated Irrigation District (CID) system of irrigation canals. From its headgates at its diversion point on the Kingsburg Branch Canal, the ditch runs along a southwesterly course through southern Fresno County to its terminus at the Ward Drainage Canal, north of the Cole Slough. For this project the ditch was recorded at three locations: Segments SC-1 and SC-3 are located outside of the Study Area and were recorded for comparison purposes; Segment SC-2 is located within the Study Area along Bethel Avenue, northeast of Selma. The observed portions of the ditch are of earthen construction with concrete and metal engineering features and short segments lined with river rock. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Selma Colony Ditch along Bethel Avenue, camera facing south southeast, August 27, 2008.

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
Circa 1890

\*P7. Owner and Address:  
Consolidated Irrigation District  
2255 Chandler Street  
Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 9

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 20

B1. Historic Name: Selma Colony Ditch

B2. Common Name: Selma Colony Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Built circa 1890; concrete structures replaced original wooden ones in 1940; canal extended to the south between 1926 and 1954.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: None

B9. Architect: Unknown b. Builder: Santa Fe Corporation

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Selma Colony Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-1

\*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.)

UTM: Zone 11; 270823mE / 4051532mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

This segment marks the head of the Selma Colony Ditch; it is located north of Huntsman Avenue, between Bethel and Academy avenues.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

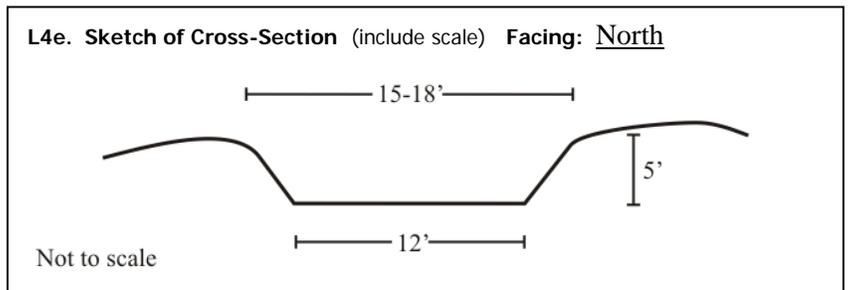
This is a comparison point outside the Study Area. The Selma Colony Ditch diverts water from the Kingsburg Canal at this location. The headgate is board-formed cast concrete with a rectangular cross section. It has three screw-operated gates, protected from the north by a metal trash grate. The canal at this location has a flat bottom with uniform banks. The section immediately adjacent to the headgate is lined with smooth river stone set in concrete. The walls are unlined beyond this section. The canal passes under Huntsman Avenue via a concrete box culvert with wooden railings.

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

- a. **Top Width** 15-18 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 5 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete headgates, culvert, pipes



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The Selma Colony Ditch headgates are adjacent to a residence; the canal is otherwise surrounded by vineyards and vacant land.

**L7. Integrity Considerations:**

**L8a. Photograph, Map, or Drawing.**



See "Significance Statement," Section B10.  
**L8b. Description of Photo, Map, or Drawing:**  
Selma Colony Ditch headgates, view facing southwest, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-2

**\*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.)

UTM (north end): Zone 11; 269736mE / 4051515mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

UTM (south end): Zone 11; 269675mE / 4049936mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 3.

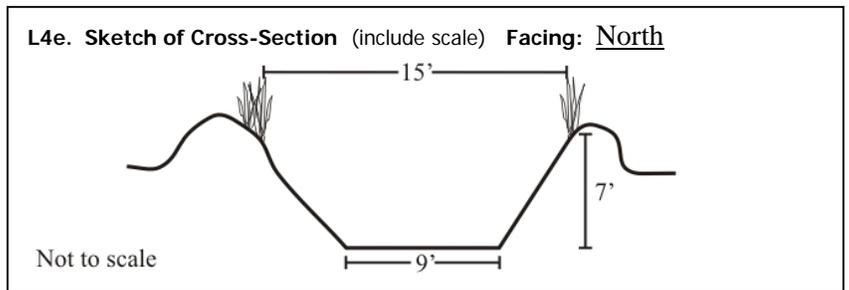
This segment runs along the east side of Bethel Avenue between Rose and Huntsman avenues.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of the Selma Colony ditch is located within the Study Area. The ditch is earth-lined with a flat bottom and gently curved, machine-groomed walls topped with narrow berms. Several concrete engineering features are located along this one-mile long segment, including six diversion gates in vertical concrete pipes; a drop gate, located less than 1/8 mile south of Huntsman Avenue; a board-formed concrete checkgate located less than 1/4 mile south of the drop gate; and three culverts that carry the canal under field and farm access roads. A larger, board-formed concrete box culvert bearing the date "August 1947" carries the canal under Floral Avenue. At Rose Avenue, the canal is piped underground and turns to the west.

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

- a. **Top Width** 15 feet
- b. **Bottom Width** 9 feet
- c. **Height or Depth** 7 feet
- d. **Length of Segment** 1 mile



**L5. Associated Resources:**

Concrete culverts, diversion gates, checkgate, and drop gate

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This segment of Selma Colony Ditch is located in a rural setting comprised of scattered residences, vacant parcels, and vineyards.

**L8a. Photograph, Map, or Drawing.**



**L7. Integrity Considerations:** This segment was recently reshaped. At the time of survey, tire tracks from the equipment used to reshape the canal were visible along the bottom and sides.

**L8b. Description of Photo, Map, or Drawing:** View of Selma Colony Ditch within the Study Area, camera facing south along Bethel Avenue from Huntsman Avenue, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Selma Colony Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SC-3

\*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.)

UTM: Zone 11; 269205mE / 4048333mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 9.

This segment is located at Saginaw Avenue between Bethel Avenue and the Southern Pacific Railroad tracks.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

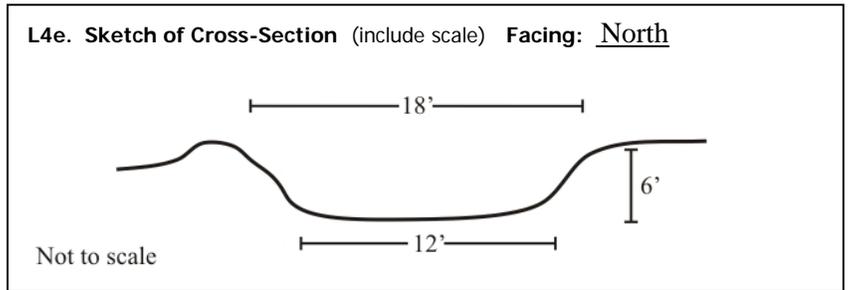
At this point the Selma Colony Ditch is earth-lined and has a shallow “U” shape. It passes under Saginaw Avenue via a board-formed concrete culvert with a 1927 date stamp, from which it continues to the west before turning south again. South of the road is a concrete checkgate followed by a short segment of river stone riprap lining. Directly south of the lined section is a trash rack and piped lateral canal.

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

- a. **Top Width** 18 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert, overpour check gate, pipeline



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The Selma Colony Ditch is located in a rural residential and agricultural setting consisting mainly of vineyards.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**

Selma Colony Ditch along Saginaw Road, camera facing west, showing checkgate in the foreground, August 27, 2008.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

The Selma Colony Ditch was constructed near the end of the nineteenth century by the Santa Fe Corporation, headed by John P. Clark. This canal was one of many small irrigation ditches that Clark's company built to bring water to tracts of land near Selma. It diverts from the Kingsburg Branch of the Centerville & Kingsburg (C&K) Canal and runs southwest, passing through the Selma Colony lands and extending further south. The Selma Colony appears to have developed after the initial boom of Fresno County colonizing. It was a small colony, only comprising half of Section 16, Township 16 South, Range 22 East, located along the Southern Pacific Railroad between the towns of Selma and Kingsburg. The original construction date of the canal is unknown, though it probably occurred about 1890.<sup>1</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger trend toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler Switch, Selma Colony Ditch, and Santa Fe Canal, and their various branches. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s with the assistance of Works Progress Administration (WPA) funding. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. By 1940, the Selma Colony Ditch was one of many canals to receive a concrete structure as part of the renovation. Between 1926 and 1954 the Selma Colony Ditch was extended from Elkhorn Avenue to the Ward Drainage Ditch, a distance of about one-quarter mile.<sup>3</sup>

### Evaluation

The Selma Colony Ditch does not meet the criteria for listing in the NRHP or the CRHR. The canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). As discussed above, Selma Colony Canal was privately built near the turn of the twentieth century and incorporated into the Consolidated Irrigation District system in 1921. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Fresno County (Criterion A or 1). Canals, like other forms of infrastructure, are common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of their abundance,

<sup>1</sup> A general plan of the canal is shown in the 1891 county atlas, although it is not clear whether the line indicates a proposed route or the presence of an actual, constructed canal. It was certainly in place by 1901, the year in which seven miles of the Selma Colony ditch were transferred to the newly incorporated Consolidated Canal Company. See: I. Teilman & W.H. Shafer, *Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 53-54; J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996), 18; Thos. H. Thompson, *Official Historical Atlas Map of Fresno County* (Tulare: Thos. H. Thompson, 1891); William Harvey, Sr. *Atlas of Fresno County, California* (Fresno: William Harvey, 1907); W.C. Guard, *Atlas of Fresno County, California* (Fresno: W.C. Guard, 1909).

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929, 209-211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirsty Land*, 101-104.

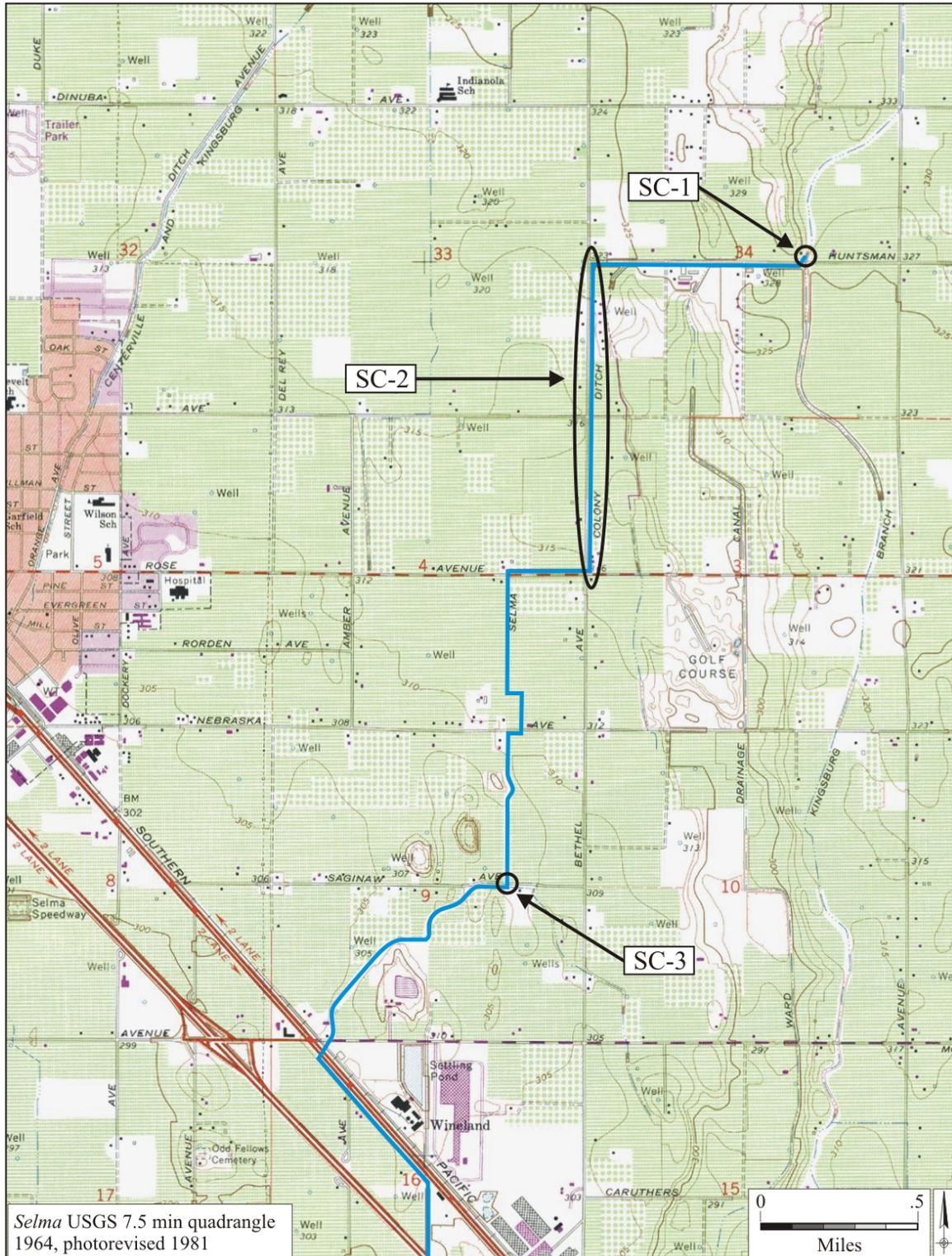
<sup>3</sup> Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; "WPA Helps Put Water District Ahead 25 Years," *The Fresno Bee* (August 12, 1940), 3-B; USGS, *Burriss Park Quadrangle* (Washington D.C.: USGS, 1924); USGS, *Burriss Park Quadrangle* (Washington D.C.: USGS, 1954).

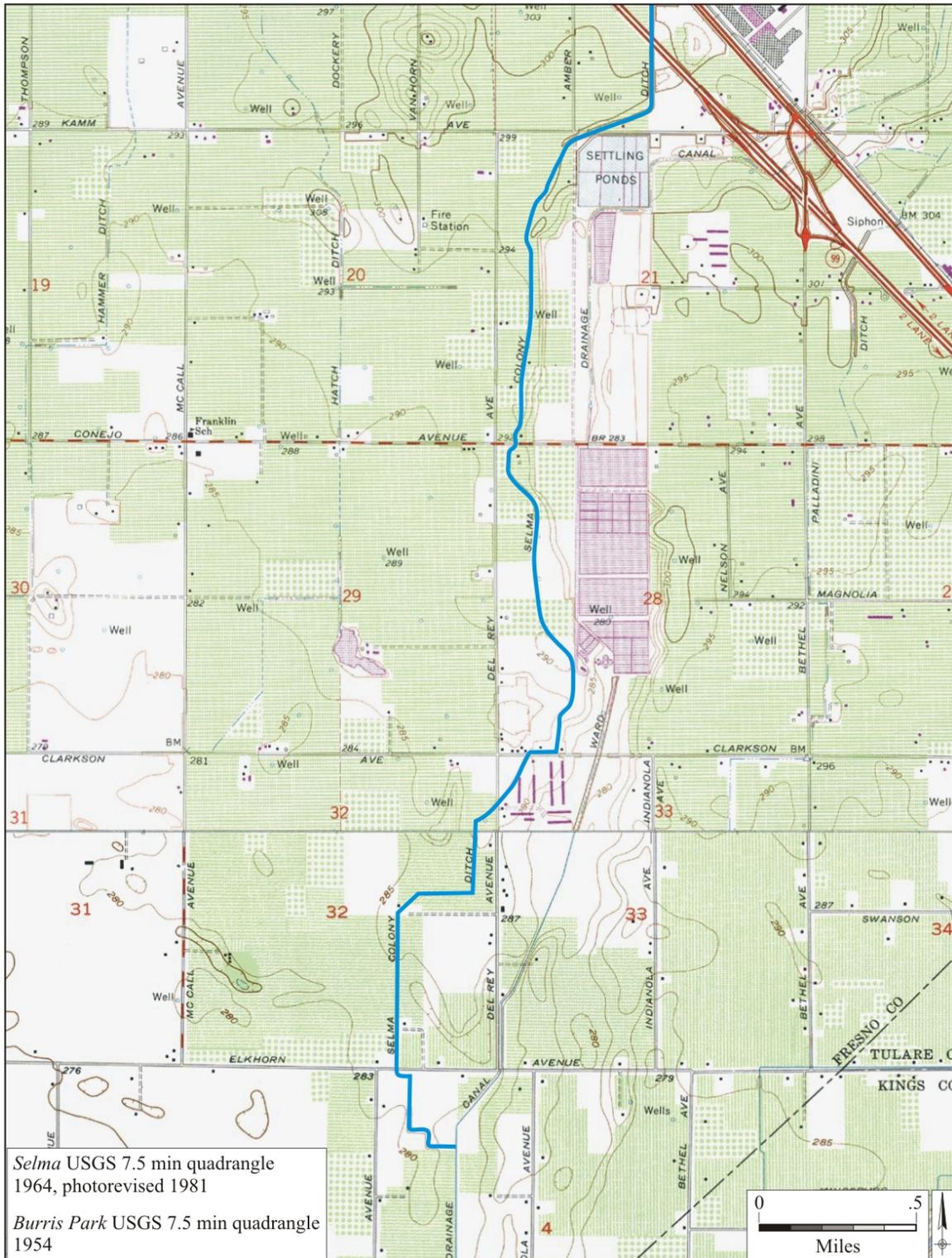
it is necessary to evaluate canals within the context of irrigation development and their impact in the region as a whole. In comparison to larger, earlier canals, such as the Centerville and Kingsburg Canal and its two main branches, as well as the Fowler Switch Canal, the Selma Colony Canal was built relatively late in the history of irrigation works in this part of Fresno County and served a small colony south of the town of Selma. The Selma Colony Canal was a second-generation canal built after the pioneer period of large-scale irrigation had already reached maturity. Likewise, that canal does not appear significant for its association with the Selma Colony, which was a small-scale endeavor established near the end of the period of colony development in Fresno County.

Additionally, Selma Colony Canal does not appear associated with any historically significant individuals (Criterion B or 2), nor does this heavily modified resource embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3). The canal was one of many constructed under the leadership of John P. Clark and his Santa Fe Corporation.

Even if the Selma Colony Canal were historically significant, the integrity of the ditch has been compromised. The ditch has been regularly machine-groomed and enlarged with modern maintenance equipment, and it was extended one-quarter of a mile to its current terminus at the Ward Drainage Canal. Another quarter-mile segment has been piped under current roadways, all of which have altered the original shape and dimensions of the channel. Additionally, all observed water control structures, bridges, and culverts are concrete and metal replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its original construction, the Selma Colony Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

**Location Maps:**





**P1. Other Identifier:** Ward Drainage Canal

\*P2. Location:  Not for Publication  Unrestricted

\*a. County Fresno

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

\*b. USGS 7.5' Quad Selma Date 1964, photorevised 1981 T 15S, 16S R 22E; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Ward Drainage Canal is a conduit within the Consolidated Irrigation District (CID) system of irrigation canals. From its headgates at the Selma Colony Ditch, the Ward Drainage Canal flows in a generally southern course through Fresno County, running between Bethel and Academy Avenues for most of its course. It crosses west over Bethel Avenue near State Highway 99 and continues south to its terminus at the Cole Slough. For this project the canal was recorded in three locations: Segment WDC-1 is located at the headgates, outside of the Study Area; Segment WDC-2 is located within the Study Area where it crosses Mountain View Avenue; Segment WDC-3 is a comparison point located outside of the Study Area along Del Rey Avenue near its intersection with Elkhorn Avenue. The segments are described in detail on the attached Linear Feature Records. (See Continuation Sheet)

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Ward Drainage Canal at Mountain View Road, camera facing north, August 27, 2008

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

1914 (McFarland, *Water for a Thirsty Land*)

\*P7. Owner and Address:

Consolidated Irrigation District

2255 Chandler Street

Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)

Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 10

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 30

B1. Historic Name: Ward Drainage Canal

B2. Common Name: Ward Drainage Canal

B3. Original Use: Drainage canal B4. Present Use: Drainage canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction in 1914; lengthened on multiple occasions between 1926 and 1964.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features:

B9. Architect: W.H. Shafer b. Builder: Ward Drainage District

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Ward Drainage Canal does not appear to meet the criteria for listing in the California Register of Historical Resources because it is not historically significant. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Ward Drainage Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** WDC-1

\*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.)

UTM: Zone 11; 270323mE / 4051500mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

This segment is the head of the Ward Drainage Canal, located where it diverts water from the Selma Colony Canal on the south side of Huntsman Avenue between Bethel and Academy avenues, east of Selma.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

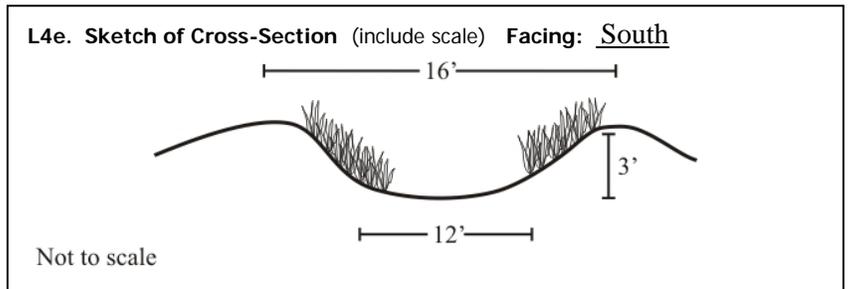
Ward Drainage Canal at this location has a shallow “U” shape with a sandy bottom and heavily overgrown banks topped with low berms. This is the point where the drainage canal diverts water from the Selma Colony Canal via a board-formed concrete headgate with two channels and a single wood slat gate.

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

- a. **Top Width** 16 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 3 feet
- d. **Length of Segment** 50 feet

**L5. Associated Resources:**

Concrete headgate



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The drainage canal is in a rural agricultural area surrounded by an abandoned winery and vineyards.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southeast, Selma Colony Canal in foreground, headgate to Ward Ditch at center.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Freeman  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** September 16, 2008

**L1. Historic and/or Common Name:** Ward Drainage Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** WDC-2

\*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.)

UTM: Zone 11; 270674mE / 4047467mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 10.

This portion of Ward Drainage Canal crosses Mountain View Avenue (Road J40) between Academy Bethel avenues, southwest of Selma.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

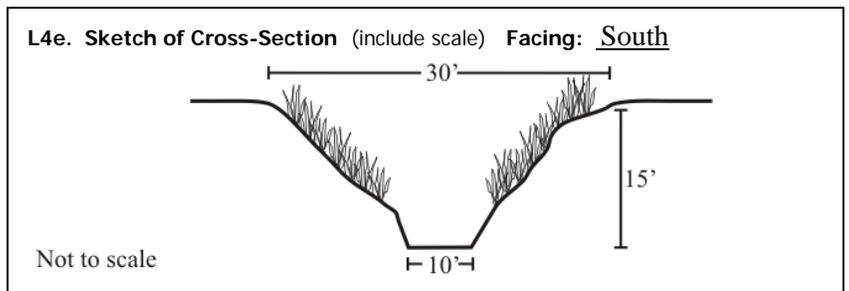
This segment is within the Study Area. At this location, the Ward Drainage Canal is a large earthen ditch with rough banks overgrown with weeds and other vegetation. The canal has a flat, sandy bottom. A small, metal frame shed – apparently used as a pumphouse – is located approximately one-quarter mile south of Mountain View Avenue, on the inside of the eastern bank of canal. The ditch crosses under Mountain View Avenue through a concrete pipe culvert.

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

- a. **Top Width** 30 feet
- b. **Bottom Width** 10 feet
- c. **Height or Depth** 15 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete pipe culvert; metal pumphouse



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The drainage canal at this location passes through a rural agricultural area surrounded by vacant land and vineyards.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing south from Mountain View Avenue.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Ward Drainage Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** WDC-3

\*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.)

UTM (north end): Zone 11; 267827mE / 4041448mN

UTM (south end): Zone 11; 267814mE / 4041108mN

USGS 7.5' Quad Burris Park Date 1954; T 16S R 22E Sec 33.

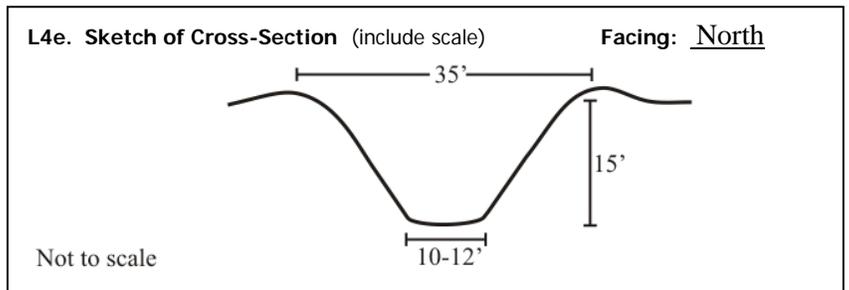
This segment runs south along the east side of Del Rey Avenue at Elkhorn Road, southwest of Kingsburg.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of Ward Drainage Canal is located outside of the Study Area and is recorded here as a comparison point. The canal at this location is broad and deep with steep walls and a narrow bottom. Its unlined walls are covered with grass, weeds, and other low vegetation. The canal crosses under Elkhorn Road via a concrete pipe culvert.

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

- a. **Top Width** 35 feet
- b. **Bottom Width** 10-12 feet
- c. **Height or Depth** 15 feet
- d. **Length of Segment** 200 feet



**L5. Associated Resources:**

Culvert

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The drainage canal is located in a rural area surrounded by large-lot residential developments and orchards. An electric powerline runs along Del Rey Avenue opposite the canal.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing north from Elkhorn Road, Del Rey Avenue visible at left.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

The Ward Reclamation District formed was formed on June 5, 1911, with the mission of draining a number of pools and sloughs covering 9,000 acres from three miles east of Selma southwest toward Kingsburg. The district built the Ward Drainage Canal in 1914 to serve this purpose. The three primary trustees, W.F. Martin, Allyn O. Taylor, and W.W. Ward, hired consulting engineer W.H. Shafer to construct the eight-mile canal. The district was effective in lowering the water level and reclaiming 1,000 acres of former swampland and mosquito breeding grounds.<sup>1</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger movement toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Lone Tree Channel, and the Fowler Switch Canal, as well as their various branches. The Consolidated Irrigation District acquired the Ward Drainage Canal in 1933 during a busy period of acquisition as several independent companies collapsed financially. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. In 1940, the district replaced 33 wooden checks and 41 wooden gates with concrete and steel structures along its various canals. With the help of the federal Work Project Administration (successor to the New Deal-era Works Progress Administration), the new concrete structures were constructed and reinforced with cobblestone and many of the smaller branches were piped, while larger features like the Ward Drain were improved and cleaned. Between 1926 and 1946, the Ward Drainage Canal was extended south to the Cole Slough, and between 1946 and 1964 the canal was extended north to the Selma Colony Canal.<sup>3</sup>

A new wastewater treatment facility was established in the early 1970s requiring the Ward Drain to be piped through the facility. Initially CID developed an agreement with the Selma-Kingsburg-Fowler County Sanitation District in which the Selma Colony Canal would take in treated wastewater for irrigation or to be dispersed into existing groundwater. Problems with the wastewater plant between 1975 and 1976 resulted in multiple upgrades, and the diversions to the Selma Colony Canal were never completed.<sup>4</sup>

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<sup>1</sup> Harry Barnes, "Use of Water from Kings River, California," *State of California Department of Engineering, Bulletin No. 7* (Sacramento: California State Printing Office, 1920); J. Randall McFarland, *Water for a Thirsty Land: The Consolidated Irrigation District and Its Canal Development History* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996), 64-65.

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 55; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 209-211; McFarland, *Water for a Thirsty Land*, 101-104.

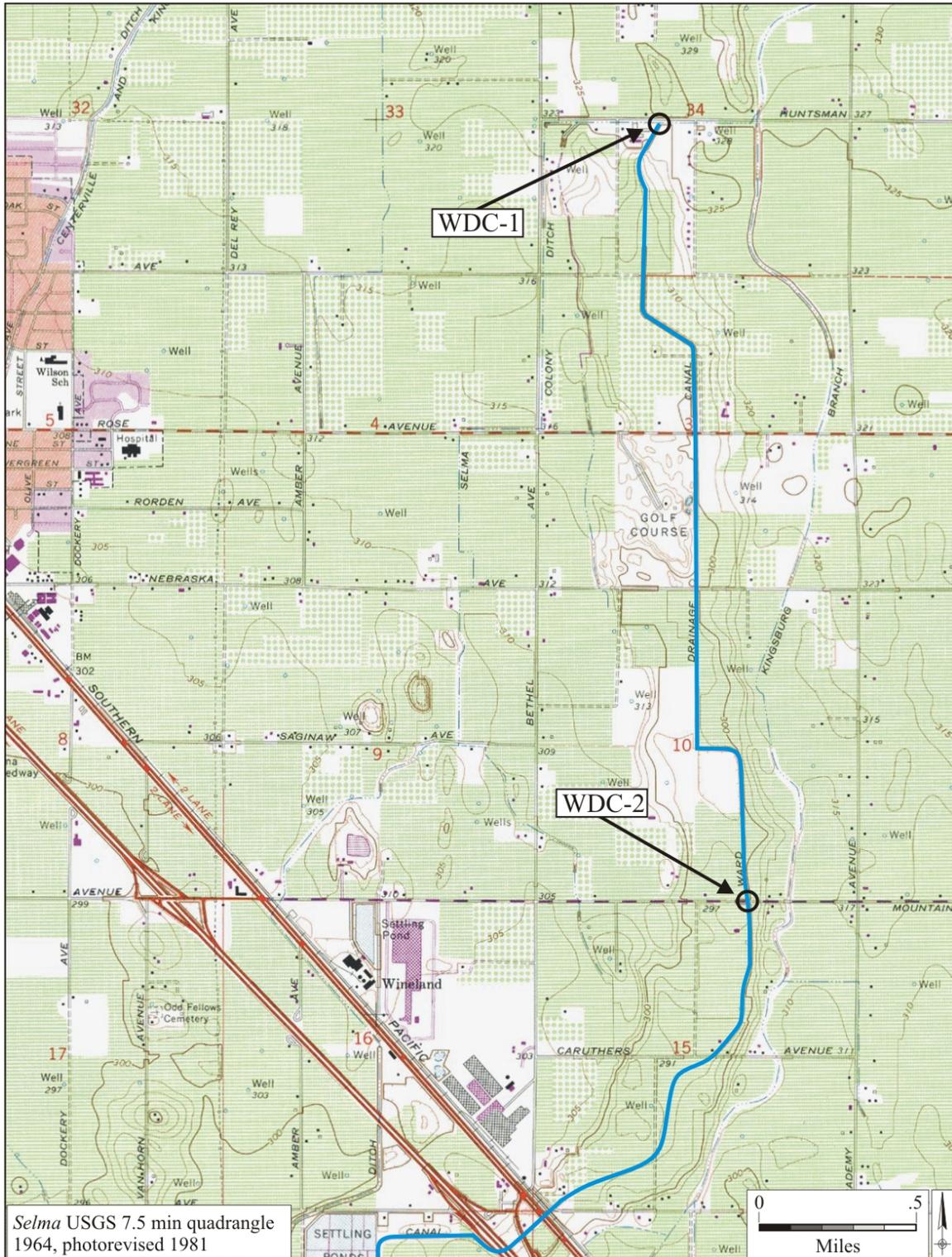
<sup>3</sup> Adams, *Irrigation Districts in California*, 211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; Huber, "Engineering Report, Consolidated Irrigation District," 29; McFarland, *Water for a Thirsty Land*, 101-105, 150-151; "WPA Helps Put Water District Ahead 25 Years," *Fresno Bee* (August 12, 1940), 3-B; USGS, *Selma Quadrangle* (Washington D.C.: USGS, 1924); USGS, *Selma Quadrangle* (Washington D.C.: USGS, 1964); USGS, *Burris Park Quadrangle* (Washington D.C.: USGS, 1924); USGS, *Burris Park Quadrangle* (Washington D.C.: USGS 1946); USGS, *Burris Park Quadrangle* (Washington D.C.: USGS, 1964).

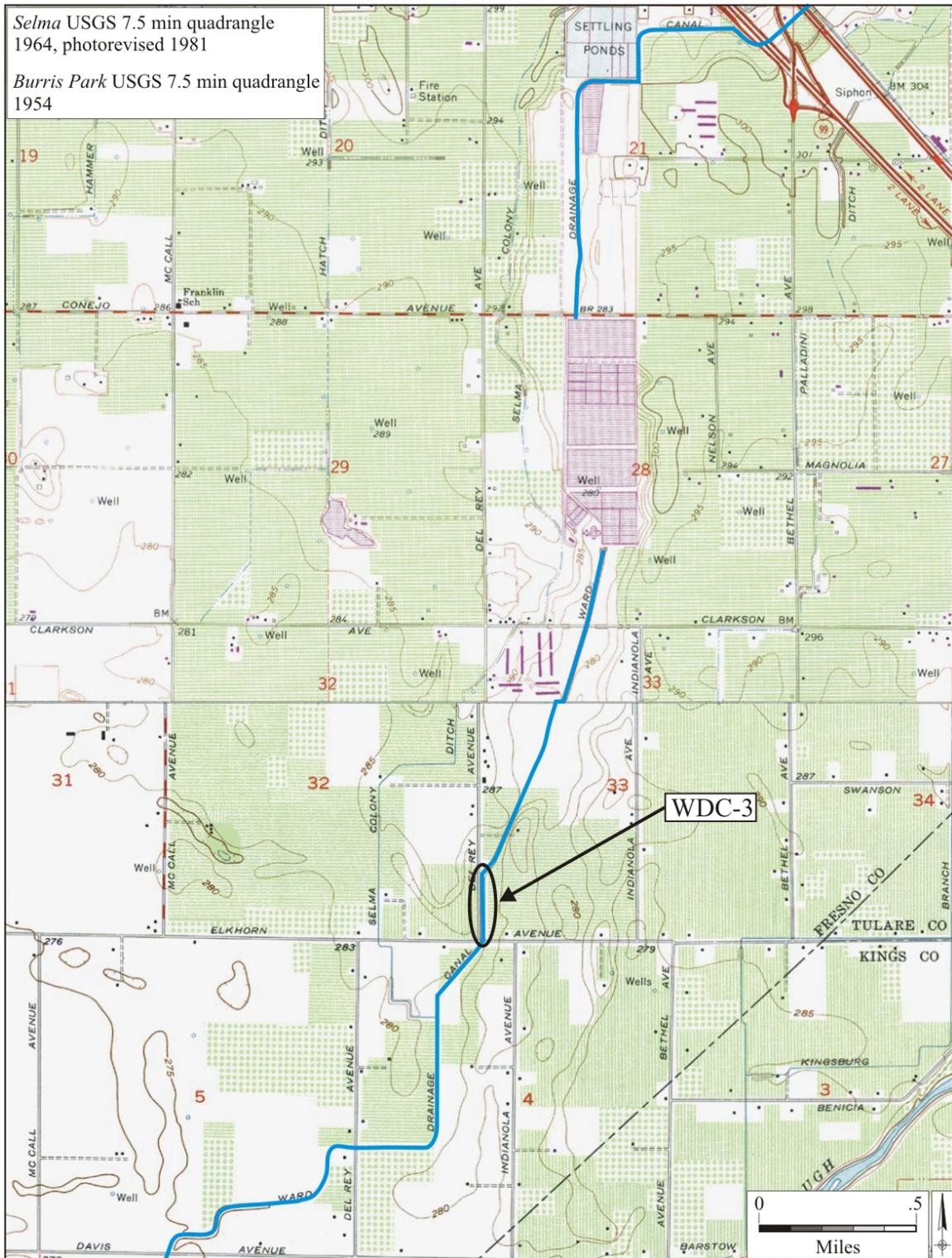
<sup>4</sup> McFarland, *Water for a Thirsty Land*, 155-156.

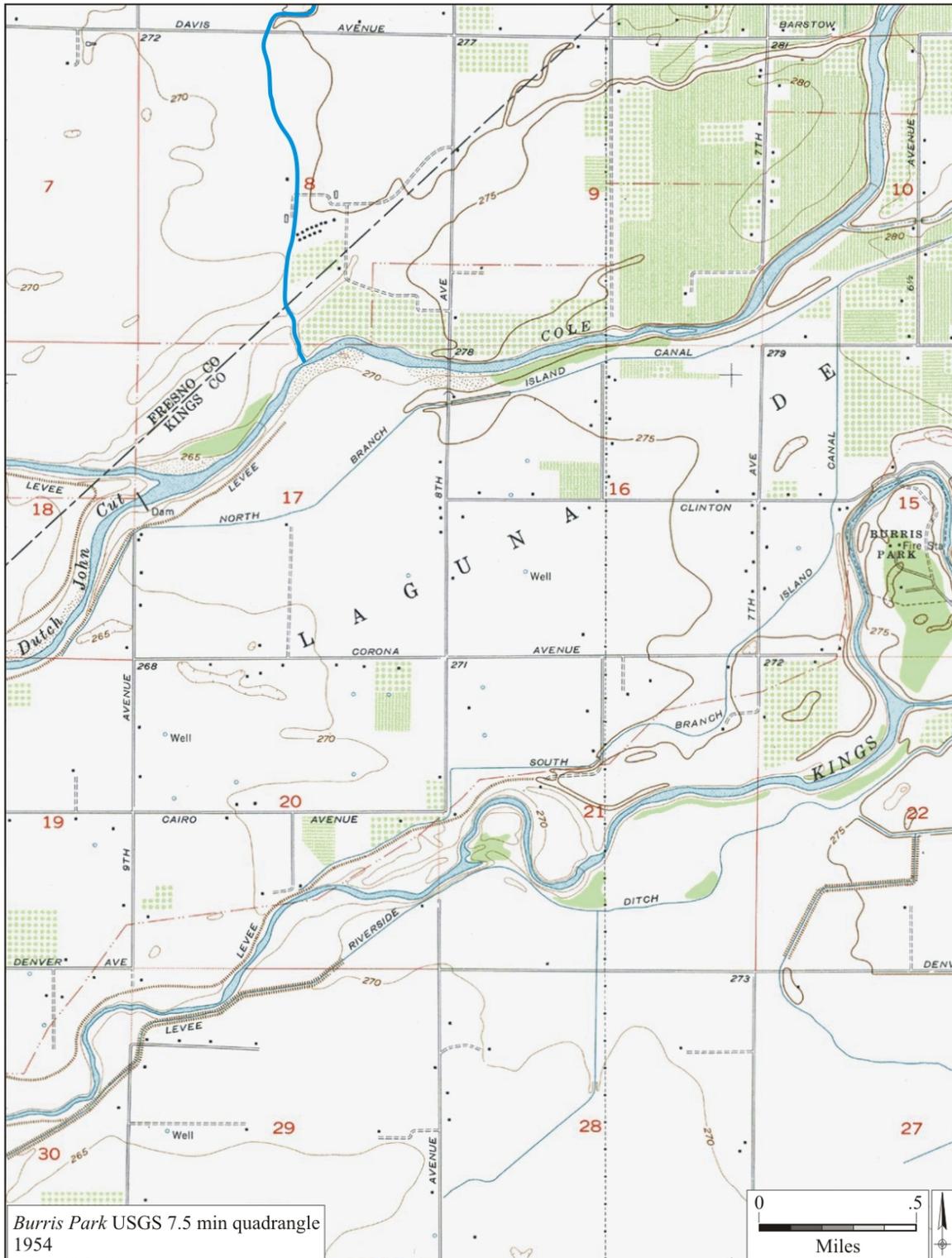
Evaluation

Ward Drainage Canal does not meet the criteria for listing in the NRHP or the CRHR. The canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). While the canal has fulfilled an important function in the agricultural needs of southern Fresno County, this association does not represent a significant event within the context of irrigation history in this area. In comparison to larger, earlier irrigation works, such as the Centerville and Kingsburg Canal and its branches, which transformed the agricultural character of this part of the county, Ward Drainage Canal was built relatively late and did not play a direct, defining role in the region's history. Furthermore, the canal is not associated with any historically significant individual (Criterion B or 2), nor does this utilitarian and modernized resource embody any distinctive characteristics in terms of its engineering or construction (Criterion C or 3). Lacking significance, the Ward Drainage Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

**Location Maps:**







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

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

Page 1 of 11

\*Resource Name or # (Assigned by recorder) Map Reference PLI 33

P1. Other Identifier: Kingsburg Branch Canal

\*P2. Location:  Not for Publication  Unrestricted

\*a. County Fresno

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

\*b. USGS 7.5' Quad Selma Date 1964 (photorevised 1981) T15S, 16S R 22E; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Kingsburg Branch Canal is a principal conduit within the Consolidated Irrigation District (CID) system of irrigation canals. From its headgates north of Parlier, the Kingsburg Branch of the Centerville and Kingsburg Canal follows a southwesterly course through southern Fresno County to its terminus slightly north of the Cole Slough. The canal is predominately unlined with short sections of concrete lining adjacent to engineering structures. For this project the canal was recorded at three locations: Segments KB-1 and KB-2 are located outside of the Study Area and were recorded for comparison purposes; Segment KB-3, located north of Kingsburg, is within the Study Area. See the attached Linear Feature Records for detailed descriptions of the individual segments.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) View of canal at Mountain View Road (Segment KB-3), camera facing south, August 27, 2008

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

1878 (McFarland, *Water For A Thirsty Land*)

\*P7. Owner and Address:

Consolidated Irrigation District

2255 Chandler Street

Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110,

Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)

Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

DPR 523A (1/95)

\*Required Information

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 11

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 33

B1. Historic Name: Kingsburg Branch of the Centerville and Kingsburg Canal

B2. Common Name: Kingsburg Branch Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction, 1878; the southern end was realigned between 1924 and 1954; additional alterations for the construction of Highway 99 during the late 1950s.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: None

B9. Architect: John E. Urton b. Builder: Centerville and Kingsburg Irrigation Ditch Company

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Kingsburg Branch Canal does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

L1. Historic and/or Common Name: Kingsburg Branch Canal

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: KB-1

\*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.)

UTM: Zone 11; 271366mE / 4053145mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 26, 27.

This segment crosses Academy Avenue between Adams and South avenues, approximately ¾ mile southeast of canal's headgates.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

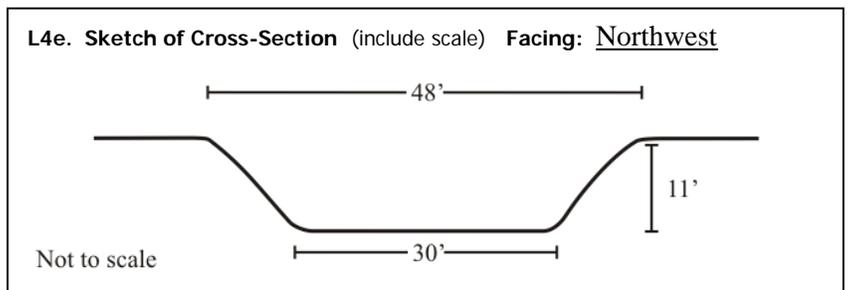
This is a comparison point outside the Study Area. The Kingsburg Branch Canal at this location is a wide, earthen canal with a broad, flat bottom and uniform walls. Both embankments carry dirt access roads. Academy Avenue crosses the canal at this location via a modern cast concrete bridge bearing the number "42C-065". On the southwest side of the canal is a diversion gate within a vertical concrete pipe structure.

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

- a. Top Width 48 feet
- b. Bottom Width 33 feet
- c. Height or Depth 11 feet
- d. Length of Segment 100 feet

L5. Associated Resources:

Concrete culvert, diversion gates, checkgate



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal crosses a busy road in a rural agricultural area surrounded by orchards.

L7. Integrity Considerations:

See "Significance Statement," Section B10.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing: Kingsburg Branch Canal, camera facing southwest from Academy Avenue Bridge.

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: August 28, 2008

**L1. Historic and/or Common Name:** Kingsburg Branch Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** KB-2

\*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.)

UTM: Zone 11; 270826mE / 4051498mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 34.

This segment crosses Huntsman Avenue approximately ¼ mile west of Academy Avenue and ¾ east of Bethel Avenue.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is a comparison point outside the Study Area. The canal crosses Huntsman Avenue from north to south. The canal at this location is predominately unlined with a broad, flat bottom and uniform, machine-groomed walls. On the north side of Huntsman Avenue, Selma Colony Ditch diverts water from the west side of the Kingsburg Branch Canal; there is a poured concrete drop gate at this location, south of which is a concrete-lined section followed by sections lined by river stone and rubble. The canal then passes under Huntsman Avenue via a concrete box culvert. South of Huntsman Avenue the canal resumes its unlined earth configuration.

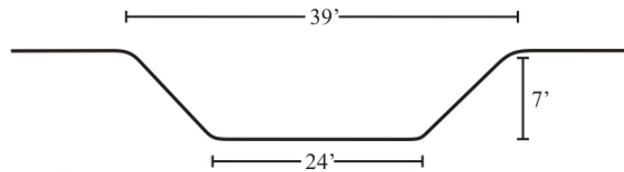
**L4. Dimensions:** (in feet for historic features and meters for prehistoric features)

- a. **Top Width** 39 feet
- b. **Bottom Width** 24 feet
- c. **Height or Depth** 7 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Drop gate, headgate of Selma Colony Ditch, diversion gate, culvert

**L4e. Sketch of Cross-Section** (include scale) **Facing:** South below drop gate



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located within a rural agricultural area surrounded by vineyards, vacant land, and a residence.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing north from Huntsman Avenue.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Kingsburg Branch Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** KB-3

**\*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.)

UTM: Zone 11; 270883mE / 4047461mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 10, 15.

This segment crosses Mountain View Road / Route J40 between Bethel and Academy avenues, north of Kingsburg.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

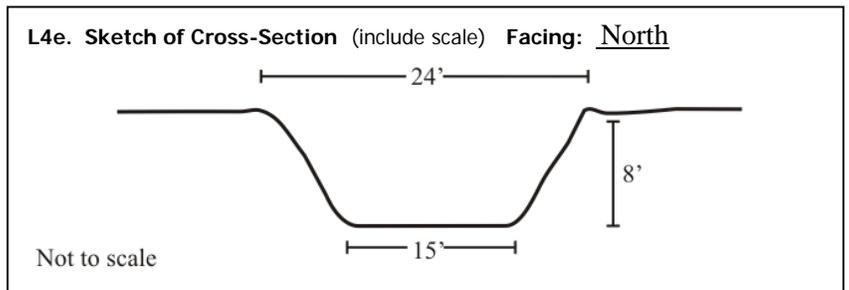
This segment is located within the Study Area. The Kingsburg Branch Canal at this location is a broad, unlined canal with a flat bottom and steep walls. The canal passes under Mountain View Avenue through a board-formed concrete culvert. The north side of the culvert also acts as a check dam with slats for wooden gates. South of the culvert, approximately the first twenty feet of the canal walls are faced in smooth stone set in concrete. South of this is a short section lined with concrete rubble riprap.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 15 feet
- c. **Height or Depth** 8 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Diversion gate, concrete pipe, culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is set among vineyards and orchards with the busy Mountain View Avenue crossing the canal.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of Kingsburg Branch Canal, camera facing north from Mountain View Avenue.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

**L1. Historic and/or Common Name:** Kingsburg Branch Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** KB-4

\*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.)

UTM: Zone 11; 270353mE / 4045871mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 15, 22.

This segment crosses Kamm Avenue between Bethel and Academy avenues, northeast of Kingsburg.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

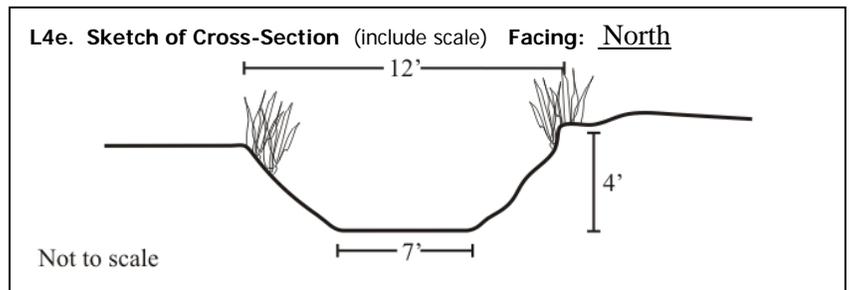
This is a comparison point located south of the Study Area. The Kingsburg Branch Canal at this location is unlined with a flat bottom and uneven walls covered in vegetation. While the overall dimensions remain roughly the same over the length of this segment, the canal on the south side of Kamm Avenue has slightly steeper sides. The canal passes under the road through a board-formed concrete culvert dated 1937.

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

- a. **Top Width** 12 feet
- b. **Bottom Width** 7 feet
- c. **Height or Depth** 4 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The rural area surrounding the canal at Kamm Avenue includes vineyards and vacant land.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Canal facing north from Kamm Avenue, 1937 culvert in foreground.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

The Kingsburg Branch of the Centerville and Kingsburg Canal (C&K Canal), located in southern Fresno County, is operated today as part of the Consolidated Irrigation District (CID) system of canals and ditches, but was once privately owned and operated by local farmers. The canal was built in 1877-78 to serve the irrigation needs of farmers near present day Kingsburg, and was incorporated into the CID system in 1921.<sup>1</sup>

The Centerville and Kingsburg Irrigation Ditch Company, an alliance of six area farmers, formed in 1876 to build the C&K Canal. The C&K then sold 50 shares of stock to raise funds to hire John E. Urton, known for engineering canals that could flow by gravity through high ground, to design and supervise construction of the C&K Canal. Urton suggested the canal be divided into two primary branches at a point about ten miles from the diversion point. One branch would go south to Kingsburg, while the other would travel southwest to the future site of Selma on the Southern Pacific railroad line. Urton surveyed the route in late 1876 and commenced construction in March 1877. By early 1878 the canal was completed and delivering water to Selma and Kingsburg through its two branches. The main canal diversion point was located on the Kings River about two miles due north of Centerville. The main canal split into its two branches about ten miles to the south.<sup>2</sup>

The construction of the canal was unusual. With no funds remaining to hire workers, the company decreed the canal would be built by "force account," meaning the stockholders would do the work. The first few miles through the wetlands were built en masse, and the remaining sections were pieced out in parcels, or "chunks." Urton marked out the canal route across the plains and bluffs, divided it into equal chunks, and marked the limits of each with stakes. Stockholders were then randomly assigned a chunk and became responsible for its construction. Urton would inspect the finished work declare it complete or advise further changes as necessary. The men were "paid" for their labor in the form of credit against their shareholdings at a rate of \$2.00 a day, with an additional \$2.00 daily for the use of a horse and 25 cents for tools.<sup>3</sup>

The C&K Canal was transferred to the holdings of the Consolidated Canal Company (CCC) after the company's incorporation in August 1901, along with those of the Fowler's Switch Canal Company, Kirby Ditch Company, and many others. Within short order, engineer Ingvart Teilman oversaw improvements on the system's major canals. Teilman combined the C&K Canal and the Fowler Switch Canal intakes on the Kings River with that of the Fresno Canal. To accomplish the feat, Teilman designed a concrete dam and headgate across the Kings River for both the Consolidated Canal Company's canals and the Fresno Canal. Those improvements removed the brush dams that formerly had to be rebuilt yearly, following summer flooding or occasionally after winter floods.<sup>4</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger movement toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler

<sup>1</sup> I. Tielman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno, California: Williams & Son, 1943), 34; J. Randall McFarland, *Water For A Thirsty Land: The Consolidated Irrigation District and Its Canal Development History* (Selma, California: Consolidated Irrigation District and J. Randall McFarland, 1996), 21-24.

<sup>2</sup> Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 204; McFarland, *Water for a Thirsty Land*, 22-25.

<sup>3</sup> McFarland, *Water For A Thirsty Land*, 23.

<sup>4</sup> McFarland, *Water For A Thirsty Land*, 63-64; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; Harry Barnes, *Use of Water From Kings River, California, Bulletin No. 7* (Sacramento: California State Printing Office, 1920), 23-24.

Switch, Santa Fe Canal, Selma Colony Canal, and their various branches. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>5</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s with the assistance of WPA funding. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. Between 1924 and 1954 the southern portion of the Kingsburg Branch was rerouted, the last half-mile was altered to a more directly southern route from its former southwest route that crossed over and ran alongside Bethel Avenue. Additional improvements were made in the late 1950s and 1960s to accommodate construction of modern Highway 99.<sup>6</sup> Also in the post-war period, particularly after 1955, the district began to install underground pipelines along many of its canals and laterals to reduce maintenance costs and water loss through seepage. Between 1955 and 1961 alone the district installed nearly 40 miles of pipe along various conduits. Portions of the Kingsburg Branch were piped in 1992-1993 within the town of Kingsburg.<sup>7</sup> All of its visible aboveground engineering features, including culverts and check and diversion gates, are concrete structures that date to the CID era.

### Evaluation

As discussed above, the Kingsburg Branch of the Centerville and Kingsburg Canal was one of two principal branches of the first major irrigation canal to reach the portion of southern Fresno County in the vicinity of Kingsburg. The canal fundamentally shaped the settlement and agricultural patterns of this part of the county, opening it up to the intensive farming that characterizes the region to this day. The Kingsburg Branch of the C&K Canal is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with late nineteenth century agricultural development of rural Fresno County. It is also potentially eligible under Criterion C (3) as an important example of pioneer-era canal engineering. However, the Kingsburg Branch of the C&K does not appear eligible for the NRHP or CRHR because it does not retain integrity to its potential period of significance, 1878-1901. The potential period of significance begins with the canal's date of construction and ends when ownership of the canal passed out of the hands of its builders and original operators, the Centerville and Kingsburg Irrigation Ditch Company.

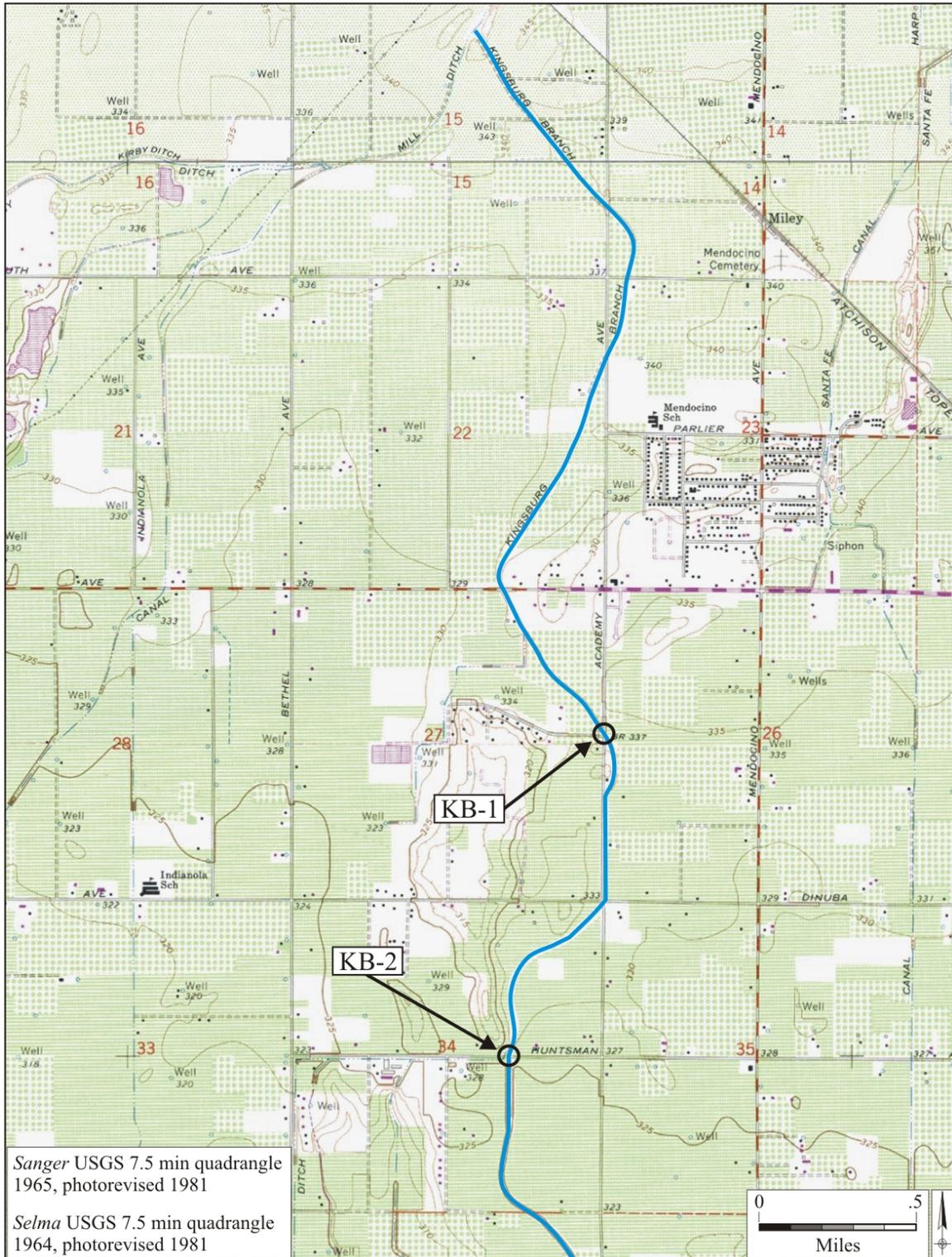
The Kingsburg Branch of the C&K bears little resemblance to its appearance during its potential period of significance. Over its entire length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, large segments of the canal as it passes through Kingsburg have been piped underground. Plus, the southern end of the canal has been realigned at its southern end and at its intersection with Highway 99. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its potential period of significance, the Kingsburg Branch of the C&K Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

<sup>5</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Adams, *Irrigation Districts in California*, 209-211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirty Land*, 101-104.

<sup>6</sup> USGS, *Burris Park Quadrangle* (Washington D.C.: USGS, 1924); USGS, *Burris Park Quadrangle* (Washington D.C.:USGS, 1954); McFarland, *Water for a Thirty Land*, 138-139.

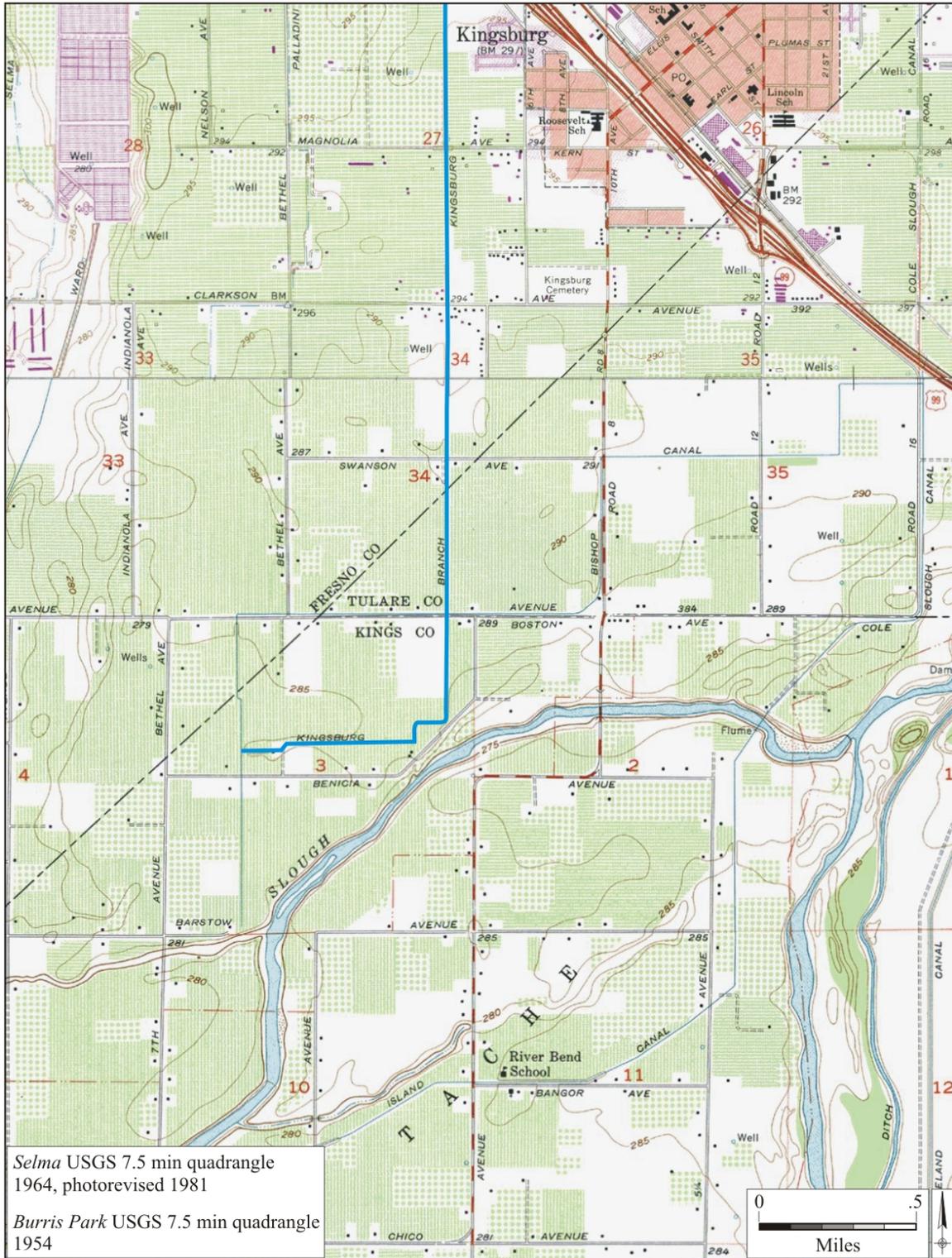
<sup>7</sup> Adams, *Irrigation Districts in California*, 211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; Huber, "Engineering Report, Consolidated Irrigation District," 29; McFarland, *Water for a Thirty Land*, 101-105, 150-151.

**Location Maps:**





Selma USGS 7.5 min quadrangle  
1964, photorevised 1981



P1. Other Identifier: Santa Fe Canal

\*P2. Location:  Not for Publication  Unrestricted

\*a. County Fresno

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

\*b. USGS 7.5' Quad Selma Date 1964, photorevised 1981 T 15S, 16S; R 22E; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Santa Fe Canal is a conduit within the Consolidated Irrigation District (CID) system of irrigation canals. From its headgates at Cole Slough Canal, the Santa Fe Canal follows a generally southerly course through Fresno County, circling around Selma to the east en route to its terminus, north of Kamm Avenue and the town of Kingsburg. The majority of the canal is unlined and has a flat bottom with overgrown embankments, as demonstrated by Segments SFC-1 and SFC-2. The portion of the canal within the Study Area, Segment SFC-3, is concrete-lined and narrower. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Santa Fe Canal along Mountain View Road (Segment SFC-3), camera facing west, August 27, 2008

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

Circa 1900 (McFarland, *Water for a Thirsty Land*; Harvey, *Atlas of Fresno County*, 1907.)

\*P7. Owner and Address:

Consolidated Irrigation District

2255 Chandler Street

Selma, CA 93662

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)

Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 9

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 37

B1. Historic Name: Santa Fe Ditch

B2. Common Name: Santa Fe Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed around 1900; expanded in 1909; in 1940 nearly a mile was lined with concrete.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: None

B9. Architect: Unknown b. Builder: Santa Fe Ditch Company

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Santa Fe Canal does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

L1. Historic and/or Common Name: Santa Fe Canal

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: SFC-1

\*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.)

UTM: Zone 11; 272903mE / 4051431mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 15S R 22E Sec 35, 36.

This segment crosses Huntsman Avenue between Mendocino and Ross avenues, in an area southwest of Parlier and east of Selma.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

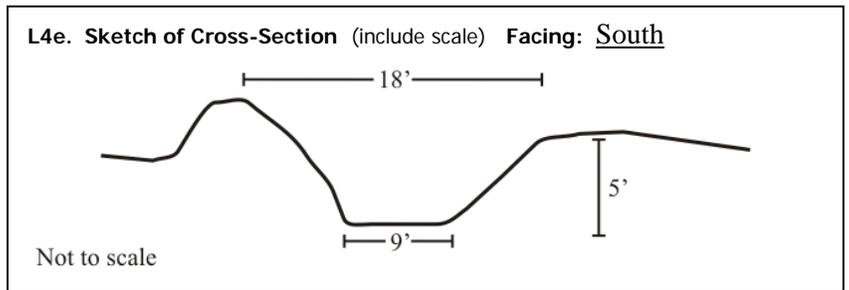
At this location, the canal is unlined and has a flat bottom with uneven embankments covered in weeds and other vegetation. North of Huntsman Avenue, earthen berms line both sides of the canal; south of the road, the berm is only on the east bank. A concrete pipe culvert with board-formed concrete headwalls carries the canal beneath the road. Other engineering features adjacent to the culvert are a concrete checkgate and a concrete box diversion gate.

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

- a. Top Width 18 feet
- b. Bottom Width 9 feet
- c. Height or Depth 5 feet
- d. Length of Segment 100 feet

L5. Associated Resources:

Culvert, box diversion gate, checkgate



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal traverses an agricultural area surrounded by vineyards and orchards.

L7. Integrity Considerations:

See "Significance Statement," Section B10.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing: Camera facing south across Huntsman Avenue, showing culvert to the left and diversion gate box to the right.

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: August 27, 2008

**L1. Historic and/or Common Name:** Santa Fe Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SFC-2

\*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.)

UTM: Zone 11; 272876mE / 4049821mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 1, 2.

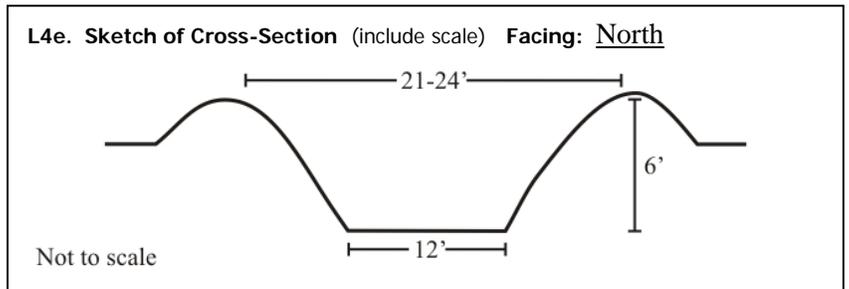
This segment crosses Rose Avenue between Mendocino and Ross avenues, in an area southwest of Parlier and east of Selma.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is outside of the Study Area and is recorded here for comparison purposes. The canal at this location is similar to Segment SFC-1: it is unlined with a flat bottom, overgrown embankments, and earth berms on both sides. The canal passes under Rose Avenue through a board-formed concrete culvert with a "Feb 1950" date stamp. A concrete checkgate is located on the north side of the culvert, and a second checkgate is located south of the culvert. Two diversion gates are built into the side of the southern checkgate.

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

- a. **Top Width** 21-24 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet



**L5. Associated Resources:**

Concrete checkgates, diversion gates, culvert

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

Orchards and vineyards surround the area; a single farm complex is located to the southwest.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of canal showing checkgate and diversion gates south of Rose Avenue, camera facing south.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

**L1. Historic and/or Common Name:** Santa Fe Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** SFC-3

**\*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.)

UTM: Zone 11; 273029mE / 4047401mN

USGS 7.5' Quad Selma Date 1964 (photorevised 1981); T 16S R 22E Sec 12, 13.

This segment of Santa Fe Canal is located along Mountain View Avenue from 1/2 mile west of Zediker Avenue to 1/8 mile east of Madsen Avenue.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

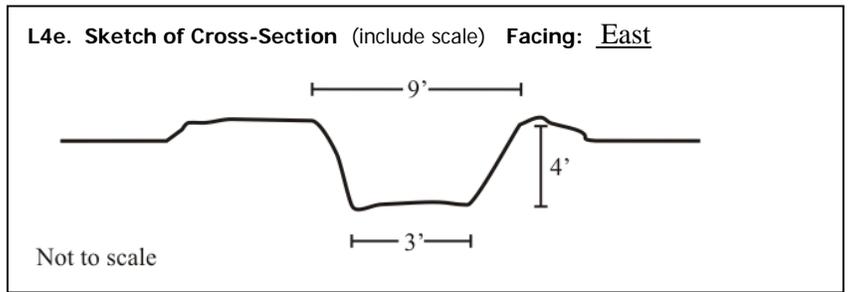
This segment is located within the project Study Area. The canal at this location is lined with concrete and has a flat bottom and steep, uniform walls. The canal approaches Mountain View Avenue from the north, passes under the road through a poured concrete box culvert, and turns to the east to run along the south side of Mountain View Avenue. A concrete checkgate is located along this portion of the segment, east of which the top width of the canal narrows from nine feet to six feet. Other engineering features along this segment also constructed of concrete include upright cylindrical diversion pipes and a small culvert near the eastern end.

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

- a. **Top Width** 6-9 feet
- b. **Bottom Width** 3 feet
- c. **Height or Depth** 4 feet
- d. **Length of Segment** 1/3 mile

**L5. Associated Resources:**

Checkgates, culverts, diversion gates.



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located in an agricultural area along a busy transportation corridor. Vineyards and orchards surround the canal, and a residential lot is located to the southwest.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Canal facing east south of Mountain View Avenue

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

## **B10. Significance (continued):**

### Canal History

The Santa Fe Canal branches off of the Cole Slough Canal and runs south to an area northeast of Kingsburg. The canal's construction occurred near the turn of the twentieth century after John P. Clark, secretary for the Centerville and Kingsburg Irrigation Ditch Company, solidified the Centerville & Kingsburg (C&K) system water rights, thereby permitting him to expand the system. Clark incorporated the Santa Fe Ditch Company, naming it for the nearby railroad, and relied on the San Francisco Savings Union, the same bank that backed the construction of the Fowler Switch Canal, for financial backing. The Santa Fe Ditch Company constructed the Santa Fe Ditch to better supply a small area of country with water. Its actual date of construction has not been determined and is estimated to be around 1900, the year before the holdings of the Santa Fe Ditch Company were transferred to the newly incorporated Consolidated Canal Company. The Santa Fe Canal appears – unnamed – on the 1907 county atlas map.<sup>1</sup>

On August 23, 1921, the Consolidated Irrigation District (CID) was organized and immediately acquired the old Consolidated Canal Company system. The formation of CID was part of a larger movement toward irrigation district formation brought on by agricultural prosperity during World War I and the need to finance major infrastructural improvements. The irrigation system that CID purchased from the Consolidated Canal Company consisted of 25 separate canals including the C&K Canal, Fowler Switch, Selma Colony Ditch, and Santa Fe Canal, and their various branches. Most of the canals and ditches were unlined over their entire length, and practically all of the canal control structures were timber and in dire need of replacement.<sup>2</sup>

Since the formation of the district in 1921, CID has regularly upgraded and made modifications to its system of canals and ditches. One of its first objectives was to replace all timber structures with concrete structures, a task largely accomplished by the end of the 1930s with the assistance of Works Progress Administration (WPA) funding. In 1937, the district purchased its first motorized heavy equipment and began phasing out the use of Fresno scrapers, thus ushering in a new era of maintenance and construction. In 1940, the district lined 4,583 feet of the Santa Fe Canal with concrete as a preventative measure against seepage. That same year, the canal's dilapidated timber engineering features were replaced with concrete structures.<sup>3</sup>

### Evaluation

The Santa Fe Canal does not meet the criteria for listing in the NRHP or the CRHR. The canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). As discussed above, Santa Fe Canal was privately built near the turn of the twentieth century and incorporated into the Consolidated Irrigation District system in 1921. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Fresno County (Criterion A or 1). Canals, like other forms of infrastructure, are common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of their abundance, it is necessary to evaluate canals within the context of irrigation development and their impact in the region as a whole. In comparison to larger, earlier canals, such as the Centerville and Kingsburg Canal and its two main branches, as well as the Fowler Switch

<sup>1</sup> I. Teilman and W.H. Shafer, *Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943), 53-54; J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996), 55; William Harvey, Sr. *Atlas of Fresno County, California* (Fresno: William Harvey, 1907).

<sup>2</sup> W.L. Huber, "Engineering Report, Consolidated Irrigation District," report to California State Engineer and Department of Public Works, January 4, 1922, 1; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 209-211; Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; McFarland, *Water for a Thirsty Land*, 101-104.

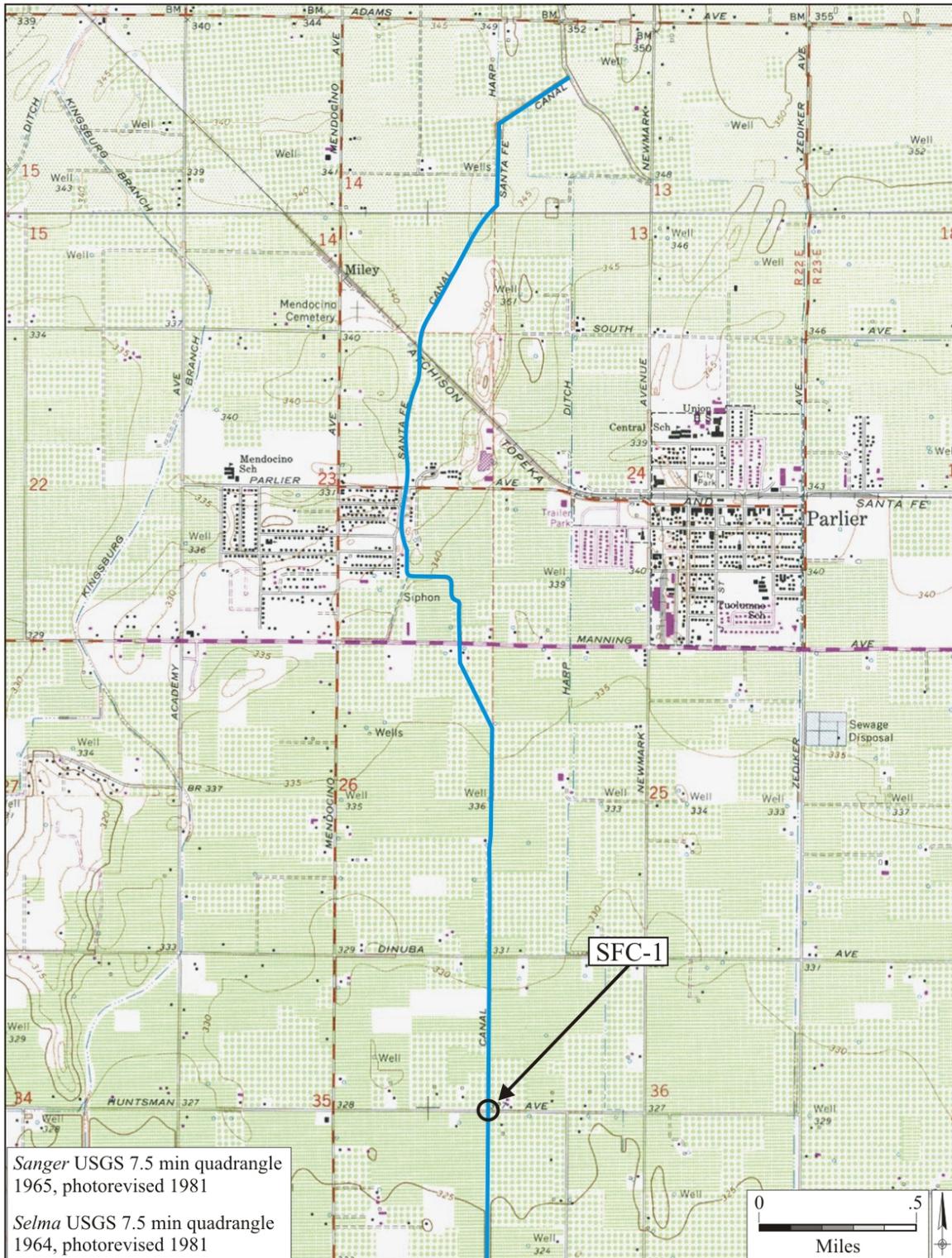
<sup>3</sup> Teilman and Shafer, *Story of Irrigation in Fresno and Kings Counties*, 55; "WPA Helps Put Water District Ahead 25 Years," *The Fresno Bee* (August 12, 1940), 3-B.

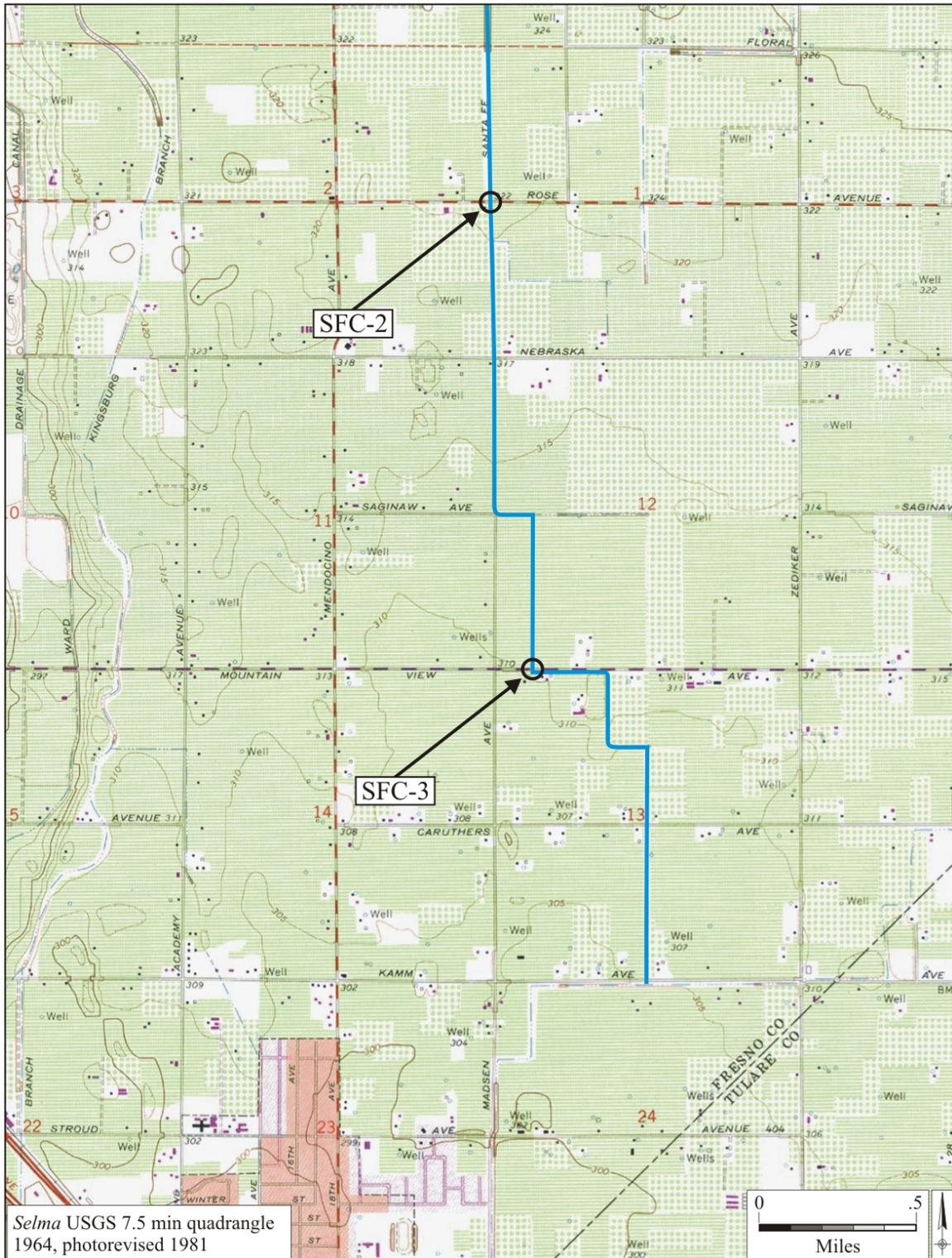
Canal, the Santa Fe Canal was built relatively late in the history of irrigation works in this part of Fresno County and served a small constituency of farmers. The Santa Fe Canal was a second-generation canal built after the pioneer period of large-scale irrigation had already reached maturity.

Additionally, Santa Fe Canal does not appear associated with any historically significant individual (Criterion B or 2), nor does this heavily modified resource embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3).

Even if the Santa Fe Canal were historically significant, the integrity of the ditch has been compromised. The ditch has been enlarged from its original 1890s configuration. It has also been lined with concrete, altering the original shape and dimensions of the channel. Additionally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its original construction, the Santa Fe Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

Location Maps:





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

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

**P1. Other Identifier:** West Section 20 Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad Reedley Date 1966 T 16S; R 23E; M.D. B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

West Section 20 Ditch is a conduit within the Alta Irrigation District (AID) system of irrigation canals. As the name implies, the ditch services the west side of Section 20 (Township 16 South, Range 23 East). West Section 20 Ditch begins at the intersection of Road 40 and Avenue 408 and continues westerly along Avenue 408 for about three-quarters of a mile, then turns south through the center of the western half of the section. The ditch terminates at a natural slough on the east side of Kings River. Because of access restrictions, the lower portion of the ditch could not be recorded; the segment located along Avenue 408 is documented in detail on the attached Linear Feature Record.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) **Photograph 1. Beginning of West Section 20 Ditch, camera facing west from Road 40, August 27, 2008**

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
1905 (Director's Minutes, Alta Irrigation District)

\*P7. Owner and Address:  
Alta Irrigation District  
P.O. Box 715  
Dinuba, CA 93618

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 7

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 55

B1. Historic Name: West Section 20 Ditch

B2. Common Name: West Section 20 Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed 1905; timber engineering features replaced and concrete lining added incrementally from the 1920s through the 1960s.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features: \_\_\_\_\_

B9. Architect: Unknown b. Builder: Alta Irrigation District

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The West Section 20 Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks historical significance. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear / Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** West Section 20 Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** PLI 55

\***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.)

UTM (east end): Zone 11; 277643mE / 4045629mN

UTM (west end): Zone 11; 276450mE / 4045664mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981): T 16S R 23E Sec 20.

This segment begins at the intersection of Road 40 and Avenue 408 and heads west along Avenue 408 for ¾ miles.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of West Section 20 Ditch, which runs parallel to the south side of Avenue 408, comprises the portion of the resource within the Study Area for the current project. The first 30-foot section of the ditch, on the west side of the culvert that carries it under Road 40, is lined with concrete (east of Road 40 the canal is known as Carpenter Ditch and is piped underground). Beyond this point, for a distance of about ½ mile, the ditch assumes a U-shaped configuration with unlined walls topped with shallow berms (**Photographs 1 and 2**). As shown in **Photograph 3**, the west end of the segment is lined with concrete and has steep, uniform walls and a flat bottom. This configuration persists as the canal turns to the south and departs the Study Area (**Photograph 4**). Along this segment of the West Section 20 Ditch are three board-formed concrete overpour checkgates; three diversion gates in concrete boxes; and a concrete siphon that carries the ditch under Road 36.

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

- a. Top Width 8 feet
- b. Bottom Width 4 feet
- c. Height or Depth 4 feet
- d. Length of Segment Approximately 1 mile

**L5. Associated Resources:**

Check gates, diversion gates, pipe head, siphon culvert

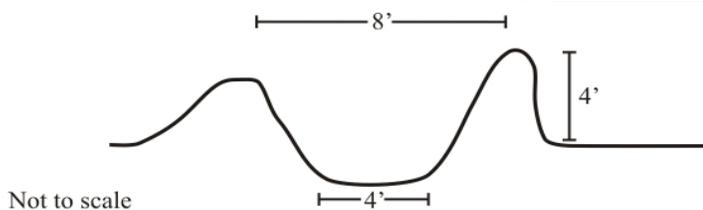
**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This passes through a semi-rural area surrounded by large residential lots and open and cultivated fields.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L4e. Sketch of Cross-Section** (include scale) Facing: West (unlined portion)



**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:** Photograph 2. Camera facing east from east of Road 36, showing check gate (foreground), diversion gate (right), and unlined section of canal.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 27, 2008

### **B10. Significance (continued):**

West Section 20 Ditch is a local ditch built in 1905 to serve – as the name implies – small farm parcels within the west half of Section 20 (Township 16 South, Range 24 East), located in north Tulare County just southeast of the Fresno county line. Alta Irrigation District built and continues to own and operate the ditch.

Alta Irrigation District (AID) was formed in 1888 following passage of the Wright Act the previous year, which allowed landowners to organize and operate their own irrigation districts. In 1890, the new district purchased the canals and water rights of the 76 Land and Water Company, the first enterprise to build large-scale irrigation works in northern Tulare County beginning in the early 1880s. At the time, the 76 Land and Water Company system consisted of the 76 Canal, or main canal (located outside of the Study Area for this project); Traver Canal and McClanahan Ditch, branches of the main canal that served the western portion of the district surrounding Traver (both recorded separately); and several smaller laterals. The newly-formed irrigation district immediately began an expansion program to provide irrigation water to portions of the district not covered by the existing 76 Company system. The West Section 20 Ditch was built relatively late in this expansion effort – fifteen years after AID purchased the old system.<sup>1</sup>

The West Section 20 Ditch (as well as its branch, the East Section 20 Ditch, not located in the Study Area) was built to provide irrigation water to lands formerly held by C.W. Clarke, a large landholder with nearly 9,000 acres along the Kings River and elsewhere in Tulare County.<sup>2</sup> His holdings were subdivided and sold off in the early twentieth century, including Section 20, which was divided into 20-acre farms parcels in 1901. Buyers of the parcels petitioned the AID Board of Directors to build a canal to serve Section 20. A committee consisting of Directors Fairweather and McCracken and Superintendent Greene investigated the creation of a canal in March of 1905. The canal drew water from the Carpenter Ditch (which in turn diverted from the Caesar Canal) and carried the water along the northern edge of Section 20 for a little less than a mile. It then turned due south through the western half of the section. It eventually deposited excess water back into the Kings River. The original channel was unlined and all engineering features were of timber construction.<sup>3</sup>

In 1912 the Board of Directors instructed the district superintendent to increase the ditch's carrying capacity by raising and lining selected portions.<sup>4</sup> As late as 1922 the Section 20 Ditch retained many of its original wooden diversion gates to small private laterals serving individual farms. Additionally, the ditch included 18 wooden drop gates to adequately regulate the flow of water. Systematic replacement of these original timber features with concrete structures began in the 1920s. In addition to the replacement and modernization of gates and drops, several sections were lined with concrete, including the segments along the northern edge of West Section 20 between 1961 and 1965.<sup>5</sup>

<sup>1</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 25-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 181-184; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988).

<sup>2</sup> John C. McCubbin, *The McCubbin Papers* (Reedley: Reedley Historical Society, 1988), 87; Thomas H. Thompson, *Historical Atlas of Tulare County* (Visalia: Thomas Thompson, 1892).

<sup>3</sup> Alta Irrigation District (AID), Board of Directors, Minutes Book, Volume 5, March 7, 1905, 154, on file in AID Offices, Visalia.

<sup>4</sup> AID, Directors Book, Minutes Book, Volume 5, November 6, 1912 377, AID Offices; AID, Directors Book, Volume 5, December 3, 1912, AID Office.

<sup>5</sup> AID, Detailed Engineering Drawings, Sections 15-16-17-20-21-22 Township 16 South, Range 23 East, 1922, on file at AID Office; AID, *Annual Reports*, 1947, 1961-1965.

Evaluation

The Section 20 Ditch does not meet the criteria for listing in the NRHP or the CRHR. The ditch is not significant for its association with the development of agriculture in the region (Criterion A or 1). While the farms within the section have depended upon the ditch for continued agricultural production, this association does not represent a significant event within the context of irrigation history in this portion of Tulare County. In comparison to larger, earlier canals, such as the Travers Canal, the West Section 20 Ditch was built relatively late in the history of irrigation works in this part of Tulare County and served a small constituency of farmers. Furthermore, the canal is not associated with any historically significant individual (Criterion B or 2), nor does this heavily modified and modernized resource embody any distinctive characteristics in terms of its engineering or construction (Criterion C or 3). Lacking significance, the West Section 20 Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

Page 6 of 7

\*Resource Name or # (Assigned by recorder) Map Reference PLI 55

\*Recorded by J. Jones/C. Brookshear \*Date August 26, 2008  Continuation  Update

**Photographs (cont):**

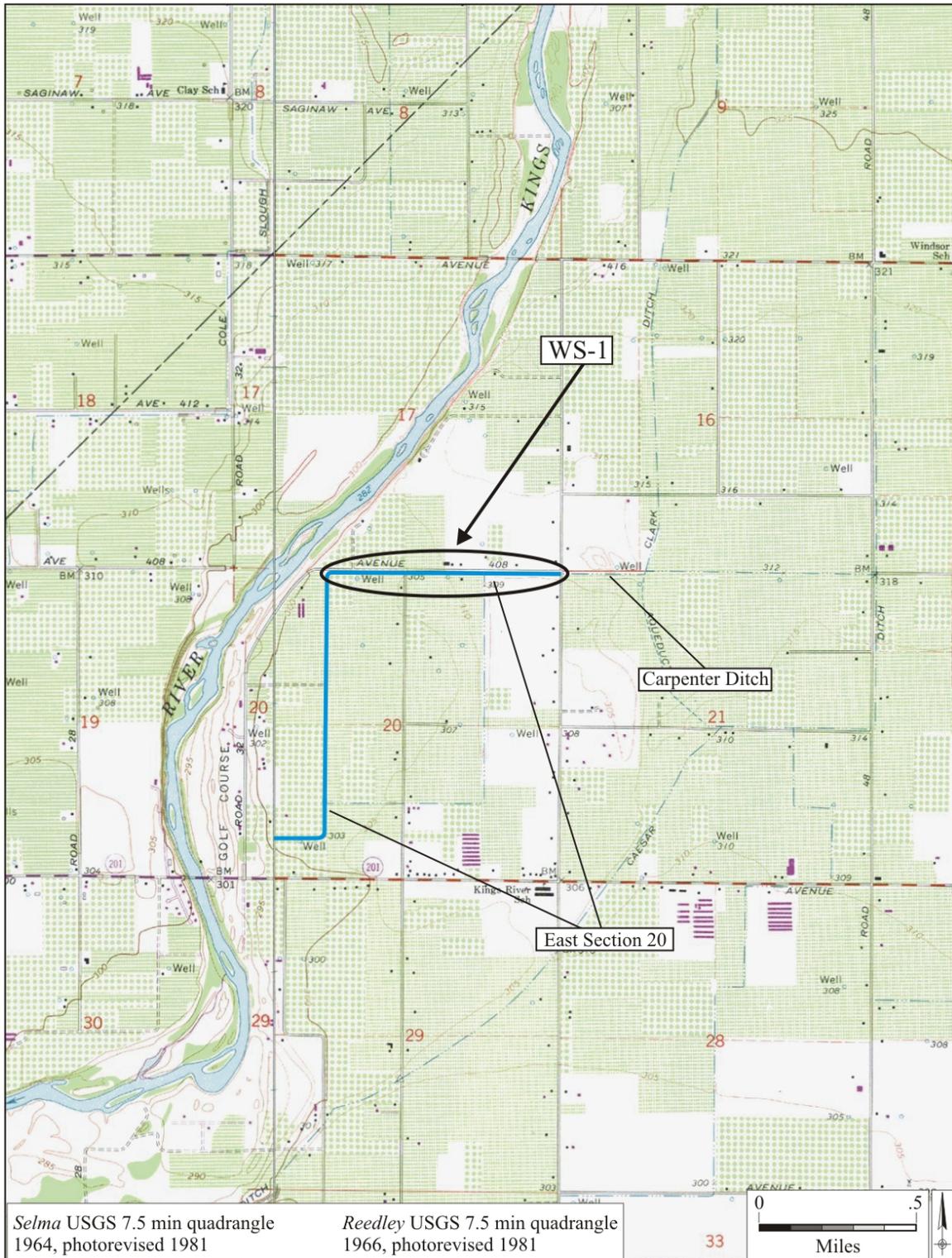


**Photograph 3:** View of concrete-lined section of canal, facing east from west end of segment, August 27, 2008.



**Photograph 4:** View of canal where it turns south from Avenue 408, August 27, 2008.

**Location Map:**



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

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6Z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

P1. Other Identifier: Caesar Canal

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad Reedley Date 1966 T See Linear Feature Records; \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Caesar Canal is a conduit within the Alta Irrigation District (AID) system of canals. The canal diverts water from the Traver Canal near the intersection of El Monte Way (Route J40) and Road 52. The canal flows in a generally southwesterly direction for about six miles, eventually discharging into the McClanahan Canal. For this project the canal was recorded at three locations, of which Segment CC-2 is the only portion located within the Study Area. Segments CC-1 and CC-3 are located north and south of the Study Area, respectively, and were recorded for comparison purposes. The first half mile of the canal is piped. Beyond the intersection of Road 48 and El Monte Way, the canal is predominately earthen with concrete engineering structures (Segments CC-1 and CC-2). A short section of the canal – between Road 40 and Road 38 – is lined with concrete (Segment CC-3). These representative segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) View of Caesar Canal showing Segment CC-2 (within the Study Area), camera facing north, August 27, 2008.

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
Circa 1892 (Thompson, *Historical Atlas Map of Tulare County*; AID records)

\*P7. Owner and Address:  
Alta Irrigation District  
P.O. Box 715  
Dinuba, CA 93618

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 27, 2008

\*P10. Survey Type: (Describe) Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 8

\*NRHP Status Code 6Z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 63

B1. Historic Name: Caesar Canal

B2. Common Name: Caesar Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed circa 1892; concrete engineering features added in the 1920s and later.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Caesar Canal does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks significance and integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Caesar Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CC-1

\*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.)

UTM: Zone 11; 279305mE / 4047181mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 15.

This segment begins at the intersection of Road 48 and Avenue 416 (El Monte Way).

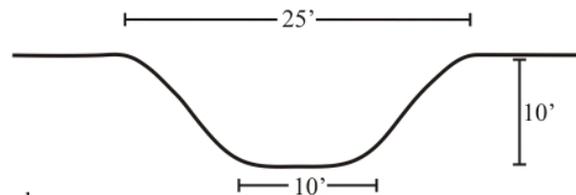
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is located to the north of the Study Area and is recorded here as a comparison point. Caesar Canal diverts from the Traver Canal at Avenue 416 / El Monte Way and Road 52. At that point it is an underground pipeline following a westerly alignment. At Road 48 the canal turns to the south and becomes an open ditch. The ditch at this location has unlined, graded walls and a uniform U-shaped geometry.

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

- a. **Top Width** 25 feet
- b. **Bottom Width** 10 feet
- c. **Height or Depth** 10 feet
- d. **Length of Segment** 100 feet

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



**L5. Associated Resources:**

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing south at the point where the pipeline transitions to open canal.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Caesar Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CC-2

\*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.)

UTM: Zone 11; 277586mE / 4043688mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 28, 29.

This segment is located at Road 40 just south of State Route 201 / Avenue 400.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is the only segment of Caesar Canal located within the Study Area. The canal at this location has unlined earthen walls. On the northeast side of Road 40 the canal has a V-shaped cross section; southwest of the road the canal has a broader, U-shaped geometry. The canal crosses under the road via a culvert consisting of two concrete pipes. At the south end of this segment the canal becomes an underground pipeline capped with a concrete checkgate bearing a "Dec 26, 1925" date stamp. The checkgate has been modified with two motorized undershot metal gates and a center overshot board gate. The segment also includes five diversion gates located near the road culvert, each of which consists of a concrete box surround with external and internal metal gates.

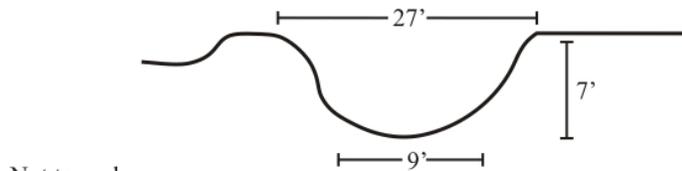
**L4. Dimensions:** (in feet for historic features and meters for prehistoric features)

- a. **Top Width** 27 feet
- b. **Bottom Width** 9 feet
- c. **Height or Depth** 7 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Culvert, diversion gates, pipeline

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



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This segment is located in an agricultural area of orchards and vineyards just south of a crossroads school and market.

**L8a. Photograph, Map, or Drawing.**



**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southwest, showing road culvert (foreground) and pipeline headgate.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Caesar Canal

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CC-3

\*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.)

UTM: Zone 11; 276237mE / 4042687mN

USGS 7.5' Quad Reedley Date 1966 (photorevised 1981); T 16S R 23E Sec 29.

This segment is located where Caesar Canal crosses Avenue 392 west of Road 38.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

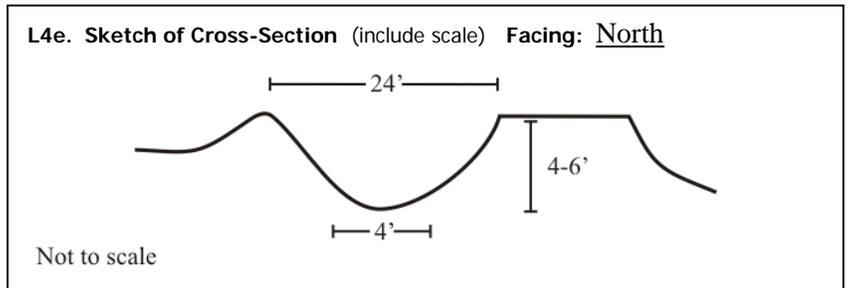
This segment is located south of the Study Area and is recorded here for comparison purposes. Along this segment, the ditch is lined with a concrete slab on the west bank and is unlined on the east bank. The canal passes under Avenue 392 via a board-formed concrete box culvert. A board-formed concrete box diversion with an incised "February 23, 1916" date stamp is located a short distance south of the culvert.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 4 feet
- c. **Height or Depth** 4-6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert, diversion gate



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards. A residence is southeast of the culvert.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing north showing Avenue 392 culvert at center and small diversion gate on left.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Services, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

### **B10. Significance (continued):**

The exact construction history of the Caesar Canal has not been established, but by 1892 it had been built following its current alignment as far as Avenue 392.<sup>1</sup> The Alta Irrigation District (AID) purchased the canal in 1895 near the end of a period of expansion in which district added existing canals or built new ones to expand the old 76 Land and Water Company system.

Alta Irrigation District (AID) was formed in 1888 following passage of the Wright Act the previous year, which allowed landowners to organize and operate their own irrigation districts. In 1890, the new district purchased the canals and water rights of the 76 Land and Water Company, the first enterprise to build large-scale irrigation works in northern Tulare County beginning in the early 1880s. At the time, the 76 Land and Water Company system consisted of the 76 Canal, or main canal (located outside of the Study Area for this project); Traver Canal and McClanahan Ditch, branches of the main canal that served the western portion of the district surrounding Traver (both recorded separately); and several smaller laterals. The newly-formed irrigation district immediately began an expansion program to provide irrigation water to portions of the district not covered by the existing 76 Company system.<sup>2</sup>

Caesar Canal began on the property of its namesake and possible builder, Jason Caesar, located in the northwest quarter of Section 22, Township 16 South, Range 23 East. Caesar Canal diverted water from Traver Canal and followed a generally southwesterly route to the southern edge of Section 20. This was amidst the holdings of C.W. Clarke, a large landowner with 9,000 acres along Kings River and another thousand acres southwest of Traver. Clark was the owner of the canal when AID acquired it in 1895. That same year the AID Board of Directors declared its irrigation system complete.<sup>3</sup>

Over the next two decades, AID focused its attention to other problems including water rights litigation and defending the legitimacy of its bonds. Funds for canal maintenance and upgrades were extremely limited during this period and the condition of system began to deteriorate. The situation improved in the 1910s and 1920s, at which time the district increased assessments for maintenance and began to systematically replace all of Caesar Canal's original wooden engineering features, such as diversion gates, checks, and drops, with concrete structures. By 1922, ten of the 18 drop gates along Caesar Canal had been replaced with concrete gates, and another four were replaced in the subsequent years. Later improvements to the canal include the addition of concrete lining to a section near Avenue 392, and the piping of the section between Road 40 and Road 36 sometime after 1981. Caesar Canal remains an active component of the AID irrigation water delivery system, and has been regularly upgraded and maintained up to the present.<sup>4</sup>

#### Evaluation

As discussed above, Caesar Canal was one of the canals built in the 1890s and added to the existing Alta Irrigation District system. The canal does not appear significant for its association with irrigation or agricultural developments in this part of

<sup>1</sup> Thomas H. Thompson, *Historical Atlas Map of Tulare County* (Visalia: Thomas Thompson, 1892).

<sup>2</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 25-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 181-184; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988).

<sup>3</sup> Alta Irrigation District (AID), Board of Directors Books Volume I, 1888-1894, on file in the AID Office, Visalia; Morison, *The Alta Empire*, 26-27.

<sup>4</sup> Harold J. Enns, "The Alta Irrigation District: A Prototype of Individual Initiative in Water Development in California," Masters Thesis in History, California State College Fresno, 1967, 68-69; AID, Detailed Engineering Drawings, Sheets 39-41, 51-54, 68-71, 86-88, 104, 1922, on file at AID office; AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1944-1980); USGS, *Reedley Quadrangle* (Washington, D.C.: USGS, 1981).

Tulare County (Criterion A or 1). Canals, like other forms of infrastructure, are common elements of the landscape, particularly in the Central Valley where they can be found everywhere that crops are cultivated. Because of this importance, it is necessary to evaluate the canals within the context of the development of canals and their impact in the region as a whole. Caesar Canal is a component of a system whose foundation dates to 1882-84 with the completion of the 76 Land and Water Company system. It is this initial system – which included such pioneer ditches as the Traver Canal and McClanahan Ditch – that made significant contributions to the transformation of the lands within the Alta Irrigation District from arid plains to intensively farmed land by bringing large quantities of water to the region. Caesar Canal was a second-generation canal built after the pioneer period of large-scale irrigation had reached maturity. Additionally, Caesar Canal does not appear associated with any historically significant individual (Criterion B or 2), nor does it embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3).

Even if Caesar Canal were historically significant, the integrity of the ditch has been compromised. Over its entire length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, the canal has been realigned to drain into the McClanahan Ditch instead of the Kings River. Another portion of the canal has been piped underground. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its original construction, the Caesar Canal does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.



**P1. Other Identifier:** McClanahan Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad See Linear Feature Records; \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City Traver Zip 93673

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The McClanahan Ditch is a conduit within the Alta Irrigation District (AID). The ditch diverts water from Traver Canal at the intersection of Avenue 390 and Road 48 (approximately three miles north of Traver), then flows westerly to the northwest corner of Section 32 (Township 16 South, Range 23 East), at which point it turns to southwest. It follows this general line until reaching the Tulare-Kings county line at 4<sup>th</sup> Avenue where it flows south before rejoining the Traver Canal. All observed segments of the ditch are earthen with concrete engineering structures. For this project the canal was recorded at four locations: Segment MD-2 is located within the Study Area, and Segments MD-1, MD-3, and MD-4 are outside the Study Area and recorded for the purposes of comparison. The segments are described in detail on the attached Linear Feature Records.

\*P3b. **Resource Attributes:** (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) McClanahan Ditch at Road 384 (Segment MD-3), camera facing north, August 26, 2008.

\*P6. **Date Constructed/Age and Sources:**  
 Historic  Prehistoric  Both  
1884

\*P7. **Owner and Address:**  
Alta Irrigation District  
P.O. Box 715  
Dinuba, CA 93618

\*P8. **Recorded by:** (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110,  
Davis, CA 95618

\*P9. **Date Recorded:** August 26, 2008

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

\*P11. **Report Citation:** (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 10

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 67

B1. Historic Name: McClanahan Ditch

B2. Common Name: McClanahan Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction, 1884

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: None

B9. Architect: P.Y. Baker b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The McClanahan Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** McClanahan Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MD-1

\*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.)

UTM: Zone 11; 279158mE / 4041960mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 16S R 23E Sec 34.

This segment marks the head of McClanahan Ditch located at Road 48 just south of Avenue 392, north of Traver.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

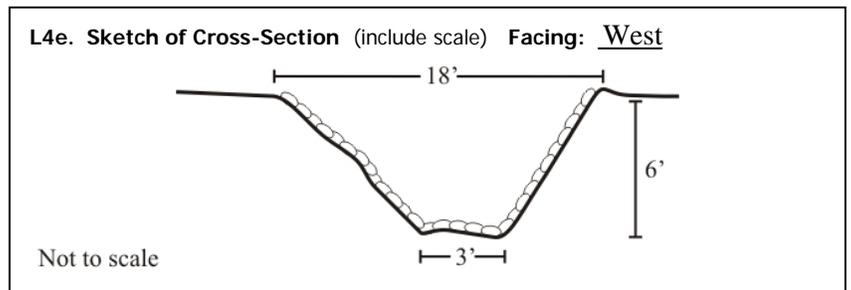
This segment is located outside the Study Area and is recorded here for comparison purposes. This is the beginning of the canal; a poured concrete headgate is located just east of Road 48. At this location, McClanahan Ditch is a V-shaped and unlined, with the exception of a 50-foot section west of Road 48 which is lined with rubble, as shown in the photograph below. A concrete box culvert carries the canal under the roadway.

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

- a. **Top Width** 18 feet
- b. **Bottom Width** 3 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Headgate, culvert under Road 48



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards and vineyards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of McClanahan Ditch facing west from Road 48.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

L1. Historic and/or Common Name: McClanahan Ditch

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: MD-2

\*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.)

UTM: Zone 11; 277543mE / 4042025mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 16S R 23E Sec 32, 33.

This segment crosses Road 40 just south of Avenue 392.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

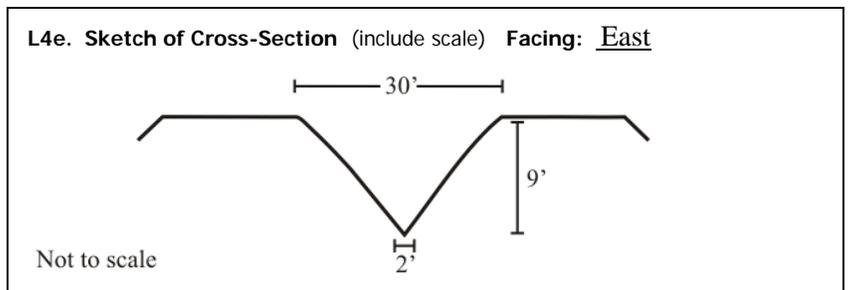
This segment is located within the project Study Area. The McClanahan Ditch at this location is unlined with a V-shaped cross-section. The canal passes under Road 40 through a concrete box culvert with a 1982 date stamp. East of the culvert are two diversion gates: a gate in a concrete box and another with a pump in a vertical concrete pipe.

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

- a. Top Width 30 feet
- b. Bottom Width 2 feet
- c. Height or Depth 9 feet
- d. Length of Segment 100 feet

L5. Associated Resources:

Culvert, diversion gates



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards.

L7. Integrity Considerations:

See "Significance Statement," Section B10.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing:

Camera facing west from Road 40.

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Freeman  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: September 16, 2008

**L1. Historic and/or Common Name:** McClanahan Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MD-3

\*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.)

UTM: Zone 11; 274981mE / 4040909mN

USGS 7.5' Quad Burris Park Date 1954; T 16S R 23E Sec 31, T 17S R 23E Sec 6.

This segment crosses Avenue 384 just northeast of State Highway 99.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

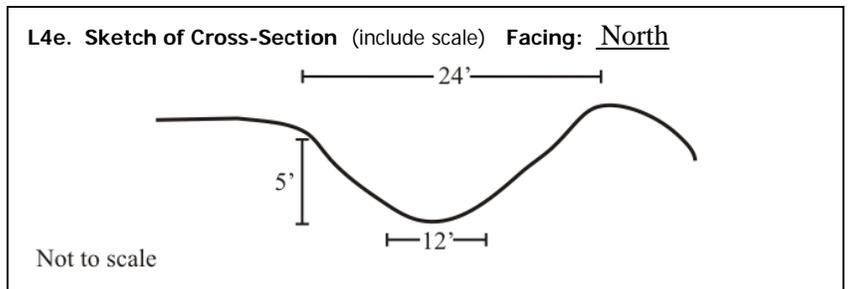
This segment is outside of the Study Area and was recorded for comparison purposes. The canal at this location is unlined and has a uniform “U” shape. An earthen berm on the east side balances the depth provided by the higher field to the west. The canal passes under Avenue 384 through a concrete box culvert.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 5 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards and open fields.

**L7. Integrity Considerations:**

See “Significance Statement,” Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing south, railroad in background.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** McClanahan Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MD-4

\*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.)

UTM: Zone 11; 273537mE / 4038858mN

USGS 7.5' Quad Burris Park Date 1954; T 17S R 22E Sec 7, 12.

The McClanahan Ditch crosses 4<sup>th</sup> Avenue on the Tulare/Kings county line south of Avenue 376 and north of Avenue 368.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

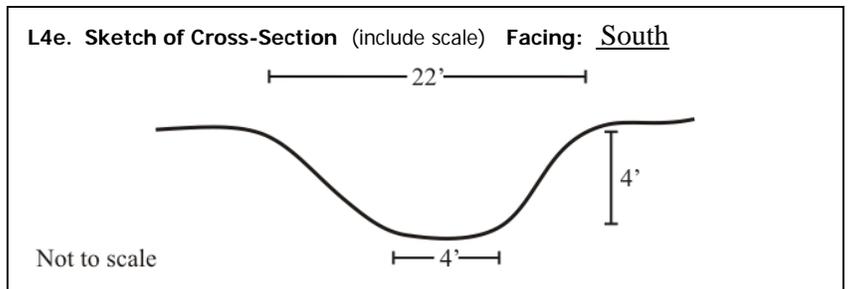
This is a comparison point. The ditch at this location is U-shaped and unlined. It approaches 4<sup>th</sup> Avenue from the east, crosses under the road through a concrete pipe culvert, and turns south to parallel the road for approximately one mile. A three-channel concrete checkgate, located just south of the road crossing, bears a "February 11, 1928" date stamp.

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

- a. **Top Width** 22 feet
- b. **Bottom Width** 4 feet
- c. **Height or Depth** 4 feet
- d. **Length of Segment** 3/4 mile

**L5. Associated Resources:**

Checkgate, culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of canal segment along 4<sup>th</sup> Avenue showing concrete checkgate, camera facing north.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

### **B10. Significance (continued):**

McClanahan Ditch, built in 1884, is one of the original irrigation canals of the 76 Land and Water Company, the forerunner of the Alta Irrigation District. It was one of two principal branches of the company's main canal, the '76 Canal, which originated in southern Fresno County near the community of Reedley (the other main branch canal, the Traver Canal, is recorded separately). The company was founded in 1882 to serve the semi-arid region previously dominated by the '76' Ranch, owned by Darwin and Ferguson. The land and water company adopted its name from the ranch, which had collapsed under the combined forces of droughts, introduction of the "no fence" law, and construction of the railroad. Pete Yapple Baker and D.K. Zumwalt conceived the '76' Land and Water Company as the first large-scale settlement and irrigation project in Tulare County. In order to raise capital, stock was divided among seven investors, H.P. Merritt, P.Y. Baker, Charles Traver, D.K. Zumwalt, C.F.J. Kitchener, I.H. Jacobs, Thomas Fowler, and Francis Bullard. County residents received news of the project with enthusiasm. The '76' Land and Water Company was the first in Tulare County to undertake an advertizing campaign to draw people to its newly irrigated land. They offered a total of 30,000 acres of land for sale to settlers along with water rights equaling 40 miner inches attached to each 40-acre tract. The company also offered leases and financing. Owners and lessees served by the canal paid an annual fee for the maintenance of the canal system. Town lots for Traver, the recently-platted town along the Southern Pacific mainline, also sold well and it quickly became an important regional shipping point.<sup>1</sup>

Construction of the company's '76' Canal began in August of 1882 with P.Y. Baker as "construction supervisor." The canal diverted water from Kings River approximately thirteen miles northeast of Reedley and continued in a general southeasterly direction along the foothills for about nine miles. The main canal had a 100-foot wide bottom and was over five feet deep. South of Wahtoake Lake the canal system used Kennedy Slough (Traver Creek) to bring water southwest to the head of Traver Canal. The McClanahan Ditch branched off of Traver Canal in lands belonging to A.E. McClanahan, a farmer turned real estate agent, and headed west to serve the lands north and west of Traver. The McClanahan Canal began deliveries in 1884; at the time it followed essentially the same course as the current canal.<sup>2</sup>

Originally, the McClanahan Canal, like the others in the '76' Land and Water Company system, did not return water to the river or other drainage. As a result, the water spread underground west of Traver. The water table rose from 50 feet to two feet and alkali soon sterilized the soil of that region. The increasing alkalinity coupled with construction of the Southern Pacific eastern valley line through Dinuba in 1888 ushered in a period of decline in Traver; the town eventually rebounded, but for a time it became little more than a flag stop along the main railroad route.<sup>3</sup>

In 1887 California passed the Wright Act allowing residents to form and operate their own irrigation districts. The residents in the area served by the '76' Canal and its branches voted to form their own district the following year. Because the canal's diversion point was further up the Kings River than any other irrigation district, they selected "Alta," meaning "high," for

<sup>1</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 26-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 183-184.

<sup>2</sup> *Memorial and Biographical History of the Counties of Fresno, Tulare and Kern California* (Chicago: Lewis Publishing Co, 1891) 405; Carl Ewald Grunsky, *Irrigation Near Fresno, California USGS Water Supply and Irrigation Papers No. 18* (Washington, D.C.: Government Printing Office, 1898) 52; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988), 21; Jewell, "Agricultural Development in Tulare County," 25-27; Small, *Early History of Tulare County*, 181; Alfred Bannister, *Map of Tulare County* (San Francisco: Lith. Britton & Rey, 1884); Thomas H. Thompson, *Historical Atlas of Tulare County* (Visalia: Thomas Thompson, 1892); US Census Bureau, MS Census 1900, Tulare County, Kaweah township, ed 61 sheet 5; US Census Bureau, MS Census 1910, Fresno County, 8<sup>th</sup> Judicial Township, ed 65, sheet 3.

<sup>3</sup> Harold J. Enns, "The Alta Irrigation District: A Prototype of Individual Initiative in Water Development" Master's Thesis, Fresno State College, 1967, 36-37.

the name of the district. The Board of Directors, consisting of P.Y. Baker, formerly of the 76 Land and Water Company, T.L. Reed, J.D. Van Noy, E.E. Giddings, and J.E. Toler, authorized \$675,000 worth of bonds, of which \$410,000 were used to purchase the existing '76' Canal system. Another \$133,000 in bonds was used to expand the irrigation system. The district hired James Sibley to design a larger system and constructed additional branches between 1888 and 1890 increasing irrigated land from the original 2,000 acres to 19,000 acres. During this period the drainage problem with the McClanahan and Traver Canals were resolved. J.S. Hurst constructed an extension of the McClanahan Ditch that connected it to the Traver Canal in Section 18, Township 17 South, Range 23 East. The Traver Canal drained into Kings River. Alta Irrigation District purchased the segment for \$612.85 in bonds in 1891.<sup>4</sup>

In 1895, AID declared the system complete and turned its attention to other problems including water rights litigation and defending the legitimacy of its bonds. For the next several decades funds for canal maintenance were extremely limited and the condition of system began to deteriorate. Funding for maintenance and improvements began to rebound in the 1920s. As late as 1922 the McClanahan Ditch still retained most of its original wooden engineering features, including 12 wooden checkgates. Renovations began at the southwestern end of the ditch with the installation of a thirteenth checkgate and the replacement of the lower two wooden checkgates with concrete gates, including the gate at Segment MD-4 installed in 1928. Since that time all original wooden engineering features have been replaced with concrete structures. The McClanahan Ditch remains a principal component of the AID irrigation water delivery system, and has been regularly upgraded and maintained up to the present.<sup>5</sup>

### Evaluation

As discussed above, McClanahan Ditch was one of original delivery canals of the '76' Land and Water Company, the first major irrigation company in Tulare County. The canal fundamentally shaped the settlement and agricultural patterns of this part of the county, opening it up to the intensive farming that characterizes the region to this day. McClanahan Ditch is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with late nineteenth century agricultural development of rural Tulare County. However, McClanahan Ditch does not appear eligible for the NRHP or CRHR because it does not retain integrity to its potential period of significance, 1884-1890. The potential period of significance begins with the canal's date of construction and ends when ownership of the canal passed out of the hands of its builders and original operators, the 76 Land and Water Company.

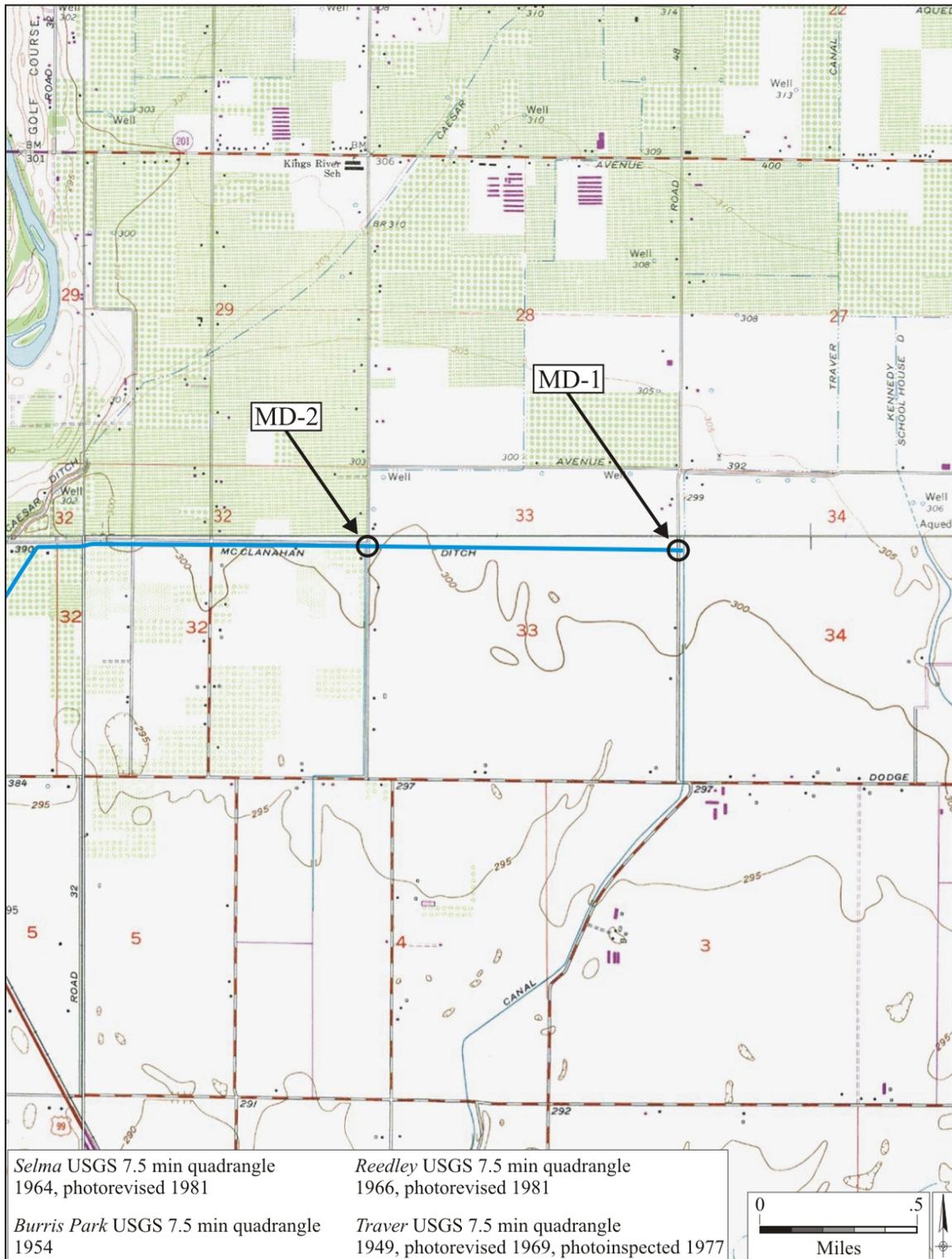
Similarly the canal is associated with Peter Yaple Baker, prominent local businessman and canal promoter (Criterion B or 2). Baker was associated with the canal system through out his adult life and as its major proponent significant within the local community. However, the canal system and irrigation district does not retain integrity to the period of his association with it.

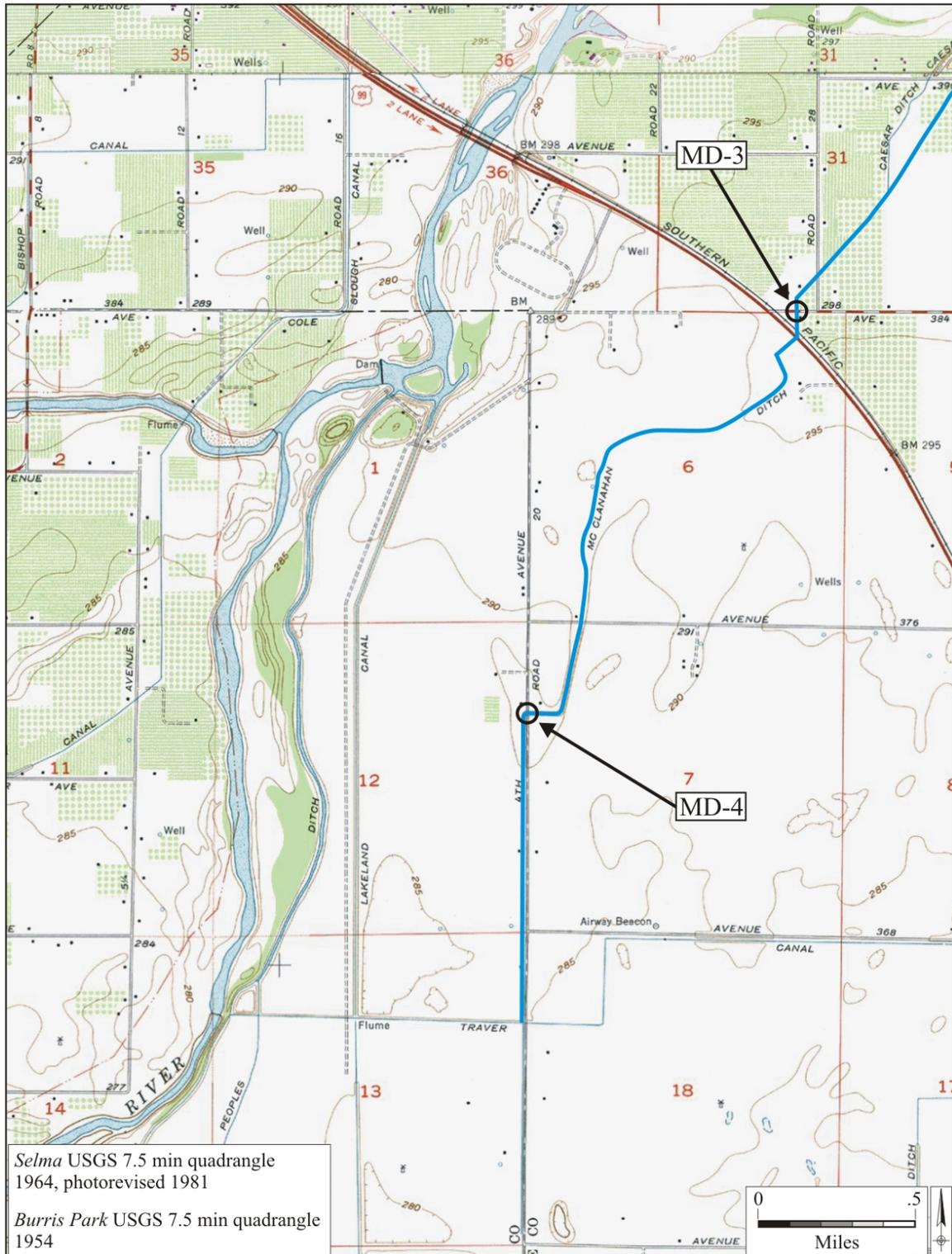
The McClanahan Ditch bears little resemblance to its appearance during its potential period of significance. Over its entire length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, all observed water control structures and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its potential period of significance, the McClanahan Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

<sup>4</sup> Frank Adams, *Irrigation Districts in California*, Bulletin No. 29, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; Small, *Early History of Tulare County California*, 188; Morison, *The Alta Empire*, 26-27; Alta Irrigation District (AID), Board of Directors Books, Volume 1 1888-1894, on file at AID Office, Visalia.

<sup>5</sup> AID, Detailed Engineering Drawings, Sheets 69 and 84, 1922, on file at AID Office; AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1944-1980).

**Location Maps:**





**P1. Other Identifier:** Grove Ditch

\*P2. Location:  Not for Publication  Unrestricted

\*a. County Tulare

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

\*b. USGS 7.5' Quad Traver Date 1949, photorevised 1969 T17S R 23E: \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City Traver Zip 93631

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Record

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Record

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

Grove Ditch is a small branch lateral of the Traver Canal. It is a conduit within the Alta Irrigation District (AID) system of irrigation canals. Grove Ditch diverts from the Traver Canal and runs a westerly course to its terminus. The majority of the canal was recorded as one segment due to the brevity of its length and limited access.

\*P3b. **Resource Attributes:** (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Grove Ditch, camera facing west near center of segment, August 26, 2008.

\*P6. **Date Constructed/Age and Sources:**  
 Historic  Prehistoric  Both  
1884-1891

\*P7. **Owner and Address:**  
Alta Irrigation District  
P.O. Box 715  
Dinuba, CA 93618

\*P8. **Recorded by:** (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. **Date Recorded:** August 26, 2008

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

\*P11. **Report Citation:** (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 7

\*NRHP Status Code 6Z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 70

B1. Historic Name: Grove Canal

B2. Common Name: Grove Canal

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Constructed 1884-1891; concrete lined in 1950; pipeline installed in 1977 and 1979.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Grove Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: J. Randall McFarland, *Water for a Thirsty Land* (Selma: Consolidated Irrigation District and J. Randall McFarland, 1996); Carl Ewald Grunsky, "Irrigation Near Fresno, California," *United States Geological Survey* (Washington: Government Printing Office, 1898); I. Teilman and W.H. Shafer, *The Historical Story of Irrigation in Fresno and Kings Counties in Central California* (Fresno: Williams & Son, 1943); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Grove Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** GRD-1

\*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.)

UTM (east end): Zone 11; 276799mE / 4039209mN

UTM (west end): Zone 11; 277972mE / 4039156mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 4.

This segment is located along Avenue 376 between Road 36 and Traver Canal, north of Traver.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

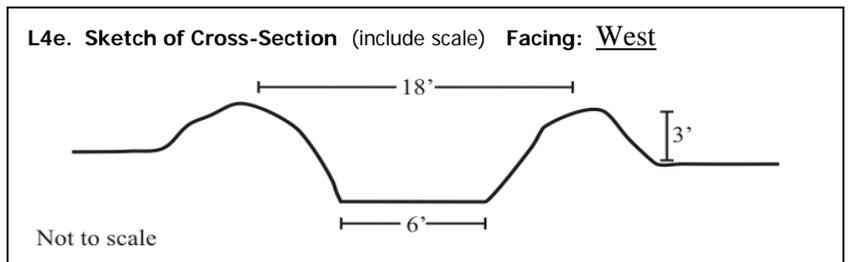
This segment comprises all above-ground components of Grove Ditch. It diverts water from Traver Canal, on the south side of Avenue 376 between Brewer Drive and Road 40. The cast concrete headgate appears to be of recent construction. The canal is lined with concrete and has a flat bottom and walls that extend above grade. The canal crosses Road 40 through a double pipe culvert. The open channel ends at Road 36 where the canal enters a pipeline capped with a box weir bearing a 1934 date stamp. Two poured concrete checkgates are located between Road 40 and Road 36. The canal has four diversion gates along its south side. Each of the gates has a concrete box head and metal gates.

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

- a. **Top Width** 18 feet
- b. **Bottom Width** 6 feet
- c. **Height or Depth** 3 feet
- d. **Length of Segment** 0.75 mile (approx.)

**L5. Associated Resources:**

Headgate, checkgates, delivery gates, culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located among peach orchards. An abandoned cemetery is located north of the western end at the northeast corner of Road 37 and Avenue 376.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8b. Description of Photo, Map, or Drawing:**

**L8a. Photograph, Map, or Drawing.**



View of canal facing west from the headgates. Traver Canal is visible in the foreground. See Continuation Sheet for additional photograph.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 28, 2008

## **B10. Significance (continued):**

Grove Ditch was constructed sometime between 1884 and 1891 as a private ditch connecting to the Traver Canal. The ditch provided water to the northern edge of the Traver Colony and then crossed the land of Daniel Zumwalt, one of the founders of the 76 Land and Water Company.<sup>1</sup>

Grove Ditch remained privately-owned until the 1930s, at which time the Alta Irrigation District absorbed it into its system. Alta Irrigation District (AID) was formed in 1888 following passage of the Wright Act the previous year, which allowed landowners to organize and operate their own irrigation districts. In 1890, the new district purchased the canals and water rights of the 76 Land and Water Company, the first enterprise to build large-scale irrigation works in northern Tulare County beginning in the early 1880s. At the time, the 76 Land and Water Company system consisted of the 76 Canal, or main canal (located outside of the Study Area for this project); Traver Canal and McClanahan Ditch, branches of the main canal that served the western portion of the district surrounding Traver (both recorded separately); and several smaller laterals.<sup>2</sup> During the Great Depression of the 1930s, many stakeholders and users of Grove Ditch petitioned the AID to take over the maintenance and operation of several private ditches throughout the system. The Board of Directors convened a committee in 1934 to develop a policy on the absorption of these ditches. Grove Ditch appears to have been brought into the AID shortly thereafter.<sup>3</sup>

As late as the 1920s, all engineering features along the ditch – five drop gates and seven delivery gates – were of timber construction.<sup>4</sup> These have all been replaced with concrete structures. AID continued improvements to the canal following World War II in conjunction with the additional supply of stored water from the Pine Flats reservoir. In 1950 the district spent \$1,987.20 on the ditch, most likely for the concrete lining of the ditch. Another major expenditure was made in 1977 and 1979 with over \$4,000 spent each year. This likely covered the installation of the pipeline west of Road 36.<sup>5</sup>

### Evaluation

As discussed above, Grove Ditch was privately built in the 1880s or 1890s and added to the existing Alta Irrigation District system during the 1930s. The canal does not appear significant for its association with irrigation or agricultural developments in this part of Tulare County (Criterion A or 1). It was the larger, earlier canals, such as the Travers Canal and McClanahan Ditch that made significant contributions to the transformation of the lands within the Alta Irrigation District from arid plains to intensively farmed land by bringing large quantities of water to the region. The Grove Ditch, in comparison, diverted from these main canals and served a relatively small constituency of farmers. Additionally, the canal is not associated with any historically significant individual (Criterion B or 2), nor does this heavily modified and modernized resource embody any distinctive characteristics in terms of its engineering or construction (Criterion C or 3).

<sup>1</sup> Thomas H. Thompson, *Historical Atlas Map of Tulare County* (Tulare: Thomas Thompson, 1892); Eugene L. Menefee and Fred A. Dodge, *History of Tulare and Kings Counties, California* (Los Angeles: Historic Record Company, 1913), 401-403.

<sup>2</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 25-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 181-184; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988).

<sup>3</sup> Alta Irrigation District (AID), Board of Directors Book, Minutes Book 5, on file at AID office, Visalia.

<sup>4</sup> AID, Detailed Engineering Drawings, Sections 2-3-4-9-10-11 T17S, R23E Sheet 27, 1922, on file at AID offices; AID, Miscellaneous Ditch Data [chart], 1924, AID Office.

<sup>5</sup> AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1950, 1977, and 1979).

Even if the Grove Ditch were historically significant, the integrity of the ditch has been compromised. The ditch has been lined with concrete altering the original shape and dimensions of the channel. Additionally, the western end of the ditch has been piped underground. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking significance and integrity, the Grove Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

Page 6 of 7

\*Resource Name or # (Assigned by recorder) Map Reference PLI 70

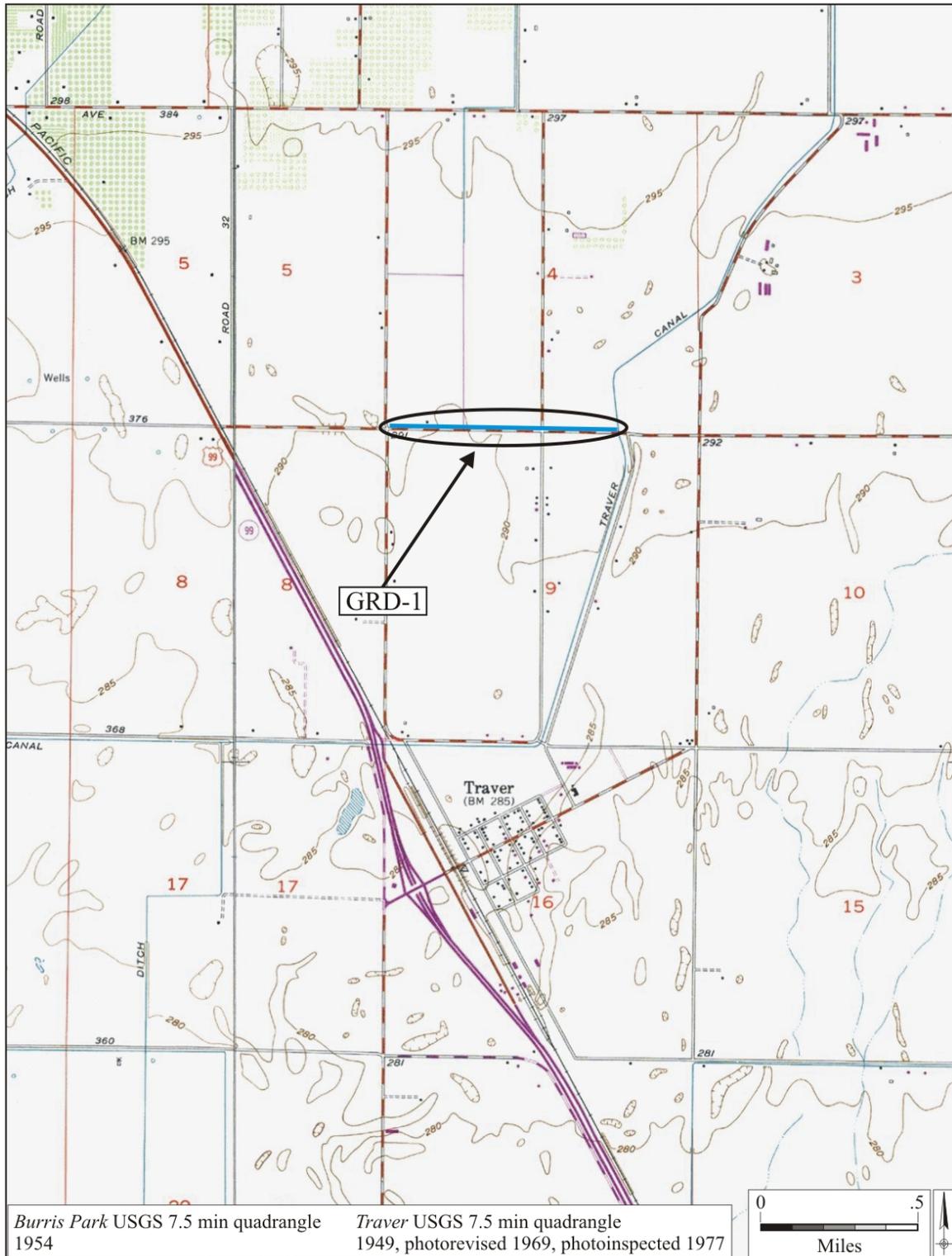
\*Recorded by J. Jones/C. Brookshear \*Date August 26, 2008  Continuation  Update

**Photographs (cont):**



**Photograph 3:** View of canal at the location that it is piped underground, camera facing west at the intersection of Avenue 376 and Road 36.

**Location Map:**



**P1. Other Identifier:** Cross Creek Wasteway

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad Traver Date 1949 (photorevised 1969)  $\tau$  See Linear Feature Records: \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City Traver Zip 93673

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The Cross Creek Wasteway is a component of the Alta Irrigation District system of canals. The wasteway begins at Banks Ditch, near the intersection of Avenue 360 and Road 52, and follows a southerly course for about two miles. This section of the canal is an engineered earthen channel with a flat bottom and steep walls. The canal then turns to the west and becomes a modified natural waterway that has been channelized within the past 40 years to follow property divisions. For this project the wasteway was recorded at two locations: CCW-1 is located outside the Study Area and was recorded for comparison purposes, while CCW-2 is located within the Study Area.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Cross Creek Wasteway at the west end of Segment CCW-2, camera facing west, August 26, 2008.

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

1901-1921 (Alta Irrigation District records)

\*P7. Owner and Address:

Alta Irrigation District

289 N L Street

Dinuba, CA 93618

\*P8. Recorded by: (Name, affiliation, address)

J. Jones/C. Brookshear

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

\*P9. Date Recorded: August 26, 2008

\*P10. Survey Type: (Describe)

Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 6

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 77

B1. Historic Name: Cross Creek; Cross Creek Wasteway

B2. Common Name: Cross Creek Wasteway

B3. Original Use: Drainage canal B4. Present Use: Drainage canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction 1901-1921; lengthened and improved in 1961, 1974, and 1994.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: James Sibley b. Builder: Alta Irrigation District

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Cross Creek Wasteway does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks significance. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Carl Ewald Grunsky, *Water Supply and Irrigation Papers of the USGS No. 18: Irrigation Near Fresno, California*, (Washington, D.C.: Government Printing Office, 1898); Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Cross Creek Wasteway

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CCW-1

\*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.)

UTM: Zone 11; 279858mE / 4035809mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 22.

The head of Cross Creek Wasteway is located at the southwest corner of the intersection of Avenue 360 and Road 52. The wasteway continues south along the west side of Road 52.

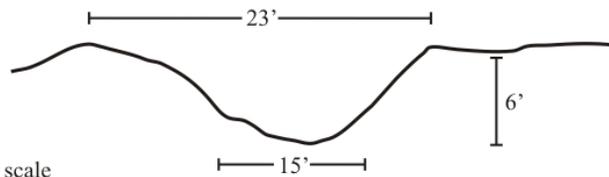
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is outside of the Study Area and was recorded for comparison purposes. At the wasteway's diversion point from Banks Canal the channel is wide and filled with sandy sediment. Just south of the intersection is a board-formed concrete drop gate bearing the date October 15, 1928. For a short distance south of the drop gate the wasteway's walls have been recently lined with concrete rubble. Beyond this point the channel is earth-lined with a flat bottom and steep, uniform walls topped with earthen berms. Other engineering structures located along this segment include two check gates, box and vertical concrete pipe diversion gates, a checkgate, a culvert, and small slab vehicle bridge, all built of concrete.

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

- a. **Top Width** 23 feet
- b. **Bottom Width** 15 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 1 mile

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



**L5. Associated Resources:**

Drop gate, diversion gates, culvert, checkgates

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal passes through a rural agricultural area surrounded by orchards.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing southwest, showing drop gate south of Avenue 360.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Freeman

JRP Historical Consulting, LLC

1490 Drew Ave, Suite 110

Davis, CA 95618

**L11. Date:** September 16, 2008

**L1. Historic and/or Common Name:** Cross Creek Wasteway

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** CCW-2

\*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.)

UTM: Zone 11; 279209mE / 4032580mN

USGS 7.5' Quad Traver Date 1949 (photorevised 1969, photoinspected 1977); T 17S R 23E Sec 34.

The Cross Creek Wasteway crosses the Highway 99 Frontage Road, also known as Diagonal Road 60, south of Avenue 362.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

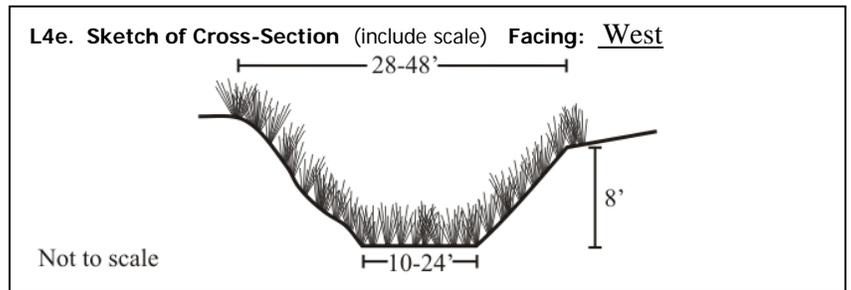
This segment is located within the Study Area. On the upstream section of the segment, between Highway 99 and the frontage road, the sides of the earthen canal have eroded resulting in a wide ditch approximately 48 feet wide at the top and 24 feet wide at the bottom. West of the highway the drainage channels opens up into a pond, beyond (west of which) the wasteway continues as a heavily overgrown channel. Several bridges cross the channel within this segment, including State Bridge 46-034L & R (Highway 99), a concrete bridge along the frontage road, and a small bridge on private property west of the pond.

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

- a. **Top Width** 28-48 feet
- b. **Bottom Width** 10-24 feet
- c. **Height or Depth** 8 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

State Bridge #46-034L & R (Highway 99)



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The ditch is located in an agricultural area adjoining a major transportation route including State Highway 99 and the Southern Pacific railroad tracks. The surrounding crops include corn and alfalfa.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing northeast toward Highway 99 (background).

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

### **B10. Significance (continued):**

Alta Irrigation District built the Cross Creek Wasteway between 1901 and 1921 to deposit excess water from Banks Ditch into Cross Creek. Alta Irrigation District (AID) was formed in 1888 following passage of the Wright Act the previous year, which allowed landowners to organize and operate their own irrigation districts. In 1890, the new district purchased the canals and water rights of the 76 Land and Water Company, the first enterprise to build large-scale irrigation works in northern Tulare County beginning in the early 1880s. At the time, the 76 Land and Water Company system consisted of the 76 Canal, or main canal (located outside of the Study Area for this project); Traver Canal and McClanahan Ditch, branches of the main canal that served the western portion of the district surrounding Traver (both recorded separately); and several smaller laterals. AID immediately began an expansion program to provide irrigation water to portions of the district not covered by the existing 76 Company system. Previous irrigation works had been constructed without proper drainage resulting in alkali damage to the land surrounding Traver in the late nineteenth century. Consequently, proper drainage was an important part of the new expanded system.<sup>1</sup>

During the initial period of construction the district extended the wasteway channel 1.53 miles from Banks Ditch, at which time it included three wooden drop gates. In the 1920s many of the wooden engineering features throughout the district were replaced with concrete structures. Cross Creek Wasteway's headgate was replaced in 1928.<sup>2</sup> Little additional improvement activity occurred on the Cross Creek Wasteway until the 1960s. In 1961 the canal was extended to the west; it was further extended in 1974. A segment east of Highway 99 was channelized in 1993.<sup>3</sup>

Cross Creek Wasteway does not meet the criteria for listing in the NRHP or the CRHR. The drainage canal is not significant for its association with the development of agriculture in the region (Criterion A or 1). While the canal has fulfilled an important function in the agricultural needs of northern Tulare County, this association does not represent a significant event within the context of irrigation history in this area. In comparison to larger, earlier irrigation works, such as the Traver Canal which transformed the agricultural character of this part of the county, Cross Creek Wasteway was built relatively late and did not play a direct, defining role in the region's history. Furthermore, the canal is not associated with any historically significant individual (Criterion B or 2), nor does this utilitarian and modernized resource embody any distinctive characteristics in terms of its engineering or construction (Criterion C or 3). Lacking significance, the Cross Creek Wasteway does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

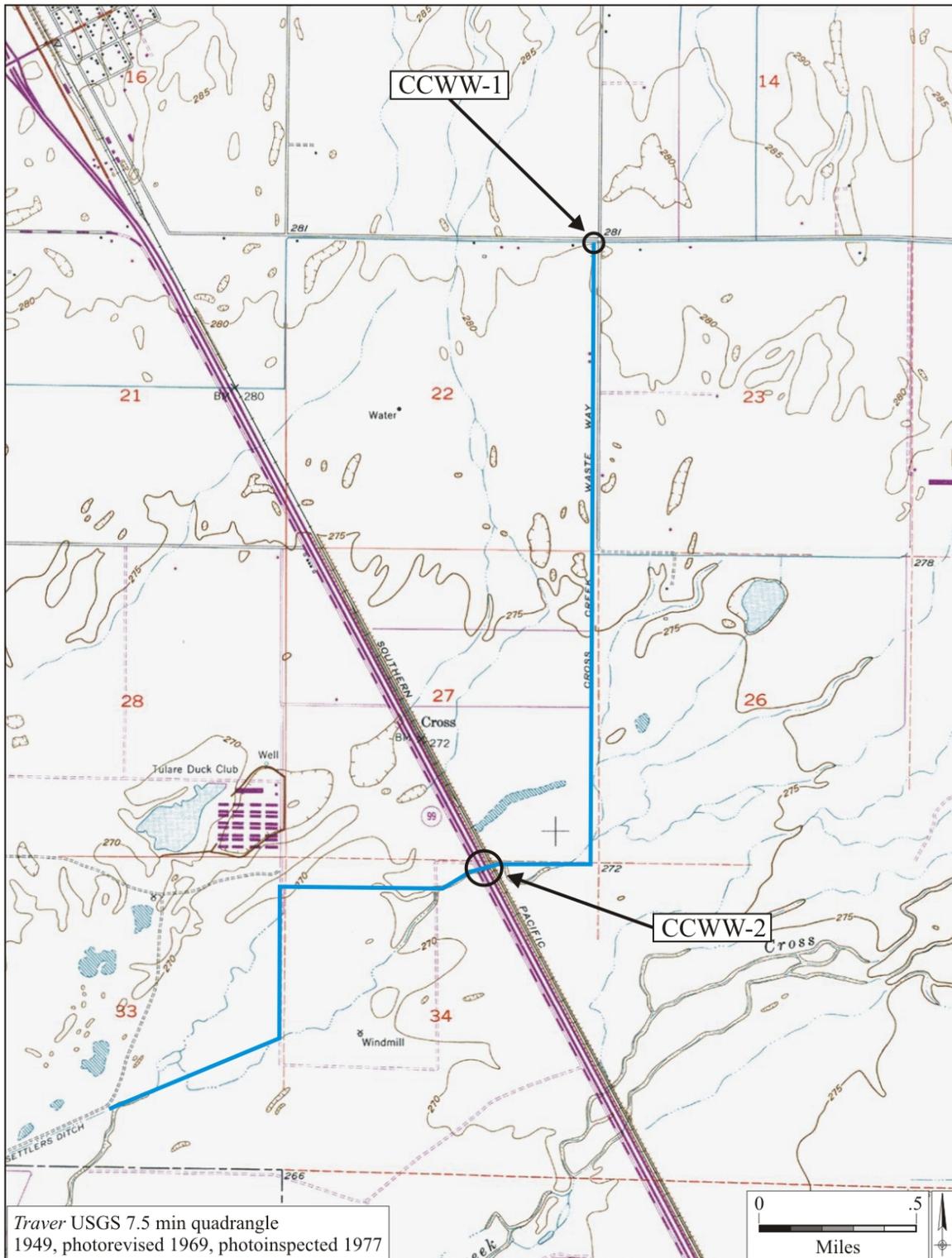
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<sup>1</sup> US Department of Agriculture, *Report of Irrigation Investigations in California* (Washington D.C.: Government Printing Office, 1901), 294; Marion Nielsen Jewell, "Agricultural Development in Tulare County 1870-1900," Master's Thesis, University of Southern California, June 1950, 25-27; Kathleen Edward Small, *Early History of Tulare County, California* (Exeter: Bear State Books, 2001), 181-184; Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929), 27-28; William Morison, *The Alta Empire: The Story of Conquest and Development in the San Joaquin Valley* (Dinuba: Alta Irrigation District, 1988).

<sup>2</sup> Seth Smith, *Tulare County* (San Francisco: Britton and Rey, 1901); USGS, *Traver Quadrangle* (Washington, D.C.: np, 1927); Alta Irrigation District (AID), *Map of Alta Irrigation District*, 1921, on file at AID Office, Visalia; AID, Detailed Engineering Drawings, Section 14-15-16-22-23 T17S R23E, 1922, AID Office; AID, Miscellaneous Ditch Data [chart], 1924, AID Office.

<sup>3</sup> AID, *Annual Reports* (Dinuba: Alta Irrigation District, 1961, 1974, and 1975); USGS, *Traver Quadrangle* (Washington, D.C.: np, 1949, photorevised 1969, photoinspected 1977); USGS, *Traver Quadrangle* (Washington, D.C.: np, 1993), available from [teraservertusa.com](http://teraservertusa.com), accessed September 29, 2008.

**Location Map:**



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

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

**P1. Other Identifier:** Goshen Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad See Linear Feature Records: \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City Goshen Zip 93227

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Goshen Ditch is an irrigation canal owned by the Goshen Canal Company and managed and operated by the People's Ditch Company. The canal diverts water from St. Johns River in Section 11 of Township 18 South, Range 24 East, and follows a generally westerly course through the agricultural and range lands north of Goshen. Just northwest of Goshen the canal crosses under State Highway 99 and turns to the northwest, eventually draining into Cross Creek. The majority of the canal is earthen with a trapezoidal or U-shaped cross section, but an approximately one-mile section – between Road 68 and Highway 99 – is piped. For this project the canal was recorded at three locations: Segments GD-1 and GD-2 are outside the Study Area and recorded for comparison purposes; Segment GD-3 is located within the Study Area. These segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) Camera facing east, at Highway 99 and Avenue 320, August 26, 2008

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
1874 (Grunsky, Irrigation Near Fresno)

\*P7. Owner and Address:  
Goshen Ditch Company  
PO Box 366  
Farmersville, CA 93223

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 26, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

B1. Historic Name: Hayes Ditch; Buckley Ditch; Goshen Ditch

B2. Common Name: Goshen Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction, 1874; reconstruction of Upper Goshen Ditch, 1881-1882; abandonment of lower Goshen Ditch and realignment of west end, 1927-1950.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Goshen Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources, primarily because it lacks integrity. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: *Carl Ewald Grunsky, Water Supply and Irrigation Papers of the USGS No. 18: Irrigation Near Fresno, California, (Washington, D.C.: Government Printing Office, 1898); Frank Adams, Irrigation Districts in California, Bulletin No. 29, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.*

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

L1. Historic and/or Common Name: Hayes Ditch; Buckley Ditch; Goshen Ditch

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: GD-1

\*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.)

UTM: Zone 11; 287668mE / 4028395mN

USGS 7.5' Quad Monson Date 1949 (photorevised 1969); T 18S R 24E Sec 9, 10.

This segment of Goshen Ditch crosses Shirk Road between Avenues 320 and 328.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

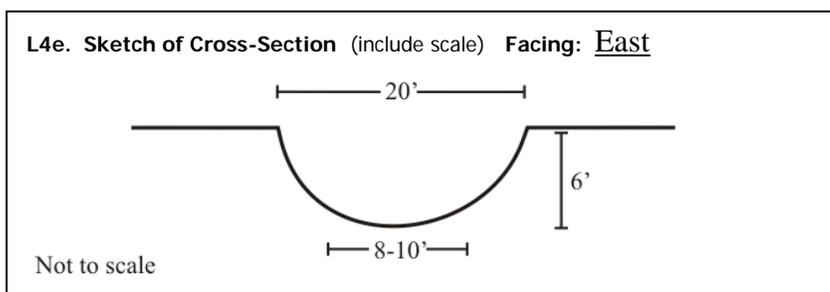
This segment was recorded for comparison purposes. The canal at this location has a uniform “U” shape with unlined, machine-groomed walls. A small section to the west of Shirk Road is lined with rubble riprap to prevent erosion at the turn. The canal crosses under Shirk Road via a large concrete pipe culvert.

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

- a. Top Width 20 feet
- b. Bottom Width 8-10 feet
- c. Height or Depth 6 feet
- d. Length of Segment 100 feet

L5. Associated Resources:

Concrete culvert and diversion gate



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is in an agricultural area surrounded by cornfields and a dairy ranch.

L7. Integrity Considerations:

See “Significance Statement,” Section B10.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing:  
Camera facing east from Shirk Road,  
August 26, 2008

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: August 26, 2008

L1. Historic and/or Common Name: Hayes Ditch; Buckley Ditch; Goshen Ditch

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: GD-2

\*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.)

UTM: Zone 11; 282860mE / 4027618mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969); T 18S R 24E Sec 7.

This segment is located on the north side of Avenue 320 about 0.75 miles east of State Highway 99, north of Goshen.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment was recorded for comparison purposes. At this location the canal has a narrow, flat bottom and uniform machine-groomed walls. The canal enters a pipeline at Avenue 320 and goes underground as it turns to the east.

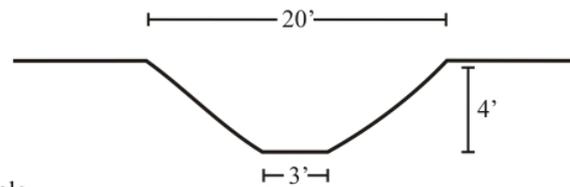
L4. Dimensions: (in feet for historic features and meters for prehistoric features)

- a. Top Width 20 feet
- b. Bottom Width 3 feet
- c. Height or Depth 4 feet
- d. Length of Segment 100 feet

L5. Associated Resources:

Pipeline

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



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This segment is located in a rural agricultural area surrounded by cornfields, hayfields, and a dairy farm.

L7. Integrity Considerations:

See "Significance Statement," Section B10.

L8b. Description of Photo, Map, or Drawing:  
Camera facing north, August 26, 2008

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: August 26, 2008

L8a. Photograph, Map, or Drawing.



L1. Historic and/or Common Name: Hayes Ditch; Buckley Ditch; Goshen Ditch

L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: GD-3

\*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.)

UTM: Zone 11; 281759mE / 4027500mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969); T 18S R 23E Sec 13.

This segment crosses Highway 99 at Avenue 320.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

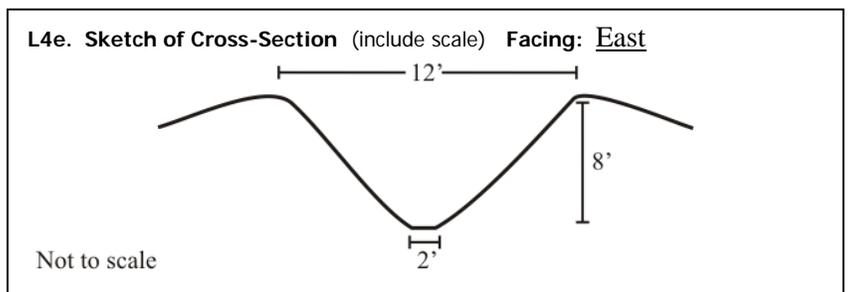
This segment is located within the Study Area. The ditch is unlined and has a V-shaped profile. It has steep, machine groomed walls topped with low berms. The ditch parallels Highway 99 for a short distance before turning west along Avenue 320. The ditch crosses under Avenue 320 via a concrete double-pipe culvert. South of Avenue 320 the ditch is heavily eroded and filled with brush.

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

- a. Top Width 12 feet
- b. Bottom Width 2 feet
- c. Height or Depth 8 feet
- d. Length of Segment 0.25 mile

L5. Associated Resources:

Concrete pipe culvert



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal at this location passes through a rural agricultural area; a horse ranch is located on the south side of Avenue 320, and an orchard is located to the north.

L7. Integrity Considerations:

See "Significance Statement," Section B10.

L8a. Photograph, Map, or Drawing.



L8b. Description of Photo, Map, or Drawing: Camera facing southeast, Highway 99 is visible to the center left.

L9. Remarks:

L10. Form prepared by: (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

L11. Date: August 26, 2008

### **B10. Significance (continued):**

The early ditches of Tulare County developed under a system of county laws that encouraged private development of irrigation systems. Laws promulgated between 1854 and 1868 limited the involvement of public officials. As a result, independent ditches flourished in the area surrounding Visalia. The Goshen Ditch, built in the mid 1870s, is among these.<sup>1</sup>

Southern Pacific Railroad established the town of Goshen along its San Joaquin mainline in 1872, and settlers began canal construction in 1874 to serve the area surrounding the newly established town. Two separate groups selected two diversion points along the St. James River. The upper diversion was located approximately three and a half miles north of Visalia and the lower diversion was about two miles downstream (northwest of the first diversion). The upper ditch, which diverted water closer to Visalia, traveled a nearly westerly route, and the lower ditch proceeded in a southwesterly direction. The two merged about a mile and a half north of Goshen where the route turned south into the town. A slough was previously in the area and appears to have been used for segments of the canal. Early accounts of the canal indicate that it was uneven in width and poorly constructed. The first flood carried away the upper canal headgate and eroded the banks of the canal greatly increasing the canal's width. The founders of the upper branch took over both branches of the canal and rebuilt in 1881-1882.<sup>2</sup>

When William Hammond Hall surveyed the irrigation systems in the San Joaquin Valley in 1877, he recorded these ditches as the Hayes Canals. It is unclear how he assigned that name. None of the early landowners, which include prominent Visalia stockmen and financiers Jasper Harrell and Henry Alden Crane, were named Hayes. Timothy Hayes did not establish a ranch south of the ditch until 1890 several decades after Hall's survey. Research did not reveal the names of those involved with the early construction of the ditch.<sup>3</sup>

In 1911 the Goshen Ditch Company incorporated under the laws of the State of California. The company was a mutual water company which provided water to stock holders who included C.S. Huntley, N.R. W. Huntley, Peter Malloch, P.T. Clark, H.B. McClure and E.J. Logsdon. The Huntleys had extensive ranch holdings throughout the San Joaquin Valley, and acquired large portions of the H.A. Crane holdings in the area after Crane's death in 1909. Peter Malloch began with an 80-acre farm in the southwest quarter of Section 6, Township 18 South, Range 24 East in 1891 and began expanding his holdings in the early twentieth century. By 1920 he had 560 acres in the area surrounding the ditch. Logsdon also acquired land from the former Crane Ranch west of the Southern Pacific railroad tracks. The other investors appear to have been local farmers.<sup>4</sup> Despite the availability of water, only 1,867 acres of the approximately 5,760 acres included in the service area were irrigated in 1931.<sup>5</sup> The land remains in large holdings providing feed for dairy operations.

In the early twentieth century the lower Goshen Ditch to the north was the longer of the two. The lower Goshen Ditch supplied water west of the Southern Pacific Railroad and south to Goshen.<sup>6</sup> Continuing alterations would lead to the

<sup>1</sup> Donald J. Pisani, *From the Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1850-1931* (Berkeley: University of California Press, 1984), 43-44.

<sup>2</sup> William Hammond Hall, *Topographic and Irrigation Map of the Great Central Valley of California* (San Francisco: Britton & Rey, 1877); Carl Ewald Grunsky, *Water-Supply and Irrigation Papers of the USGS No. 18: Irrigation Near Fresno, California* (Washington, D.C.: Government Printing Office, 1898), 20-21.

<sup>3</sup> Hall, *Map of the Great Central Valley of California; Memorial and Biographical History of the Counties of Fresno, Tulare and Kern, California* (Chicago: Lewis Publishing, 1892), 407, 409; Eugene L. Menefee and Fred A. Dodge, *History of Tulare and Kings Counties, California* (Los Angeles: Historic Record Company, 1913), 449, 589.

<sup>4</sup> Menefee and Dodge, *History of Tulare and Kings Counties*, 255-256, 589; US Census Bureau, MS Census 1900, Tulare County, Enumeration District 69, Sheet 4; Thomas Thompson, *Historical Atlas Map of Tulare County* (Tulare: Thomas Thompson, 1892); Laurence A. Moye, *Official Map of Tulare County* (Visalia: County Surveyor, 1920).

<sup>5</sup> California Division of Water Resources, *Bulletin No. 29 San Joaquin River Basin* (Sacramento, California: State Printing Office, 1931), 119.

<sup>6</sup> USGS, *Traver Quadrangle* (Washington, D.C.: 1927).

consolidation of the two ditches. By the 1950s the lower ditch was largely abandoned; the cut in the riverbank was allowed to flow out into the surrounding floodplain. The upper ditch was realigned to cover western territory and incorporated portions of the now abandoned lower ditch. The southern turn into Goshen was also abandoned; instead, the ditch continued along a westerly line, then turning north and ending shortly after passing under Highway 99. With increasing concern over the drop in ground water levels a percolating basin was added along the route between 1950 and 1969.<sup>7</sup>

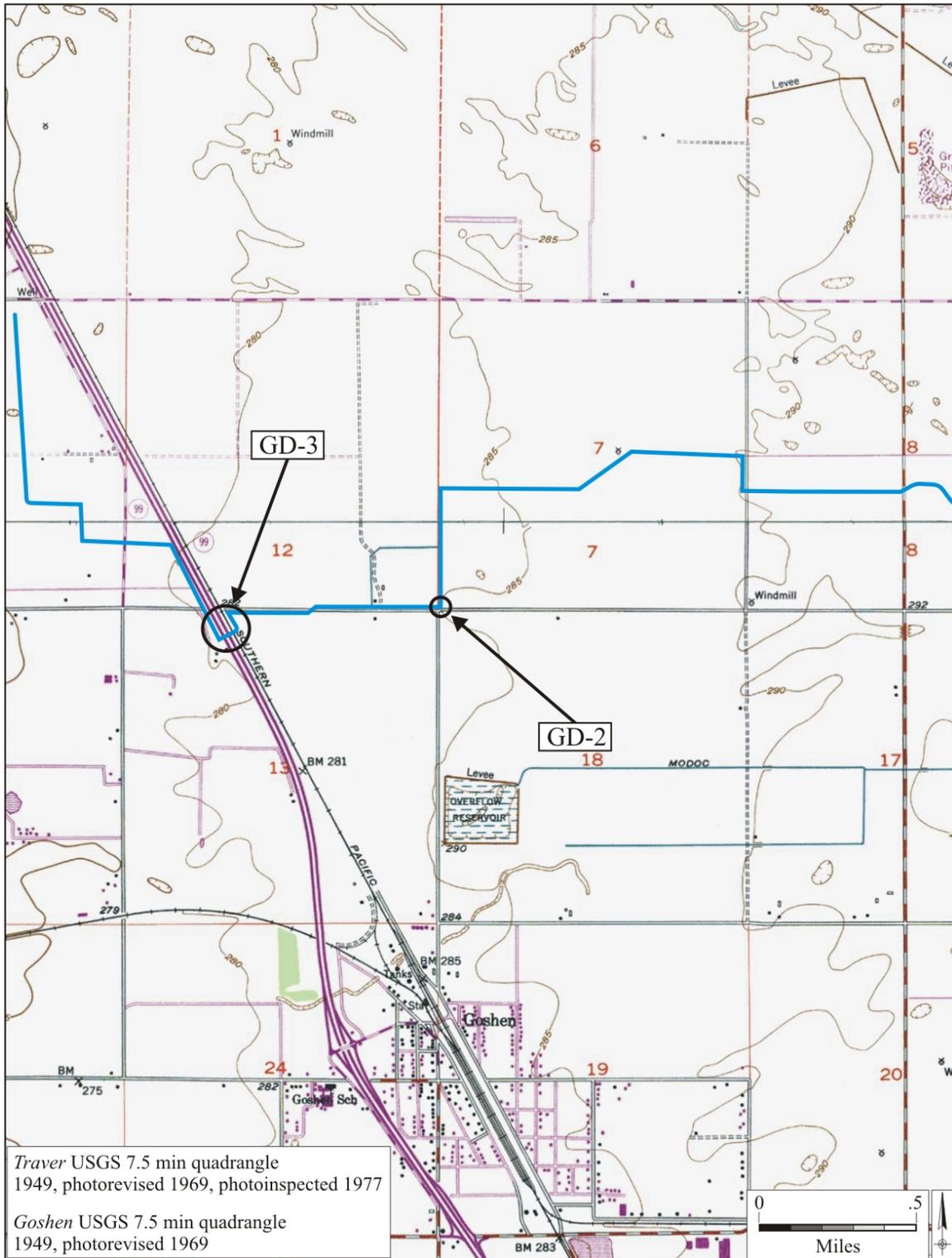
### Evaluation

As discussed above, the Goshen Ditch was one of the first irrigation ditches in the vicinity of Visalia. It was one of a handful of ditches that fundamentally shaped the settlement and agricultural patterns of this part of the San Joaquin Valley, opening it up to the intensive farming that characterizes the region to this day. The Goshen Ditch is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with mid-nineteenth century agricultural development of Tulare County. However, the Goshen Ditch does not appear eligible for the NRHP or CRHR because it does not retain integrity to its nineteenth century appearance. Over most of its length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, large segments of the canal have been realigned. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its potential period of significance, the Goshen Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

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<sup>7</sup> USGS, *Goshen Quadrangle* (Washington, D.C.: 1926 reprinted 1930); USGS, *Goshen Quadrangle* (Washington, D.C.: 1950); USGS, *Monson Quadrangle* (Washington, D.C.: 1950); USGS, *Monson Quadrangle* (Washington, D.C.: 1949 photorevised 1969); USGS, *Traver Quadrangle* (Washington, D.C.: 1949 photorevised 1969).





**P1. Other Identifier:** Mill Creek Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad Goshen and Visalia Date 1949 (photorevised 1969) τ See Linear Feature Records: M.D. B.M.

c. Address \_\_\_\_\_ City Zip \_\_\_\_\_

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

Mill Creek is a natural waterway that has been adapted to drain water. This form discusses the north fork of Mill Creek Ditch, beginning on the western edge of Visalia where the Persian Ditch diverts from the creek westward towards Cross Creek. The creek is earthen with concrete culverts where it intersects roads and other structures. For this project the creek was recorded at three locations: Segment MC-3 is located within the Study Area, and Segments MC-1 and MC-2, which were recorded outside of the Study Area, for the purposes of comparison. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



**P5b. Description of Photo:** (View, date, accession #) Mill Creek checkgate at Persian Ditch diversion, east of Linwood Street, camera facing east.

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
1862 (Grunsky, Irrigation Near Fresno)

\*P7. Owner and Address:  
United States Waterway

\*P8. Recorded by: (Name, affiliation, address)  
C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

\*P9. Date Recorded: August 26, 2008

\*P10. Survey Type: (Describe) Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 11

\*NRHP Status Code 6Z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 85

B1. Historic Name: Mill Creek Ditch

B2. Common Name: Mill Creek Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Initial alterations to natural waterway began in 1862; major channelization efforts began during the 1920s and continued through the 1950s.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The Mill Creek Ditch does not appear to meet the criteria of listing in the California Register of Historical Resources because it lacks significance and integrity.

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Carl Ewald Grunsky, *Water Supply and Irrigation Papers of the USGS No. 18: Irrigation Near Fresno, California* (Washington, D.C.: Government Printing Office, 1898); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** Mill Creek Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MC-1

\*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.)

UTM: Zone 11; 289985mE / 4022891mN

USGS 7.5' Quad Visalia Date 1949 (photorevised 1969); T 18S R 24E Sec 26.

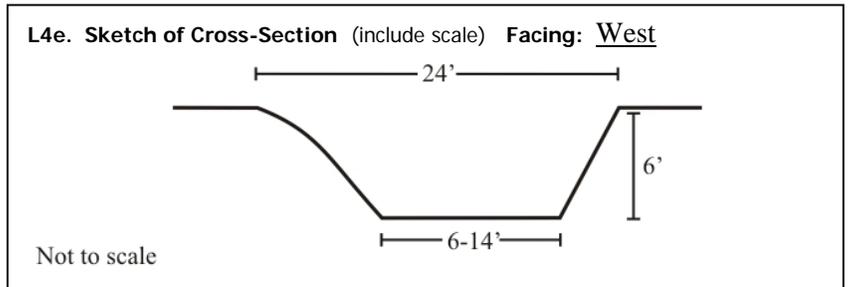
This segment marks the head of Mill Creek Ditch. It is located along Linwood Street, north of Route 198, between Akers Road and Demaree Road, within the town of Visalia.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment of the Mill Creek Ditch is located outside of the Study Area and is recorded here for comparison purposes. The ditch's concrete headgates are located east of Linwood Street. The east bank of the earthen ditch at this location has steep sides with concrete retaining blocks. The ditch passes under Linwood Street via a concrete culvert bearing a 1953 date stamp. The west bank of the ditch is overgrown with foliage and has a more natural, riparian appearance.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 6-14 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet



**L5. Associated Resources:**

Concrete culvert, diversion gate

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The head of the Mill Creek Ditch is located a residential setting.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8b. Description of Photo, Map, or Drawing:**  
Mill Creek Ditch head, outside of the study area, camera facing east, concrete culvert at Linwood Street in the foreground

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008



**L1. Historic and/or Common Name:** Mill Creek Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MC-2

\*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.)

UTM: Zone 11; 282766mE / 4024087mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969): T 18S R 23E Sec 25, T 18S R 24E Sec 30.

This segment of Mill Creek Ditch is located along Road J25, between Avenue 304 and Route 198, south of the town of Goshen.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

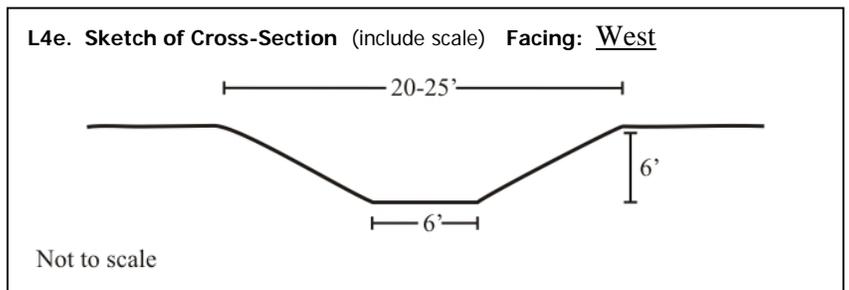
This portion of the Mill Creek Ditch is located within the Study Area. Along this segment, the earthen ditch has a broad shape with a flat bottom, uniform machine-groomed walls, and berms that carry dirt access roads. The ditch crosses under Road J25 through a board-formed concrete culvert that bears a 1954 date stamp. Large trees and foliage run along the ditch east of the road, while the west side has been recently groomed, as shown in the photograph below.

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

- a. **Top Width** 20-25 feet
- b. **Bottom Width** 6 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

This segment of the Mill Creek Ditch is in rural agricultural near State Highway 99.

**L7. Integrity Considerations:**



See “Significance Statement,” Section B10.

**L8b. Description of Photo, Map, or Drawing:** Mill Creek Ditch, located within the Study Area, camera facing west across Road J25.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

**L1. Historic and/or Common Name:** Mill Creek Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** MC-3

\*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.)

UTM: Zone 11; 277102mE / 4025419mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969); T 18S R 23E Sec 21.

This segment of the ditch was recorded at its intersection with the Southern Pacific Railroad, west of Road 44 and north of Route 198.

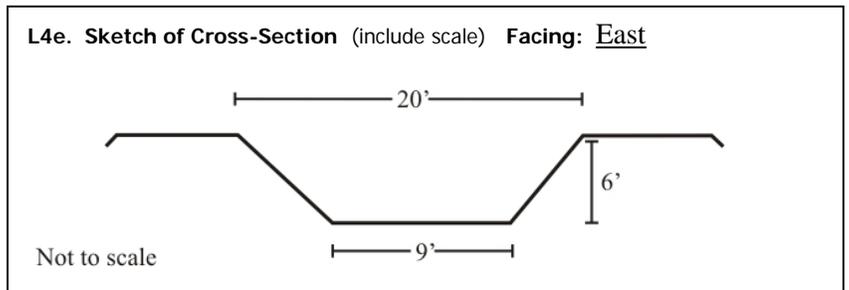
**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This segment is located outside of the Study Area and was recorded for comparison purposes; it marks the end of the Mill Creek Ditch at its convergence with natural waterways. The segment has a flat bottom with uniform, machine-groomed walls topped with ten-foot wide berms. The drainage canal runs west toward the Southern Pacific Railroad, just beyond which it drains into a natural creek.

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

- a. **Top Width** 20 feet
- b. **Bottom Width** 9 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

Cornfields, natural waterways, and the Southern Pacific Railroad surround the Mill Creek Ditch at this location.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8b. Description of Photo, Map, or Drawing:**



Mill Creek Ditch adjacent to Southern Pacific Railroad (far right), camera facing west.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 26, 2008

### B10. Significance (continued):

Mill Creek Ditch is a natural waterway that has been adapted and maintained for the drainage of surplus water. Historically four creeks carried overflow from the Kaweah River: Elbow Creek, Packwood Creek, Deep Creek, and Mill (Visalia) Creek. Visalia was founded on the banks of Mill Creek in 1854; it thrived, despite several early devastating floods and lack of reliable transportation corridors. Early settlers diverted water from Mill Creek to supply their farms with needed water. However, flooding during the winter of 1861-62 altered the flow of the Kaweah River, permanently establishing St. John's Channel and absorbing several early ditches and cuts into the new river channel. The movement of sediment during the flooding cut off the flow of water into Mill Creek in 1862. After several attempts to attain water through other ditches, a headgate was constructed where Mill Creek met the Kaweah River in 1867. This early headgate was destroyed that winter. The Kaweah Canal and Irrigation Company, Consolidated Peoples Ditch Company, and Kaweah and Mill Creek Water Company engaged in several projects through the late 1870s to return the Kaweah River to its former channel, thereby increasing flow through Mill Creek.<sup>1</sup>

The early ditches of Tulare County developed under a system of county laws that encouraged private development of irrigation systems. Laws promulgated between 1854 and 1868 limited the involvement of public officials.<sup>2</sup> As a result, independent ditches flourished in the area surrounding Visalia, and a larger irrigation district was not formed in the area north of Visalia following the passage of the Wright Act in 1887. Farmers relied not just on private ditch companies but also water pumped from wells. By 1927 these wells were drying up and the Kaweah Delta Underground Water Protective Association, St. Johns River Association, and Kaweah River Association worked to form the Kaweah Delta Water Conservation District. The new district served 342,360 acres in Tulare and Kings County. The hope was that natural water channels could be modified to transport excess water to areas with increasingly low water tables. The conservation district undertook the maintenance of Mill Creek.<sup>3</sup>

Mill Creek had several stream beds west of Visalia with several cross streams joining the routes. A definite channel had been established where the creek crossed the Southern Pacific and highway routes and further west. However, this channel did not connect to the routes between the tracks and Visalia. Improvements were made between 1927 and 1950 to reduce the number of channels. West of Visalia the channels were limited to two, the northern of which formed the general route of the modern Mill Creek and the southern channel which was absorbed into the Persian Ditch system. Segments of the natural creek bed were still in use in Section 25, Township 18 South, Range 23 East. Between 1950 and 1969 the remaining natural stream bed was channelized creating predominately straight lines from the split into north and south channels in Section 27, Township 18 South, Range 24 East to Section 21 of Township 18 South, Range 23 East where it had always been natural. As part of the channelization the segment along Avenue 304, approximately two and a half miles long, was moved one quarter mile north of the road.<sup>4</sup>

<sup>1</sup> Carl Ewald Grunsky, *Water Supply and Irrigation Papers of the USGS No. 18: Irrigation Near Fresno, California* (Washington, D.C.: Government Printing Office, 1898), 20-21.

<sup>2</sup> Donald J. Pisani, *From the Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1850-1931* (Berkeley: University of California Press, 1984), 43-44.

<sup>3</sup> Frank Adams, *Bulletin No. 21: Irrigation Districts in California*, State of California, Department of Public Works, Division of Engineering and Irrigation (Sacramento, California: State Printing Office, 1929), 387.

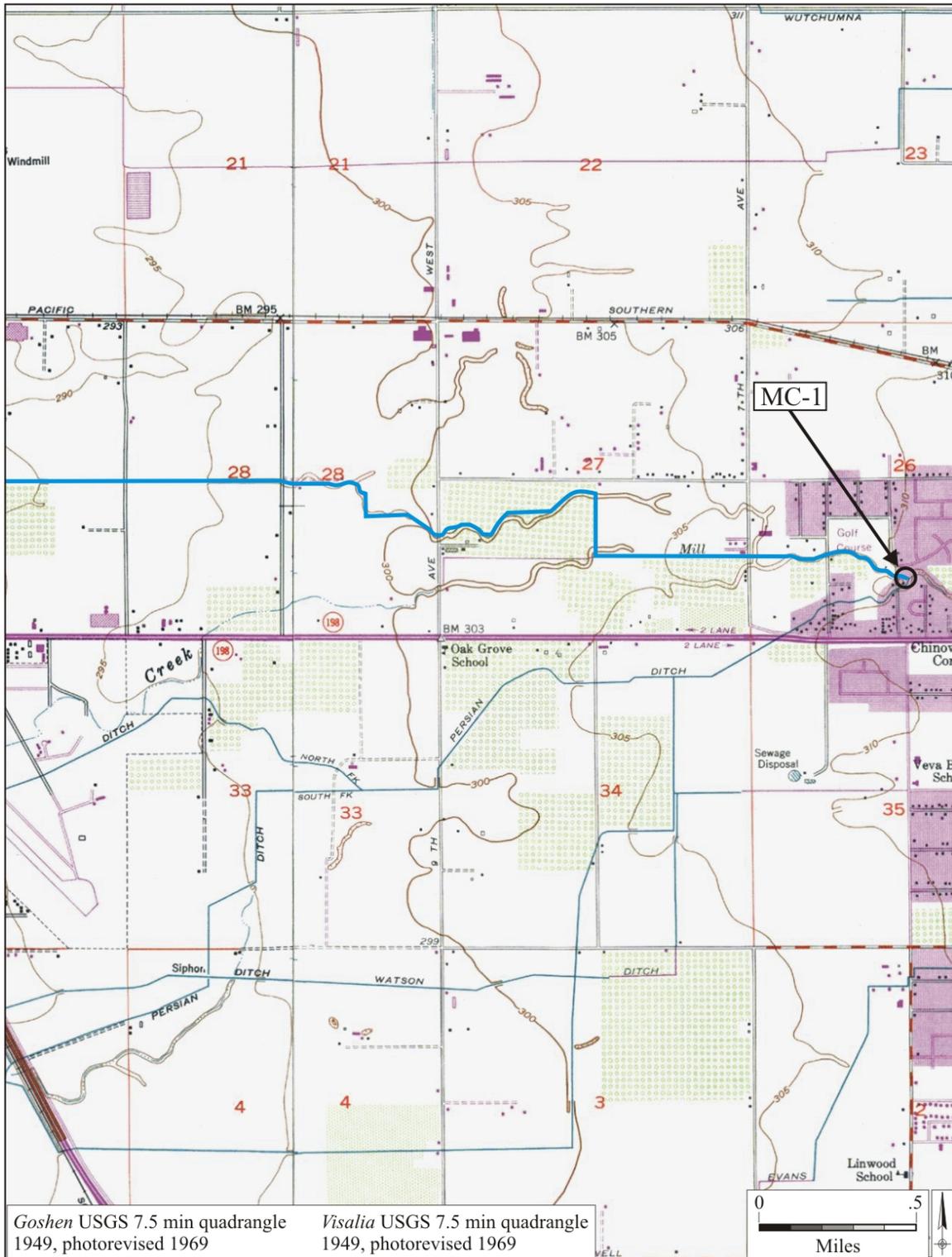
<sup>4</sup> USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1926); USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1950); USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1949 photorevised 1969); USGS, *Visalia Quadrangle* (Washington, D.C.: USGS, 1927); USGS, *Visalia Quadrangle* (Washington, D.C.: USGS, 1950); USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1949 photorevised 1969).

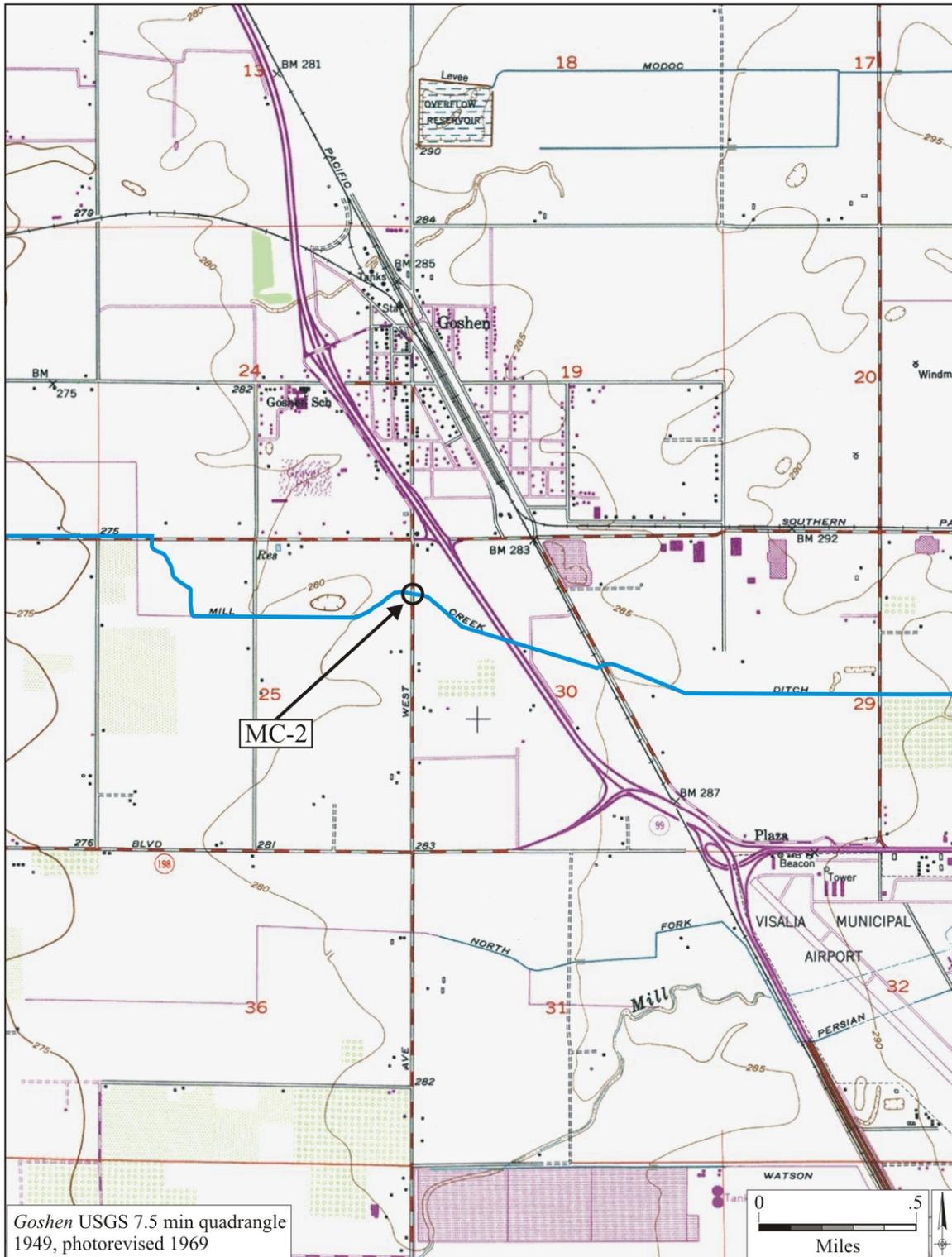
Evaluation

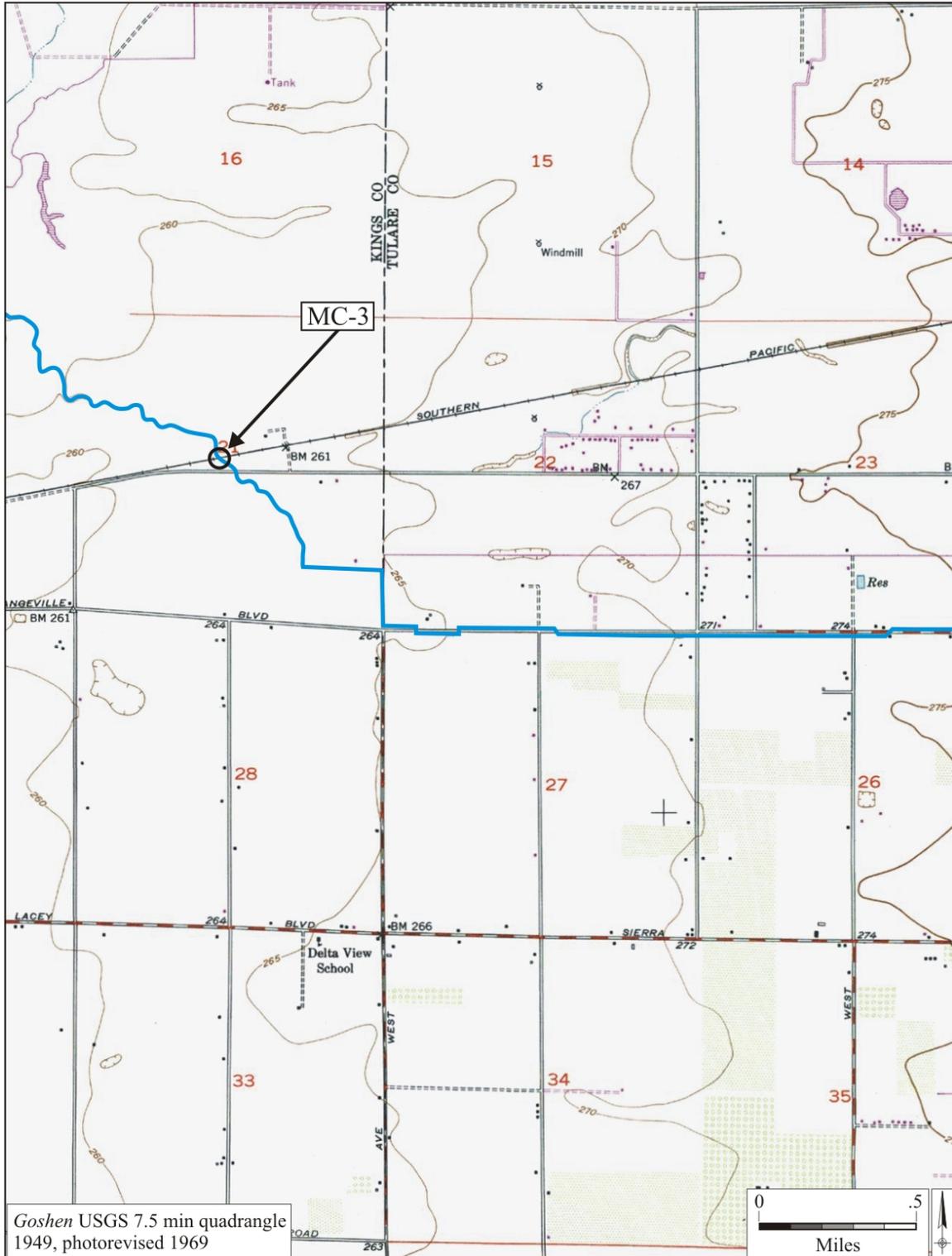
The Mill Creek Ditch does not meet the criteria for listing in the NRHP or the CRHR. While Mill Creek was significant in the development of Visalia providing needed water in an arid region, the creek was a natural feature during that period. When Mill Creek was channelized with engineering structures into the Mill Creek Ditch in the 1920s, the region was already developed with intensive agriculture. As a result, the ditch is not significant for its association with the development of agriculture in the region (Criterion A or 1). The ditch is not associated with any historically significant individual (Criterion B or 2) nor does it embody any distinctive characteristics of type, period, or method of construction (Criterion C or 3).

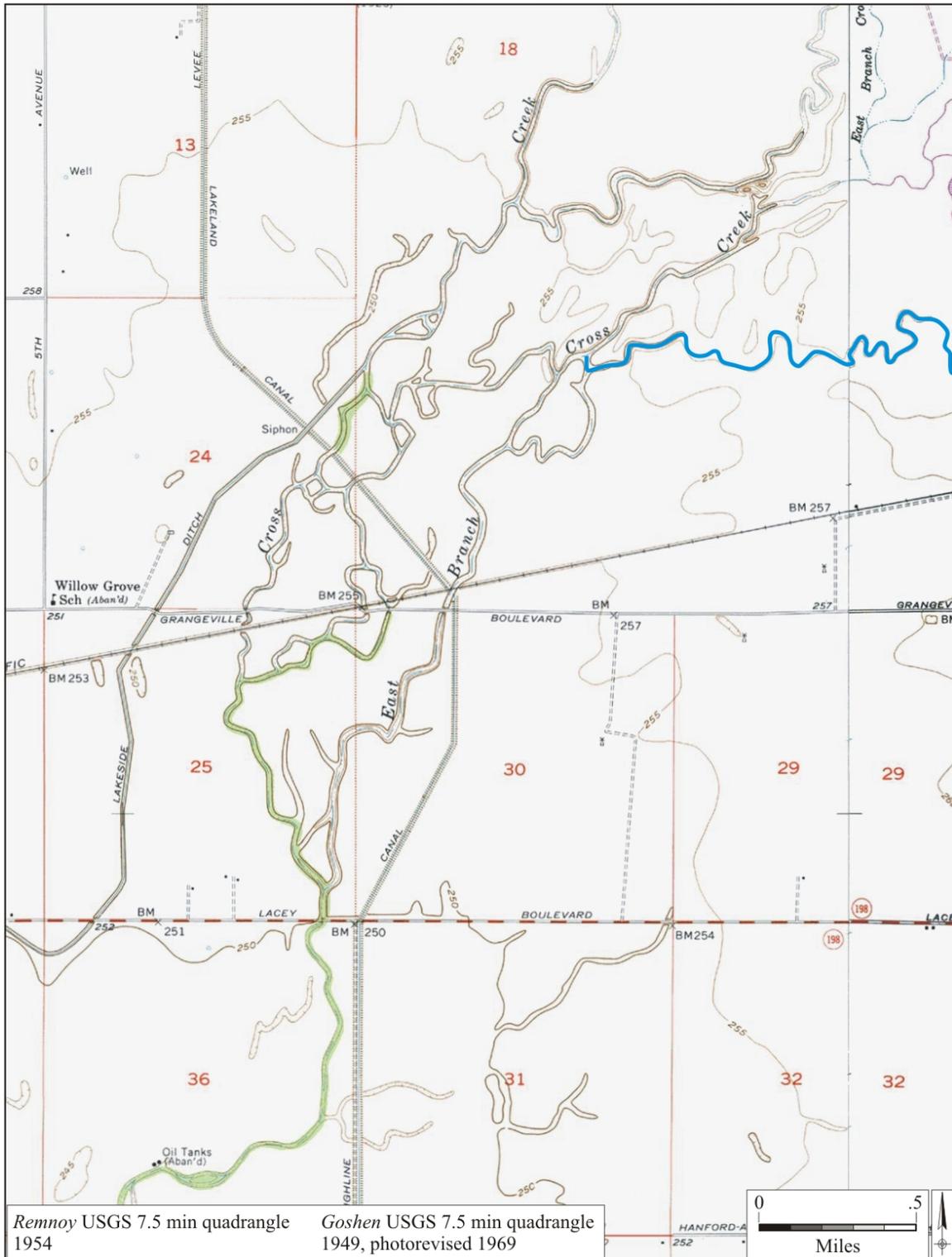
Even if the Mill Creek Ditch were eligible as a natural waterway, the historic integrity of the waterway has been compromised. The ditch has been realigned into an engineered channel and alternate channels have been removed. The creek has few aspects of integrity that recall its historic appearance to its original natural path and flow – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its original nature, the Mill Creek Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

**Location Maps:**









**PRIMARY RECORD**

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_  
Trinomial \_\_\_\_\_  
NRHP Status Code 6Z

Other Listings \_\_\_\_\_  
Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

\*Resource Name or # (Assigned by recorder) Map Reference PLI 88

**P1. Other Identifier:** North Fork Persian Ditch

\*P2. Location:  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Tulare

\*b. USGS 7.5' Quad See Linear Feature Records: \_\_\_\_\_ B.M.

c. Address \_\_\_\_\_ City Visalia Zip 93277

d. UTM: (give more than one for large and/or linear resources) See attached Linear Feature Records

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

See attached Linear Feature Records

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

The North Fork Persian Ditch is an irrigation canal owned by the Persian Ditch Company and managed and operated by the People's Ditch Company. The ditch begins in Section 33 of Township 18 South, Range 24 East, at the location where the Persian Ditch main canal splits into the north and south forks. The North Fork Persian Ditch flows in a generally westerly direction. It is unlined and open for much of its length, but large sections under the Visalia Municipal Airport and west of Road 68 / Route J25 have been piped. For this project the North Fork Persian Ditch was recorded at three locations: Segments NF-1 and NF-2, which are located outside the Study Area and recorded for comparison purposes; and Segment NF-3, which is located within the Study Area. The segments are described in detail on the attached Linear Feature Records.

\*P3b. Resource Attributes: (List attributes and codes) HP20 Canal/Aqueduct

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

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



P5b. Description of Photo: (View, date, accession #) North Fork Persian Ditch at Road 68 (Segment NF-3), camera facing west, August 25, 2008. The ditch is piped on the far side of the road (top).

\*P6. Date Constructed/Age and Sources:  
 Historic  Prehistoric  Both  
1854

\*P7. Owner and Address:  
Persian Ditch Company  
PO Box 366  
Farmersville, CA 93223

\*P8. Recorded by: (Name, affiliation, address)  
J. Jones/C. Brookshear  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110,  
Davis, CA 95618

\*P9. Date Recorded: August 25, 2008

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") JRP Historical Consulting, LLC, "Historical Resources Inventory and Evaluation Report for the Kings River Conservation District Community Power Plant Project, Fresno County: Supplemental Report for the Gas Pipeline Route," October 2008.

\*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) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Page 2 of 9

\*NRHP Status Code 6z

\*Resource Name or # (Assigned by recorder) Map Reference PLI 88

B1. Historic Name: North Fork Persian Ditch

B2. Common Name: North Fork Persian Ditch

B3. Original Use: Irrigation canal B4. Present Use: Irrigation canal

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Original construction, 1854; between 1950 and 1969, a portion of the ditch was piped beneath the Visalia airport and the portion west of Road 68 / Route J25 was piped and realigned.

\*B7. Moved?  No  Yes  Unknown Date: Between 1950 and 1969 Original Location: The western end was moved north to follow a new alignment near Road 68 / J25.

\*B8. Related Features:

B9. Architect: Unknown b. Builder: James Persian

\*B10. Significance: Theme n/a Area n/a  
Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This property has been evaluated in accordance with Section 15064.5 (1)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. The North Fork of the Persian Ditch does not appear to meet the criteria for listing in the California Register of Historical Resources because it lacks integrity to its potential period of significance. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

\*B12. References: Frank Adams, *Irrigation Districts in California, Bulletin No. 29*, State of California, Department of Public Works, Reports of the Division of Engineering and Irrigation (Sacramento: California State Printing Office, 1929); see footnotes for additional references.

B13. Remarks:

\*B14. Evaluator: Cheryl Brookshear/Bryan Larson

\*Date of Evaluation: October 2008

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

**L1. Historic and/or Common Name:** North Fork Persian Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** NF-1

\*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.)

UTM: Zone 11; 287547mE / 4021985mN

USGS 7.5' Quad Visalia Date 1949 (photorevised 1969); T 18S R 24E Sec 33, 34.

This segment is located at the intersection with Shirk Road, approximately ¼ mile south of Highway 198.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

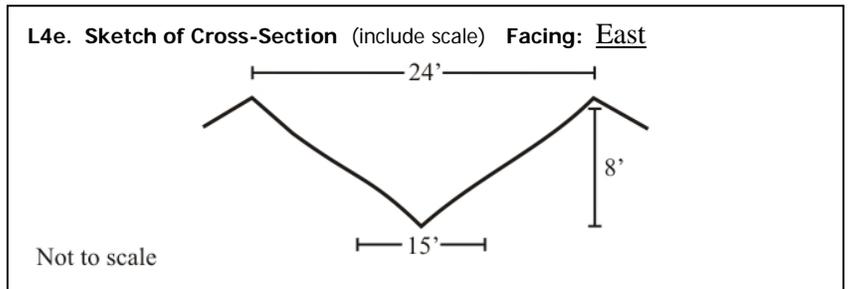
This segment is located outside of the Study Area and was recorded for comparison purposes. This location is east of the split of the north and south forks of the Persian Ditch. On the east side of Shirk Road the ditch is unlined and has a clearly defined V-shaped cross section that is the result of machine shaping, as shown in the photograph below. West of the road the canal assumes a shallow U-shaped geometry. Both sides have raised earthen banks. The canal crosses Shirk Road via a board-formed concrete box culvert.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 15 feet
- c. **Height or Depth** 8 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Concrete culvert



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located in an agricultural area surrounded by hay fields, pasture lands, and field crops.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:** Camera facing northeast from Shirk Road, machine conducting canal reshaping left of center.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Freeman  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** September 16, 2008

**L1. Historic and/or Common Name:** North Fork Persian Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** NF-2

\*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.)

UTM: Zone 11; 286343mE / 4022359mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969); T 18S R 24E Sec 33.

This segment is located south of Centennial Park, south of Highway 198, beginning at a golf course and continuing west to Visalia Municipal Airport.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

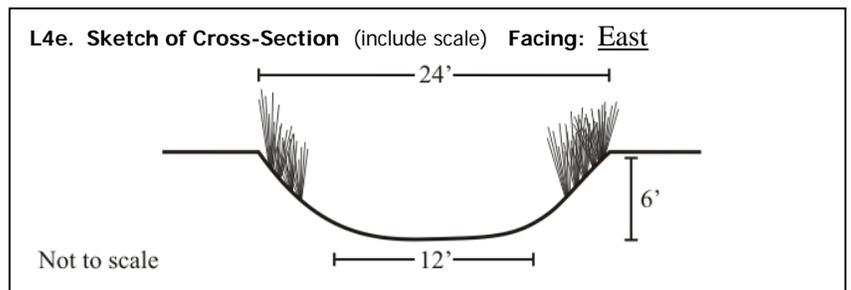
This segment was located outside of the Study Area and was recorded for comparison purposes. At this location, the canal is unlined and has a rough "U" shape that is barely visible among thick vegetation. The canal is piped underground at the west end of the segment, located at the eastern edge of Visalia Airport.

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

- a. **Top Width** 24 feet
- b. **Bottom Width** 12 feet
- c. **Height or Depth** 6 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Culvert, pipehead.



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

A golf course is to the east and airport to the west.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
Camera facing east, showing highly vegetated state of the ditch.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Freeman  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** September 16, 2008

**L1. Historic and/or Common Name:** North Fork Persian Ditch

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:** NF-3

**\*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.)

UTM: Zone 11; 282720mE / 4022332mN

USGS 7.5' Quad Goshen Date 1949 (photorevised 1969); T 18S R 23E Sec 36, T 18S R 24E Sec 31

This segment crosses Road 68 approximately 1/3 mile south of Highway 198, northwest of Visalia.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

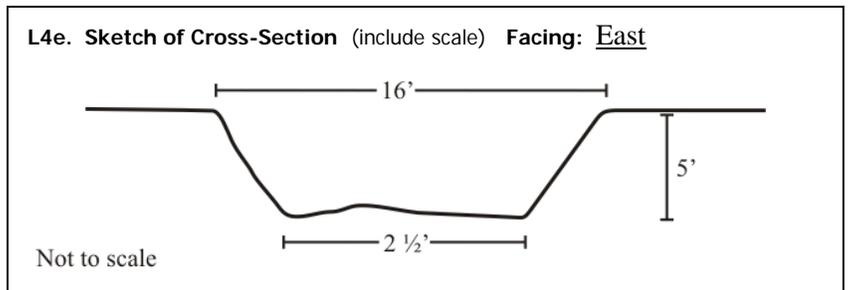
This segment is located within the Study Area. Road 68 marks the transition between an open canal on the east and an underground piped canal on the west. The open portion of the canal has a flat bottom and uniform machine-groomed walls. Dirt access roads run along both sides of the ditch. The ditch crosses under Road 68 through a concrete pipe culvert capped with a metal trash grate.

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

- a. **Top Width** 16 feet
- b. **Bottom Width** 2 ½ feet
- c. **Height or Depth** 5 feet
- d. **Length of Segment** 100 feet

**L5. Associated Resources:**

Culvert, pipehead



**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.)

The canal is located in an agricultural area with a dairy complex, including residences, to the west. To the east are open fields and control sheds for a natural gas line.

**L7. Integrity Considerations:**

See "Significance Statement," Section B10.

**L8a. Photograph, Map, or Drawing.**



**L8b. Description of Photo, Map, or Drawing:**  
View of canal segment facing east from Road 68.

**L9. Remarks:**

**L10. Form prepared by:** (Name, affiliation, address) C. Brookshear/J. Jones  
JRP Historical Consulting, LLC  
1490 Drew Ave, Suite 110  
Davis, CA 95618

**L11. Date:** August 25, 2008

### **B10. Significance (continued):**

Initial American settlement in the vicinity of Visalia, Tulare County, dates to the winter of 1852-1853, when a group of Anglo-Americans built a fortified stockade, dubbed Fort Visalia. In the spring of 1853, the settlers moved beyond the stockade and began to farm small tracts of land around Mill Creek. The local economy prospered with the discovery of gold on the Kern River in 1855. Visalia became an important stopping place for miners bound for the southern Sierra Nevada and the center of the cattle and sheep industry in southern San Joaquin Valley in the 1850s and 1860s. Wheat farming emerged as a major enterprise in the 1870s. Since the late nineteenth century, irrigated agriculture, particularly deciduous orchards, grapes, irrigated grains, alfalfa, and cotton, have dominated agricultural activities in the lower Kaweah Delta.<sup>1</sup>

Irrigation works were developed on the Kaweah Delta near Visalia earlier than in most places in the Central Valley. The first efforts were strictly local undertaking of individual farmers or groups of farmers to divert small creeks in the vicinity of the city. The Persian Ditch, built by James Persian, a Tulare County pioneer who settled in Visalia in 1853, is a remnant of this first generation of Visalia irrigation works.

During his active years in Visalia in the 1850s and 1860s, Persian was a prominent citizen of the emerging Tulare County settlement. In 1856 he was elected to the Board of Supervisors. Persian managed the contract for construction of the first permanent county courthouse and donated land for the first church building in Visalia. His farm by 1860 consisted of 850 acres, 370 of which were described as "improved." He raised livestock and produced a significant amount of crops and produce, including 1000 lbs. of butter, 40 tons of hay, and large amounts of grain. He is also credited with planting the first commercial vineyard in Tulare County. The canal was most likely small and dedicated to serving James Persian's property. Major freshets during the winter of 1861-1862 altered the flow of Mill Creek reducing the flow at the lower end of Mill Creek where the ditch is located. Difficulties in maintaining flow through Mill Creek to downstream ditches continued through the 1870s as numerous attempts were made to control flood damage.<sup>2</sup>

Little is known about how the Persian Ditch was actually constructed, but it is likely that Persian enlisted the assistance of adjacent landowners who might also benefit from Persian Ditch water. The first cooperative efforts to divert Central Valley streams on a large scale took place in the Tulare Basin. Each stockholder in the mutual water company purchased stock proportional to the amount of land he or she intended to irrigate, and the accumulated revenue was used for construction expenses. Annual assessments were levied for operation and maintenance expenses. The Persian Ditch Company was organized in 1895 and took over the private ditch constructed by James Persian. The company provided water to thirteen stockholders. As the market for Tulare County agricultural products increased, diversified farming displaced grain farming and Visalia landowners greatly expanded their irrigated acreage. The company re-organized in 1925 and all the previous by-laws were retained, but the delivery of water was limited to the south half of Township 18 South, Range 23 East; the south half of Township 18 South, Range 25 East; Township 19 South, Range 23 East; and Township 19, South Range 24 East.<sup>3</sup>

In 1927 the Persian Ditch was a single ditch.<sup>4</sup> It diverted water from a branch of Mill Creek in Township 18 South, Range 24 East, Section 33, in an area previously owned by James Persian. The ditch made a sharp turn to the north before continuing in a generally southwesterly direction. The branch of Mill Creek was channelized and made a part of the ditch by

<sup>1</sup> Annie Mitchell, *A Modern History of Tulare County* (Visalia: Limited Editions of Visalia, 1974), 15; Eugene L. Menefee and Fred A. Dodge, *History of Tulare and Kings Counties, California* (Los Angeles: Historic Record Company, 1913), 16.

<sup>2</sup> Census Bureau, *MS Census of the United States 1860*, California, Tulare County, Township 1 sheet 8; Annie R. Mitchell, *The Way it Was: The Colorful History of Tulare County* (Fresno: Valley Publishers, 1976), 36; Mitchell, *Modern History of Tulare County*, 48; Internal Revenue Service, 1865 Assessment List, California, Division 7, District 3 accessed via ancestry.com September 8, 2008; Carl Ewald Grunsky, *Water Supply and Irrigation Paper of the USGS Bulletin 18: Irrigation Near Fresno, California* (Washington, D.C.: Government Printing Office, 1898), 13.

<sup>3</sup> Persian Ditch Company, Articles of Incorporation, October 31, 1925, on file at California State Archives, Sacramento.

<sup>4</sup> USGS, *Visalia Quadrangle* (Washington D.C.: USGS, 1927).

1950. A new headgate was established approximately two miles northeast along the current northern branch of Mill Creek. Near the former headgate the ditch was divided with the construction of a southern fork. The former Persian Ditch west of Section 33 was designated the North Fork. Between 1950 and 1969 a portion of the ditch under the Visalia Municipal Airport was piped and the portion west of Road 68/J25 was realigned to run directly westward rather than curving southwest.<sup>5</sup>

The ditch today is still operated by a mutual water company. It diverts water directly from the federal Terminus Dam on the Kaweah River – water that is distributed through the natural channel of Mill Creek. The principal users of the ditch today are the owners of Persian's old farm and a golf course located along the east side of Highway 99.

### Evaluation

As discussed above, the Persian Ditch was one of the first irrigation ditches in the vicinity of Visalia which pioneered irrigation in the San Joaquin Valley. The ditch offered a prototype for the future ditches which fundamentally shaped the settlement and agricultural patterns of this part of the San Joaquin Valley, opening it up to the intensive farming that characterizes the region to this day. The North Fork of the Persian Ditch is potentially significant under NRHP Criterion A (CRHR Criterion 1) for its associations with mid-nineteenth century agricultural development of Tulare County. It is also potentially significant under Criterion B (2) for its association with James Persian and his introduction of commercial grape culture and experimental farming. However, the North Fork of the Persian Ditch does not appear eligible for the NRHP or CRHR because it does not retain integrity to its potential period of significance, 1853-1895. The potential period of significance begins with the canal's date of construction and ends when ownership of the canal passed out of the hands of James Persian and became an official mutual water company.

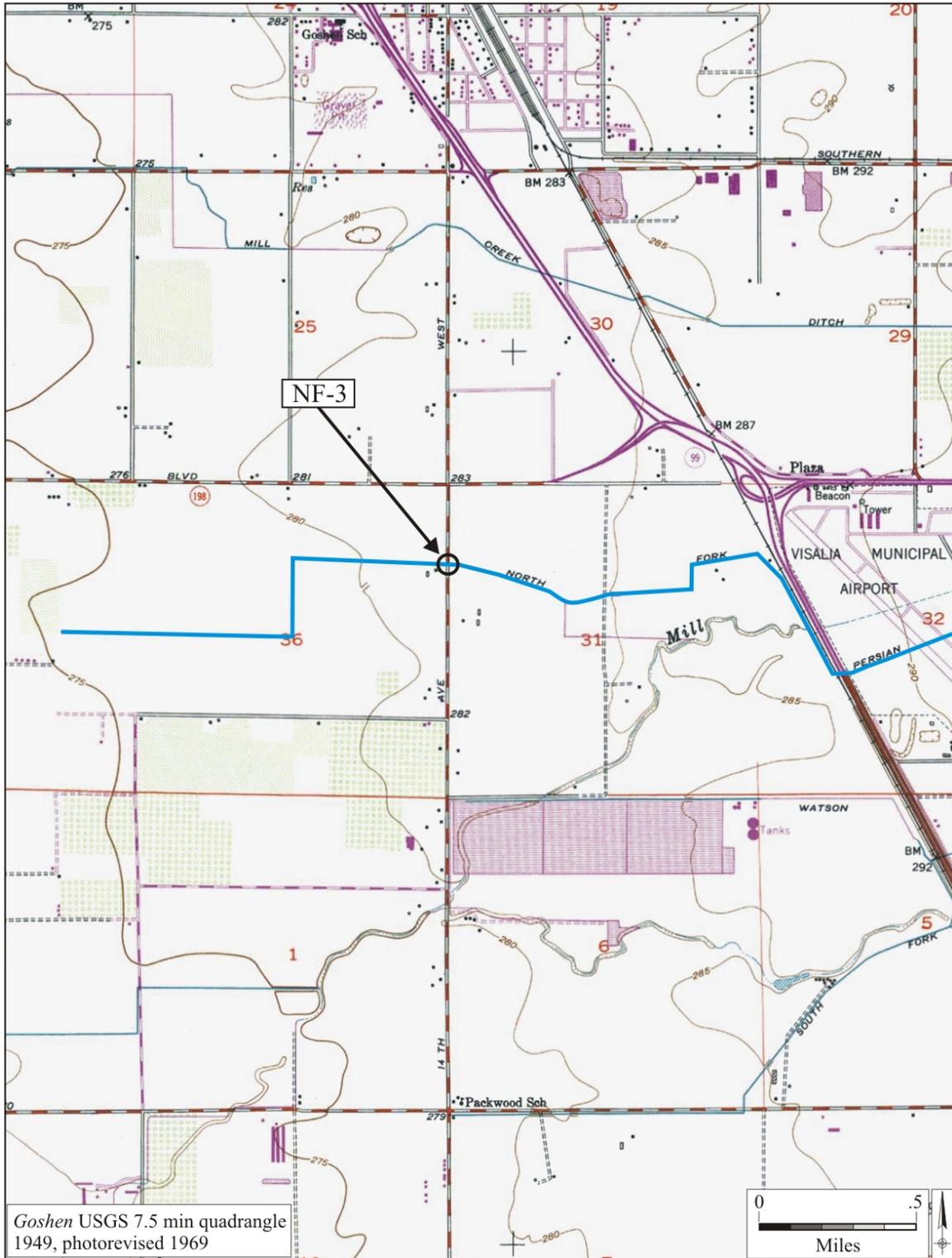
The North Fork Persian Ditch bears little resemblance to its appearance during its potential period of significance. Over most of its length, the canal has neatly groomed walls and a highly-engineered, uniform appearance that is the result of routine and ongoing maintenance efforts using modern equipment. These activities have changed the original shape and dimensions of the channel. Additionally, large segments of the canal have been realigned, including moving the original point of diversion two miles to the northeast. Other portions of the canal have been piped under the Visalia Municipal Airport and the western end. Finally, all observed water control structures, bridges, and culverts are concrete replacements of the original timber structures. The canal has few aspects of integrity that recall its historic appearance to its original construction – for all intents and purposes, it is a modern conveyance structure. Lacking integrity to its potential period of significance, the North Fork Persian Ditch does not appear eligible for the National or California registers, nor does it appear to be a historical resource for the purposes of CEQA.

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<sup>5</sup> USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1949); USGS, *Goshen Quadrangle* (Washington, D.C.: USGS, 1949 photorevised 1969)  
DPR 523E (1/95)

**Location Maps:**







BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
1-800-822-6228 – [WWW.ENERGY.CA.GOV](http://WWW.ENERGY.CA.GOV)

APPLICATION FOR CERTIFICATION  
for the *KINGS RIVER CONSERVATION*  
*DISTRICT COMMUNITY POWER PROJECT*

Docket No. 07-AFC-7

PROOF OF SERVICE  
(Revised 10/24/2008)

**INSTRUCTIONS:** All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 07-AFC-7  
1516 Ninth Street, MS-15  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

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**ENERGY COMMISSION**

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**DECLARATION OF SERVICE**

I, Ann Czerwonka, declare that on November 10, 2008, I deposited copies of the attached Historical Resources Report, in the United States mail at Sacramento CA with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

**OR**

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

  
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