

CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report /
Environmental Impact Statement

FINAL

Fresno to Bakersfield Section Section 106 Findings of Effect

February 2014



FINAL

Fresno to Bakersfield Section

Section 106 Findings of Effect

Prepared by:

URS/HMM/Arup Joint Venture

February 2014

Table of Contents

	Page
1.0 Summary of Findings	1-1
1.1 Findings for Section 106 Cultural Resources.....	1-1
1.2 Findings for “CEQA-Only” Resources	1-4
2.0 Description of Undertaking	2-1
2.1 Preferred Alternative	2-1
2.1.1 Preferred Station Alternatives	2-4
2.2 Power	2-5
3.0 Public Participation and Identification of Consulting Parties.....	3-1
3.1 Public Involvement.....	3-1
3.2 Native American Consultation	3-1
3.3 Identification of Other Consulting/Concurring Parties	3-2
4.0 Description of Historic Properties, Application of Criteria of Adverse Effect, and Conditions Proposed	4-1
4.1 Methodology.....	4-1
4.1.1 Criteria of Adverse Effect	4-1
4.1.2 Conditions Proposed to Avoid, Minimize, or Mitigate Adverse Effects	4-2
4.1.3 Project-Wide Avoidance Measures.....	4-3
4.1.4 Project-Wide Minimization or Mitigation Treatments	4-3
4.2 Built Environment Historic Properties.....	4-4
4.2.1 Holt Lumber Company.....	4-7
4.2.2 South Van Ness Entrance Gate.....	4-10
4.2.3 Washington Irrigated Colony Rural Historic Landscape	4-15
4.2.3.1 Washington Colony Canal	4-24
4.2.3.2 6422 South Maple Avenue	4-26
4.2.3.3 North Branch of the Oleander Canal.....	4-29
4.2.3.4 7870 South Maple Avenue	4-31
4.2.4 7887 South Maple Avenue	4-35
4.2.5 People’s Ditch	4-39
4.2.6 Lakeside Cemetery.....	4-42
4.2.7 Shafter Santa Fe Depot	4-48
4.2.8 San Francisco & San Joaquin Valley Railroad Section House.....	4-52
4.2.9 Friant-Kern Canal.....	4-56
4.2.10 Harvey Auditorium	4-60
4.2.11 Kern County Civic Administration Center.....	4-64
4.2.12 Stark/Spencer Residence	4-67
4.2.13 Union Avenue Corridor	4-71
4.2.14 Salón Juárez	4-75
4.2.15 1031 East 18th Avenue	4-83
4.2.16 San Joaquin Cotton Oil Company	4-86
4.2.17 2509 East California Avenue	4-89
5.0 “CEQA-Only” Cultural Resources: Description of Historical Resources, CEQA Analysis, and Conditions Proposed	5-1
5.1 Methodology.....	5-1
5.1.1 “Substantial Adverse Change” and Impacts Analysis.....	5-1
5.1.2 Conditions Proposed to Avoid, Minimize, or Mitigate Substantial Adverse Changes	5-2
5.1.3 Project-Wide Avoidance, Minimization, and Mitigation Measures.....	5-2
5.2 Built Environment Historical Resources	5-4
5.2.1 1300-1316 H Street.....	5-5
5.2.2 1310-1312 Eye Street.....	5-8

5.2.3	1401-1409 K Street	5-10
5.2.4	1323 K Street	5-13
5.2.5	1323 L Street.....	5-15
5.2.6	1330 L Street.....	5-17
5.2.7	1326 L Street.....	5-19
6.0	References	6-1

Appendices

- A SHPO Correspondence
- B California Historical Resource Status Codes

Tables

Table 1-1	Project Section 106 Activities	1-2
Table 1-2	Summary of Section 106 Effects Findings for Historic Properties within the APE for the Preferred Alternative	1-3
Table 1-3	Summary of Effects Findings for Historical Resources Under CEQA (not NRHP-eligible)	1-5
Table 3-1	List of Native American Groups (Federally-Recognized and Non-Federally Recognized) Contacted to Be Consulting/Concurring Parties	3-1
Table 3-2	Summaries of Efforts to Identify Other Consulting/Concurring Parties	3-3
Table 4-1	Adverse Effects in 36 CFR 800.5(a)(2)	4-2
Table 4-2	Summary of Historic Properties and Effects Findings	4-5
Table 4-3	Washington Irrigated Colony Rural Historic Landscape and contributing elements within the APE	4-16
Table 5-1	Summary Table of Built Environment CEQA Impacts Findings	5-4

Figures

Figure 2-1	Fresno to Bakersfield Preferred Alternative	2-2
Figure 4-1	Location Map Holt Lumber Company	4-9
Figure 4-2	Location map South Van Ness Entrance Gate	4-13
Figure 4-3	South Van Ness Entrance Gate. Existing view (top) and Simulated View (bottom)	4-14
Figure 4-4	Map of Washington Colony	4-15
Figure 4-5	Location map Washington Irrigated Colony Rural Historic Landscape	4-17
Figure 4-6	Existing View (top) and Simulated View (bottom) View from South Cedar Avenue looking northeast to proposed overcrossing along East American Avenue Washington Irrigated Colony Rural Historic Landscape.....	4-18
Figure 4-7	Existing View (top) and Simulated View (bottom) View from South Cedar Avenue looking northeast to proposed overcrossing along East Adams Avenue Washington Irrigated Colony Rural Historic Landscape.....	4-19
Figure 4-8	Existing View (top) and Simulated View (bottom) View of proposed HST tracks and road closure at East Clayton Avenue Washington Irrigated Colony Rural Historic Landscape	4-20
Figure 4-9	Existing View (top) and Simulated View (bottom) View west of proposed HST tracks looking northwest from East Jefferson Avenue Washington Irrigated Colony Rural Historic Landscape	4-21
Figure 4-10	Location Map Washington Colony Canal	4-25
Figure 4-11	Location Map 6422 South Maple Avenue	4-28
Figure 4-12	Location Map North Branch of the Oleander Canal	4-30
Figure 4-13	Location Map 7870 South Maple Avenue	4-33
Figure 4-14	7870 South Maple Avenue. Existing View (top) and Simulated View (bottom)	4-34

Figure 4-15 Location Map 7887 South Maple Avenue 4-37

Figure 4-16 7887 South Maple Avenue, Existing View (top) and Simulated View (bottom).... 4-38

Figure 4-17 Location Map People’s Ditch 4-40

Figure 4-18 Location Map Lakeside Cemetery 4-44

Figure 4-19 Lakeside Cemetery. Existing View (top) and Simulated View (bottom) 4-45

Figure 4-20 Location Map Santa Fe Depot 4-50

Figure 4-21 Existing View (top) and Simulated View (bottom) Santa Fe Depot 4-51

Figure 4-22 Location Map San Francisco & San Joaquin Valley Railroad Section House..... 4-54

Figure 4-23 Existing View (top) and Simulated View (bottom) San Francisco & San Joaquin Valley Railroad Section House 4-55

Figure 4-24 Location Map Friant-Kern Canal 4-58

Figure 4-25 Engineering Drawing Friant-Kern Canal 4-59

Figure 4-26 Location Map Harvey Auditorium 4-62

Figure 4-27 Existing View (top) and Simulated View (Bottom) Harvey Auditorium 4-63

Figure 4-28 Location Map Kern County Civic Administration Center 4-66

Figure 4-29 Location Map Stark/Spencer Residence 4-69

Figure 4-30 Existing View (top) and Simulated View (bottom) Stark/Spencer Residence..... 4-70

Figure 4-31 Location Map Union Avenue Corridor 4-74

Figure 4-32 Location Map Sociedad Juárez Mutualista Mexicana 4-78

Figure 4-33a Existing View (top) and Simulated View (bottom) Sociedad Juárez Mutualista Mexicana..... 4-79

Figure 4-33b Existing View (top) and Simulated View (bottom) Sociedad Juárez Mutualista Mexicana..... 4-80

Figure 4-34 Bakersfield Hybrid Project Effects/Efectos del Proyecto Híbrido B3 Salón Juárez 4-81

Figure 4-35 Salón Juárez Parking and Entrance Options/ Salón Juárez estacionamiento y Opciones de entrada 4-82

Figure 4-36 Location Map 1031 East 18th Avenue 4-85

Figure 4-37 Location Map 1660 East California Avenue 4-88

Figure 4-38 Location Map 2509 East California Avenue 4-91

Figure 5-1 Location Map 1300-1316 H Street 5-7

Figure 5-2 Location Map 1401-1409 K Street 5-12

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Acronyms and Abbreviations

APE	Area of Potential Effects
APN	Assessor Parcel Number
Authority	California High-Speed Rail Authority
BETP	Built Environment Treatment Plan
CRHR	California Register of Historical Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FOE	Findings of Effect
FRA	Federal Railroad Administration
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HMF	Heavy Maintenance Facility
HPSR	Historic Property Survey Report
HST	high-speed train
in/sec	inch(es) per second
MMRP	Mitigation Monitoring and Reporting Plan
MOA	Memorandum of Agreement
NPS	National Park Service
NRHP	National Register of Historic Places
NEPA	National Environmental Policy Act
PPV	peak particle velocity
project	Fresno to Bakersfield Section of the California High-Speed Train Project
RC	Regional Consultant
Section 106 PA	Section 106 Programmatic Agreement for the High-Speed Train Project
SHPO	State Historic Preservation Officer
SOI	Secretary of the Interior
SR	State Route
TPSS	traction power substation
VdB	root mean square vibration velocity level, decibels

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Section 1.0

Summary of Findings

1.0 Summary of Findings

1.1 Findings for Section 106 Cultural Resources

This Findings of Effect (FOE) report has been prepared for the Fresno to Bakersfield Section of the California High-Speed Train (HST) Project. The purpose of the FOE is to assist the project proponent, the California High-Speed Rail Authority (Authority), and the lead federal agency, the Federal Railroad Administration (FRA), to comply with Section 106 of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation, as these pertain to federally funded undertakings and their impacts on historic properties. "Historic properties" are buildings, structures, objects, or districts that are listed in the National Register of Historic Places (NRHP), have been determined eligible for listing in the NRHP, or appear to be eligible for listing in the NRHP. This FOE follows the procedures set forth in the *Programmatic Agreement among the Federal Railroad Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California High-Speed Rail Authority Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the California High-Speed Train Project* (Section 106 PA) (Authority and FRA 2011a).

The Fresno to Bakersfield Section of the California HST will be constructed using a design-build procurement process. The Area of Potential Effects (APE) for the Preferred Alternative is based on the current level of design, which is 15%. The built environment survey has been completed and access for archaeological survey has been limited to roughly 30% of the APE. Subsequent to the execution of the Memorandum of Agreement (MOA) for this section, but before the notice to proceed (NTP) is given to the design-build contractor, additional access will be obtained for the remainder of the archaeological APE. At that time, supplemental findings of effect and treatment plans will be prepared. Some stand-alone preconstruction treatments will be completed during this time.

The MOA and treatment plans prepared for this project will outline how the effects of the undertaking will be addressed. As project design is advanced to 100%, supplemental treatment plans will be developed to address any new effects resulting from the completion of the design process. Through these measures, the FRA and the Authority, in consultation with the State Historic Preservation Officer (SHPO), affected tribes, interested parties, and other concurring parties to this Agreement, will continue to identify historic properties within the limits of construction, evaluate their eligibility for the NRHP, establish a process to address design changes and their effects on archaeological and built environment historic properties, resolve any adverse effects to such properties, and address the need to treat any previously unknown archaeological properties discovered during project construction.

The project Section 106 activities to date include the preparation of the documents shown in Table 1-1.

Table 1-1
 Project Section 106 Activities

Report Title	Date	SHPO Comment Date
Historic Property Survey Report	June 2010, revised October 2011	February 6, 2012
Archaeological Survey Report	October 2011	February 6, 2012
Historic Architecture Survey Report	June 2010, revised October 2011	February 6, 2012
Supplemental Historic Property Survey Report	February 2013	April 2, 2013
Supplemental Archaeological Survey Report	February 2013	April 2, 2013
Supplemental Historic Architecture Survey Report	February 2013	April 2, 2013
Salón Juárez Traditional Cultural Property Study	September 2013	October 22, 2013
Second Supplemental Historic Property Survey Report	November 2013	December 13, 2013
Second Supplemental Historic Architecture Survey Report	November 2013	December 13, 2013
Draft Section 106 Findings of Effect (i.e., draft version of this document)	November 2013	December 13, 2013
Sources: Authority and FRA. 2011d, 2011b, 2011c, 2013c, 2013a, 2013b, 2013d, 2013e, 2013f. Acronym: SHPO = State Historic Preservation Officer		

The environmental footprint for the Fresno to Bakersfield Section extends from Amador Street in Fresno on the north, to Oswell Street in Bakersfield at the southern end of the section. Effects to historic properties in downtown Fresno (between Amador Street and Los Angeles Street), were evaluated in the original Fresno-Bakersfield Historic Property Survey Report (HPSR) (Authority and FRA 2011d). However, effects analysis for these properties is presented in the Supplemental FOE and the treatment plans for the Merced to Fresno Section (Authority and FRA 2013h; Authority and FRA 2013i). The Section 106 APE for the Fresno to Bakersfield section extends from Los Angeles Street in Fresno on the north, to Oswell Street in Bakersfield on the south. This FOE addresses potential effects on historic properties within that APE.

This FOE document follows the guidelines for documentation as required in the Section 106 PA and 36 CFR 800.11. At present, no archaeological resources within the archaeological APE have been determined eligible for NRHP listing (Authority and FRA 2011b, 2013a). This FOE analyzes potential effects on 16 historic properties within the architectural APE for the Preferred Alternative for the Fresno to Bakersfield Section. For a description of the Preferred Alternative, please see Chapter 2. Chapter 3 describes the consultation process in the Section 106 process for the undertaking. Chapter 4 presents descriptions of the historic significance and current status of the historic properties, followed by an analysis of potential effects that may be caused by the project, and conditions or treatments proposed, as required by the Section 106 PA.

This FOE concludes that this project would cause *direct adverse effects* on two historic properties (including one historic property that subsumes multiple contributing elements) and *indirect adverse effects* on three historic properties. The properties and their contributing elements are listed in Table 1-2, which also summarizes the effects findings presented in Chapter 4.

Update since draft version of FOE:

The draft version of this FOE was transmitted to the SHPO on November 15, 2013 (see Appendix A). In their response letter of December 13, 2013 (Appendix A), the SHPO concurred with the document’s findings regarding effects, but provided comments regarding proposed treatments for several properties, including the South Van Ness Entrance Gate, People’s Ditch, the Washington Irrigated Colony Rural Historic Landscape, and the Stark/Spencer residence. The previous discussions of mitigation options for these properties have been modified in this Final FOE document in response to the SHPO’s written comments, and subsequent communication with OHP staff.

The draft version of this FOE was mailed to consulting parties on November 21, 2013 (Appendix A). No comments were received from consulting parties, with the exception of the City of Fresno, which has been communicating informally with Authority staff regarding mitigation options for the South Van Ness Entrance Gate. The Authority has also been consulting with the Sociedad Juarez Mutualista Mexicana, and last met with the group in person on November 18, 2013. The proposed conditions for that property have also been revised in this Final FOE, as per discussions with the group.

Table 1-2

Summary of Section 106 Effects Findings for Historic Properties within the APE for the Preferred Alternative

Map ID No.	APN	Resource Name and Address	City, County	Year Built	Effect Findings
1	46702013	Holt Lumber 1916 S. Cherry Ave.	Fresno, Fresno	1920s	No Adverse Effect
2	n/a	South Van Ness Entrance Gate 2208 S. Van Ness (vicinity)	Fresno, Fresno	ca. 1925-29	Adverse Effect – Indirect
3	n/a	Washington Irrigated Colony Rural Historic Landscape	n/a, Fresno	1878-present	Adverse Effect - Direct
3a	n/a	Contributor: Washington Colony Canal	n/a, Fresno	1878-80	Adverse Effect - Direct
3b	33425016	Contributor: 6422 S. Maple Ave.	n/a, Kings	ca. 1908	No Adverse Effect
3c	n/a	Contributor: North Branch Oleander Canal	n/a, Fresno	ca. 1880	Adverse Effect - Direct
3d	33511011	Contributor: 7870 S. Maple Ave.	n/a, Fresno	1911	Adverse Effect – Indirect
3e	33511042	Contributor: 7887 S. Maple Ave.	n/a, Fresno	ca. 1900	Adverse Effect – Indirect
4	n/a	People’s Ditch	n/a, Kings	1873-75	Adverse Effect - Direct

Table 1-2

Summary of Section 106 Effects Findings for Historic Properties within the APE for the Preferred Alternative

Map ID No.	APN	Resource Name and Address	City, County	Year Built	Effect Findings
5	028202004000	Lakeside Cemetery Kent Ave.	n/a, Kings	1870s	Adverse Effect – Indirect
6	02703008	Santa Fe Depot 150-200 Central Valley Hwy.	Shafter, Kern	1917	No Adverse Effect
7	02707028	San Francisco & San Joaquin Valley Railroad Section House 434 Central Valley Hwy.	Shafter, Kern	1898	No Adverse Effect
8	n/a	Friant-Kern Canal	Bakersfield, Kern	1945-51	No Adverse Effect
9	00405201	Harvey Auditorium	Bakersfield, Kern	1934	No Adverse Effect
10	00629001	Kern County Civic Administrative Center	Bakersfield, Kern	1956-59	No Adverse Effect
11	00643002 00643003	Stark/Spencer Residence	Bakersfield, Kern	1898	Adverse Effect - Indirect
12	n/a	Union Avenue Corridor	Bakersfield, Kern	1933	No Adverse Effect
13	01728004	Salón Juárez	Bakersfield, Kern	ca. 1912-48	No Adverse Effect
14	01726007	1031 E. 18th Street	Bakersfield, Kern	ca. 1900	No Adverse Effect
15	01749014	San Joaquin Cotton Oil Company	Bakersfield, Kern	1924-29	No Adverse Effect
16	14113025	2509 E. California	Bakersfield, Kern	ca. 1898	No Adverse Effect
Acronyms: APN Assessor Parcel Number n/a not applicable					

1.2 Findings for “CEQA-Only” Resources

The Fresno to Bakersfield Section APE includes some built environment resources that are historical resources for the purposes of CEQA, but are not historic properties under Section 106. The project would cause **direct substantial adverse changes** to one “CEQA only” historical resource and **indirect substantial adverse changes** to three CEQA-only historical resources. See Table 1-3 for effects findings for historical resources. Section 5 presents brief descriptions of the historic significance and current status of these historical resources, followed by an analysis of potential effects that may be caused by the project, and finally, conditions or treatments proposed.

Table 1-3
 Summary of Effects Findings for Historical Resources Under CEQA (not NRHP-eligible)

Map Id No.	APN	Resource Name and Address	City, County	Year Built	Effect Findings
1	00641104	1300-1316 H St.	Bakersfield, Kern	ca.1912-1920	No Substantial Adverse Change
2	00641206	1310-1312 Eye St.	Bakersfield, Kern	1926	No Substantial Adverse Change
3	00639102	1401-1409 K St.	Bakersfield, Kern	1913	Substantial Adverse Change - Direct
4	00646003	1323 K St.	Bakersfield, Kern	ca.1921	No Substantial Adverse Change
5	00645002	1323 L St.	Bakersfield, Kern	ca.1912-1920	Substantial Adverse Change - Indirect
6	00644026	1330 L St.	Bakersfield, Kern	1920	Substantial Adverse Change - Indirect
7	00644025	1326 L St.	Bakersfield, Kern	1920	Substantial Adverse Change - Indirect

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Section 2.0

Description of Undertaking

2.0 Description of Undertaking

The portion of the Area of Potential Effects (APE) located in the downtown Fresno area between Amador Street to the north and Los Angeles Street to the south overlaps with the APE for the Merced to Fresno Section of the California High-Speed Train (HST) Project. Compliance with Section 106, including assessment of effects and resolution of adverse effects, for properties within the APE for both project sections is being completed as part of the Merced to Fresno section. Please refer to the Fresno-Bakersfield Historic Property Survey Report (Authority and FRA 2011d) for identification of historic properties and the Supplemental FOE for the Merced to Fresno Section (Authority and FRA 2013g) for evaluation of effects on those properties. The Finding of Effect report, Memorandum of Agreement, and treatment plans for the Fresno to Bakersfield Section will address the historic properties located within the APE for the Fresno to Bakersfield Section that extends south from Los Angeles Street.

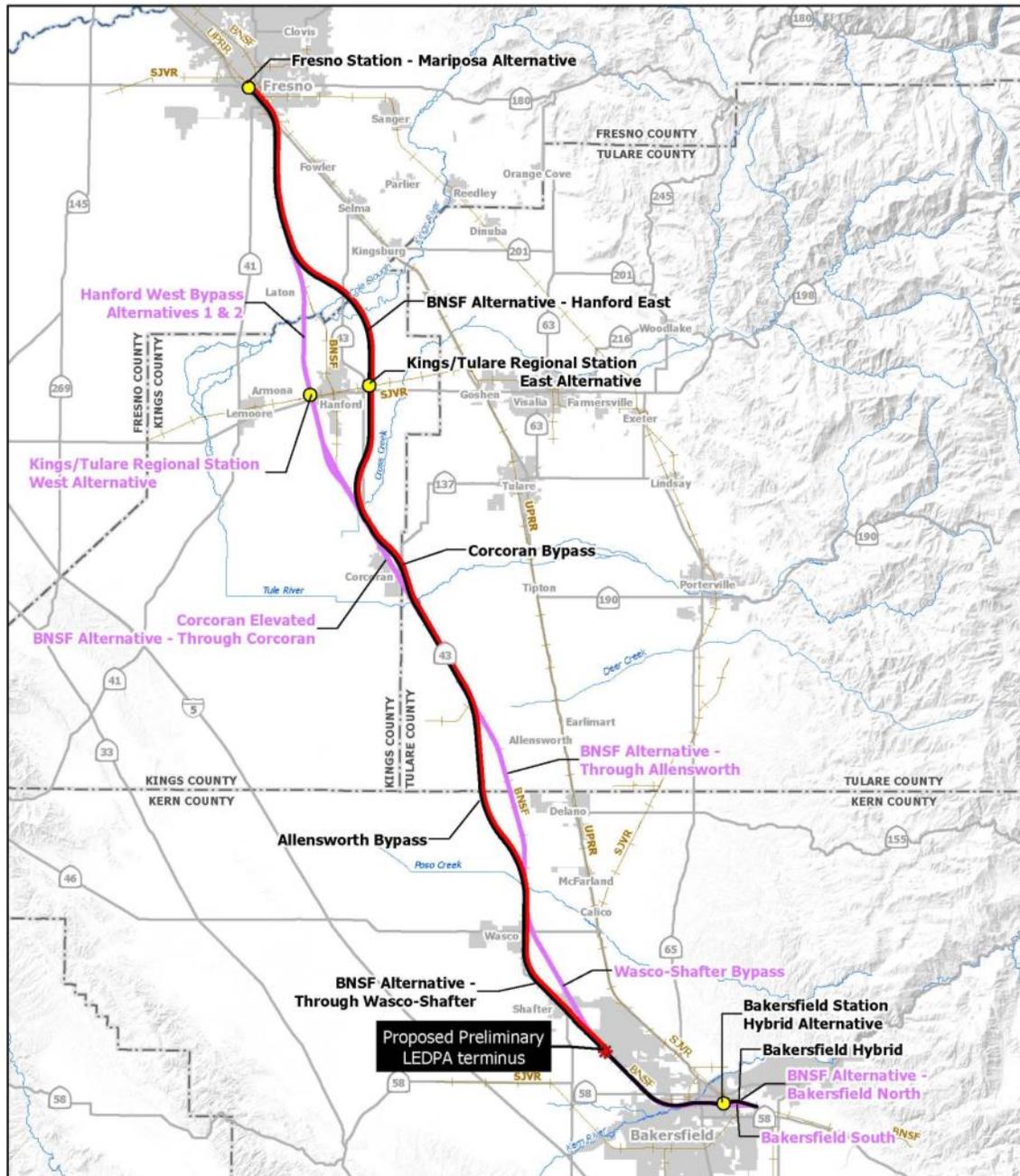
The Fresno to Bakersfield Section of the High-Speed Train (HST) Project will be 114 miles long. To comply with the Authority's guidance to use existing transportation corridors when feasible, the Fresno to Bakersfield HST Section will primarily be located adjacent to the existing BNSF Railway right-of-way. Alternative alignments were considered and studied throughout the Fresno to Bakersfield Section. The configuration shown in Figure 2-1 represents the combination of alignments that collectively form the preferred alternative for the Fresno to Bakersfield Section.

The Fresno to Bakersfield HST Section will cross both urban and rural lands and include stations in Fresno and Bakersfield, a Kings/Tulare Regional Station in the vicinity of Hanford, and power substations along the alignment. The HST alignment will be entirely grade-separated, meaning that crossings with roads, railroads, and other transport facilities will be located at different heights (overpasses or underpasses) so that the HST will not interrupt nor interface with other modes of transport. The HST right-of-way when at-grade will also be fenced to prohibit public or vehicle access. The project footprint will primarily consist of the train right-of-way, which will include both a northbound and southbound track in an area typically 120 feet wide. Additional right-of-way will be required to accommodate stations, multiple track at stations, maintenance facilities, and power substations.

The Fresno to Bakersfield Section will include at-grade, below-grade, and elevated track segments. The at-grade track will be laid on an earthen rail bed topped with rock ballast; fill and ballast for the rail bed will be obtained from permitted borrow sites and quarries. Below-grade track will be laid in an open or covered trench at a depth that will allow roadway and other grade-level uses above the track. Elevated track segments will span long sections of urban development or aerial roadway structures and consist of reinforced-concrete aerial structures with cast-in-place reinforced-concrete columns supporting the box girders and platforms. The height of elevated track sections will depend on the height of existing structures below, and will be up to 100 feet in height (this is subject to change as design progresses). Columns will be spaced 60 to 120 feet apart.

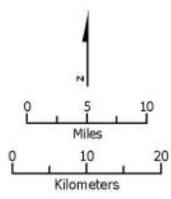
2.1 Preferred Alternative

The Project EIR/EIS for the Fresno to Bakersfield HST Section examines alternative alignments, stations, and heavy maintenance facility (HMF) sites within the general BNSF Railway corridor. Discussion of the HST project alternatives begins with a single continuous alignment (the BNSF Alternative) from Fresno to Bakersfield, which most closely aligns with the preferred alignment identified in the Record of Decision (ROD) for the Statewide Program EIR/EIS. Descriptions of the additional ten alternative alignments that deviate from the BNSF Alternative for portions of the route then follow. The alternative alignments that deviate from the BNSF Alternative were developed to avoid environmental, land use, or community issues identified for portions of the BNSF Alternative. Please refer Chapter 2 of the Fresno to Bakersfield Section EIR/EIS for detailed descriptions of the project alternatives.



Data source: URS/HMM/Arup JV, 2013

October 8, 2013



- Proposed Preliminary LEDPA
- Proposed Preferred Alternative
- Alternative alignment
- Station
- Stream
- Existing rail line
- Community/Urban area
- County boundary

Figure 2-1
 Fresno to Bakersfield Preferred Alternative

Selection of the Preferred Alternative included consideration of the project purpose and need and the project objectives presented in Chapter 1 of the EIR/EIS, as well as the objectives and criteria in the alternatives analysis, and the comparative potential for environmental impacts. Within the preferred BNSF Railway Corridor for the Fresno to Bakersfield Section, alternative alignments were identified in the Hanford, Corcoran, Allensworth, Wasco-Shafter, and Bakersfield areas. The preferred alignment in each of these areas combine to form the Preferred Alternative from Fresno to Bakersfield, which balances overall impact on the environment and local communities, cost, and constructability constraints of the project alternatives evaluated (Figure 2-1).

The Preferred Alternative combines portions of the BNSF Alternative, Corcoran Bypass, Allensworth Bypass, and the Bakersfield Hybrid. It will extend approximately 114 miles from Fresno to Bakersfield and would lie adjacent to the BNSF Railway route to the extent feasible. The Preferred Alternative will begin at the north end of the Fresno Station tracks and travel southeast through Fresno on the western side of the UPRR until reaching East Jensen Avenue. It will then curve to the south and continue through Fresno County along the BNSF Railway right-of-way in an area consisting mostly of agricultural land. In Kings County, the Preferred Alternative will pass east of the City of Hanford, parallel to and east of SR 43. The Kings/Tulare Regional Station will be located along this alignment, east of SR 43 (Avenue 8) and north of the San Joaquin Valley Railroad (SJVR). South of Hanford, the alignment will curve to the west to rejoin the BNSF Railway right-of-way. At approximately Nevada Avenue, the Preferred Alternative will diverge from the BNSF Railway right-of-way and bypass the City of Corcoran to the east, rejoining the BNSF Railway route at Avenue 136. The Preferred Alternative will continue through Tulare County adjacent to the western side of the BNSF Railway right-of-way until approximately Avenue 56/County Road J 22, where the alignment will diverge from the BNSF Railway and bypass Allensworth Ecological Reserve and the Allensworth State Historic Park to the west. The Preferred Alternative would return to the BNSF Railway right-of-way in the vicinity of Taussig Avenue in rural Kern County, and travel through the cities of Wasco and Shafter. The Preferred Alternative will continue adjacent to the BNSF Railway right-of-way through Bakersfield to the south end of the Bakersfield Station tracks in the vicinity of Baker Street.

Minor deviations from the BNSF Railway corridor are necessary to accommodate engineering constraints, namely wider curves necessary to accommodate the HST (as compared with the existing lower-speed freight line track alignment).

Although the majority of the alignment would be at-grade, the Preferred Alternative would include aerial structures in all of the four counties through which it travels. In Fresno County, an aerial structure would carry the alignment over Golden State Boulevard and SR 99, and a second would cross over the BNSF Railway tracks in the vicinity of East Conejo Avenue. The alignment will also cross Cole Slough and the Kings River on elevated structure.

In Kings County, the Preferred Alternative would be elevated east of Hanford where the alignment would pass over the San Joaquin Valley Railroad (SJVR) and SR 198. The alignment would also be elevated over Cross Creek. In Tulare County, the Preferred Alternative would be elevated at the Tule River crossing and over Deer Creek and the Stoil railroad spur that runs west from the BNSF Railway mainline. In Kern County, the BNSF Alternative would be elevated through the cities of Wasco, Shafter, and Bakersfield. The Preferred Alternative would be at-grade through the rural areas between these cities.

The Preferred Alternative's cross sections include provisions for a 102-foot separation of the HST track centerline from the BNSF Railway track centerline, as well as separations that include swale or berm protection, or an intrusion protection barrier (wall) where the HST tracks are closer. A 102-foot separation between the centerlines of BNSF Railway and HST tracks is provided wherever feasible and appropriate. In urban areas where a 102-foot separation could result in substantial displacement of businesses, homes, and infrastructure, the separation between the

BNSF Railway and HST was reduced. The areas with reduced separation require protection to prevent encroachment on the HST right-of-way in the event of a freight rail derailment. The use of a swale, berm, or wall protection would depend on the separation distance.

2.1.1 Preferred Station Alternatives

The Fresno to Bakersfield HST Section would include stations in Fresno, Bakersfield, and a third station, the Kings/Tulare Regional Station.

Stations would be designed to address the purpose of the HST, particularly to allow for intercity travel and connection to local transit, airports, and highways. Stations would include the station platforms, a station building, and associated access structure, as well as lengths of bypass tracks to accommodate local and express service at the stations. All stations would contain the following elements:

- Passenger boarding and alighting platforms.
- Station head house with ticketing, waiting areas, passenger amenities, vertical circulation, administration and employee areas, and baggage and freight-handling service.
- Vehicle parking (short-term and long-term) and “kiss-and-ride.”¹
- Motorcycle/scooter parking.
- Bicycle parking.
- Waiting areas and queuing space for taxis and shuttle buses.
- Pedestrian walkway connections.

Fresno Station

The Fresno Station is located in Downtown Fresno, less than 0.5 mile east of SR 99 on the BNSF Alternative. The station would be centered on Mariposa Street and bordered by Fresno Street on the north, Tulare Street on the south, H Street on the east, and G Street on the west. The station and associated facilities would occupy approximately 20.5 acres, including 13 acres dedicated to the station, short term parking, and “kiss-and-ride” passenger drop-off areas. The site proposal includes the potential for up to three parking structures occupying a total of 5.5 acres.

On May 3, 2012, the Merced to Fresno Section Final EIR/EIS was certified and this Fresno station location was selected. The FRA issued a ROD which included this station site in September of 2012.

Kings/Tulare Regional Station

The Kings/Tulare Regional Station would be located east of SR 43 (Avenue 8) and north of the SJVR on the Preferred Alternative. The station building would be approximately 40,000 square feet with a maximum height of approximately 75 feet. The entire site would be approximately 25 acres, including 8 acres designated for the station, bus transit center, short-term parking, and kiss-and-ride. An additional approximately 17.25 acres would support a surface parking lot with approximately 2,280 spaces.

Bakersfield Station

The Bakersfield Station will be located at the corner of Truxtun and Union Avenue/SR 204. The station design includes an approximately 57,000 square-foot main station building and an approximately 5,500 square-foot entry concourse located north of the BNSF Railway right-of-way.

¹ “Kiss-and-ride” refers to the station area where riders may be dropped off or picked up before or after riding the HST.

The station building would have two levels with a maximum height of approximately 75 feet. The first floor would house the concourse, and the platforms and guideway would be on the second floor. Additionally, a pedestrian overcrossing would connect the main station building to the north entry concourse across the BNSF right-of-way. The entire site would be approximately 24 acres, with 15 acres designated for the station, bus transit center, short-term parking, and kiss-and-ride areas. Approximately 4.5 of the 24 acres would support three parking structures with a total capacity of approximately 4,500 cars.

2.2 Power

Power for the HST System would be drawn from California's electricity grid and distributed to the trains via an overhead contact system. The project would not include the construction of a separate power source, although it would include the extension of power lines to a series of power substations positioned along the HST corridor. The transformation and distribution of electricity would occur in three types of stations:

- Traction power substations (TPSSs) transform high-voltage electricity supplied by public utilities to the train operating voltage. TPSSs would be sited adjacent to existing utility transmission lines and the HST right-of-way, and would be located approximately every 30 miles along the route. Each TPSS would be 200 feet by 160 feet.
- Switching stations connect and balance the electrical load between tracks, and switch power on or off to tracks in the event of a power outage or emergency. Switching stations would be located midway between, and approximately 15 miles from, the nearest TPSS. Each switching station would be 120 feet by 80 feet and be located adjacent to the HST right-of-way.
- Paralleling stations, or autotransformer stations, provide voltage stabilization and equalize current flow. Paralleling stations would be located every 5 miles between the TPSSs and the switching stations. Each paralleling station would be 100 feet by 80 feet and located adjacent to the HST right-of-way.

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Section 3.0

Consulting Parties and Public Participation

3.0 Public Participation and Identification of Consulting Parties

Stipulations IV and V of the Section 106 PA sets forth the procedures for public participation and involvement and identifying consulting parties in the Section 106 process for the project.

3.1 Public Involvement

As prescribed by Stipulation V of the Section 106 PA, the public, local agencies, and other interested parties were given the opportunity to comment on the findings of the historic properties surveys at public meetings and through review of the Draft EIR/EIS, which included cultural resources appendices. Letters regarding the project were also sent to parties concerned with historic architectural resources. For copies of all interested and consulting parties' letters and responses, please refer to Section 3 and Appendix A in the original HPSR and Supplemental HPSR (Authority and FRA 2011d, 2013c). Full information on the meetings and consultations that have been undertaken over the past 3 years to satisfy Section 106 and National Environmental Policy Act (NEPA) requirements can be found in Section 3.17 of the project EIR/EIS.

3.2 Native American Consultation

In addition to the avenues for involvement described above in Section 3.1, Stipulation IV of the Section 106 PA identifies a separate and more formal consultation process for federally recognized Native American Tribes and non-federally recognized Native American Groups. For the Fresno to Bakersfield Section of the HST, this consultation has been taking place continuously since 2010, mostly in association with the historic property identification efforts. For copies of all tribal consultation, interested and consulting parties' letters, and responses, please refer to Section 3 and Appendix A in the original HPSR and Supplemental HPSR (Authority and FRA 2011b, 2011d, 2013a, 2013c). Full information on the meetings and consultations that have been undertaken over the past 3 years to satisfy Section 106 and NEPA requirements can be found in Section 3.17 of the project EIR/EIS.

The most recent Native American consultation efforts have been focused on the identification of consulting parties, as summarized below in Table 3-1. These efforts have resulted in the identification of four Federally-Recognized Native American Tribes who wish to be consulting/concurring parties, and one non-federally recognized Native American party who has now passed away.

Table 3-1
 List of Native American Groups (Federally-Recognized and Non-Federally Recognized) Contacted to Be Consulting/Concurring Parties

Non-Federally-Recognized	Date of Invitation Letter	Response
Kings River Choinumni	March 28, 2013	--
Kings River Choinumni	March 28, 2013	--
The Choinumni Tribe of Yokuts	March 28, 2013	--
Traditional Choinumni Tribe	March 28, 2013	--
Sierra Nevada Native American Coalition	March 28, 2013	--
Dumna Wo-Wah Tribal Government	March 28, 2013	--

Table 3-1

List of Native American Groups (Federally-Recognized and Non-Federally Recognized) Contacted to Be Consulting/Concurring Parties

Non-Federally-Recognized	Date of Invitation Letter	Response
Dunlap Band of Mono Preservation Society	March 28, 2013	--
Choinumni Tribe (Choinumni/Mono)	March 28, 2013	--
Kern Valley Indian Council	March 28, 2013	--
Ron Wermuth, (No tribe provided; Tubatulabal, Kawaiisu, Koso, Yokuts)	March 28, 2013	Wishes to be consulting/concurring party (subsequently deceased August 2013)
Wuksache Indian Tribe, Eshom Valley Band	March 28, 2013	--
Wuksache Indian Tribe	March 28, 2013	--
Kitanemuk & Yowlumne Tejon Indians	March 28, 2013	--
Kawaiisu Tribe of Tejon Reservation	March 28, 2013	--
No tribe provided; Wukchumni, Tachi, Yowlumni	March 28, 2013	--
Federally Recognized	Date of Invitation Letter	Response
Santa Rosa Tachi Yokuts Tribe	April 8, 2013	Wish to be consulting/concurring party
Table Mountain Rancheria	April 8, 2013	Wish to be consulting/concurring party
Picayune Rancheria of the Chukchansi Indians	April 8, 2013	Wish to be consulting/concurring party
Tule River Indian Tribe	April 8, 2013	Wish to be consulting/concurring party
Tejon Indian Tribe	April 8, 2013	--
Cold Springs Rancheria of Mono Indians	April 8, 2013	--
Big Sandy Rancheria of Mono Indians	April 8, 2013	--

3.3 Identification of Other Consulting/Concurring Parties

As prescribed by Stipulation V.B. of the Section 106 PA, consulting parties may include other federal, state, regional, or local agencies that may have responsibilities for historic properties and may want to review reports and findings for an undertaking within their jurisdiction. Formal letters were sent to several local governments on December 16, 2011, inviting them to participate as consulting parties during initial identification efforts. Letters were also sent out on April 15, 2013, and October 22, 2013, to other potential consulting/concurring parties. This information is summarized in Table 3-2. This process resulted in the identification of five additional consulting/concurring parties. In addition, it is anticipated that Sociedad Juárez Mutualista Mexicana will be a consulting/concurring party in relation to Salón Juárez. The

Authority is actively engaged in discussions with this organization regarding effects and conditions to avoid effects to that historic property.

Table 3-2
 Summaries of Efforts to Identify Other Consulting/Concurring Parties

Entity	Date of Invite Letter from HSRA	Response
Consulting/Concurring Party Invitation Letters of December 16, 2011		
City of Fresno	December 16, 2011	Wish to be consulting/concurring party to MOA
State of California Department of Parks and Recreation	December 16, 2011	Wish to be consulting/concurring party to MOA (but alignment subsequently changed to avoid any potential effects to Allensworth State Historic Park; anticipated that they will no longer be consulting/concurring party)
City of Bakersfield, Mayor	December 16, 2011	--
Bakersfield City School District	December 16, 2011	--
City of Shafter	December 16, 2011	Wish to be consulting/concurring party to MOA
Consulting/Concurring Party Invitation Letters of April 15, 2013		
ENTITIES IN FRESNO COUNTY		
Bureau of Reclamation	April 15, 2013	--
Fresno County Public Works and Planning	April 15, 2013	--
Fresno Irrigation District	April 15, 2013	--
ENTITIES IN KINGS COUNTY		
Kings County Board of Supervisors	April 15, 2013	--
City of Hanford Planning Commission	April 15, 2013	--
City of Corcoran Planning Department	April 15, 2013	Wish to be consulting/concurring party to MOA
The People's Ditch Company	April 15, 2013	--
Corcoran Irrigation District	April 15, 2013	--
Last Chance Water Ditch Company	April 15, 2013	--
ENTITIES IN TULARE COUNTY		
Tulare County Resource Management Agency	April 15, 2013	--

Table 3-2
 Summaries of Efforts to Identify Other Consulting/Concurring Parties

Entity	Date of Invite Letter from HSRA	Response
ENTITIES IN KERN COUNTY		
City of Bakersfield, Mayor	April 15, 2013	--
City of Bakersfield Economic and Community Development	April 15, 2013	--
Bakersfield City School District	April 15, 2013	--
County of Kern, Planning Department	April 15, 2013	--
City of Shafter	April 15, 2013	Wish to be consulting/concurring party to MOA
City of Wasco Community Development	April 15, 2013	--
Consulting/Concurring Party Invitation Letters of October 22, 2013		
Hanford Cemetery District	October 22, 2013	--
Consulting/Concurring Party Invitation Letters of December 17, 2013		
City of Bakersfield, Mayor	December 17, 2013	--
City of Bakersfield Economic and Community Development	December 17, 2013	Letter received February 6, 2014 indicating that City wishes to be consulting/concurring party

Section 4.0
Description of Historic Properties,
Application of Criteria of Adverse Effect,
and Conditions Proposed

4.0 Description of Historic Properties, Application of Criteria of Adverse Effect, and Conditions Proposed

This chapter assesses the effects of the proposed project on the 16 historic properties within the project APE. The assessment provided below identifies the effects as defined in 36 CFR 800.5 (a)(2), as required by Stipulation VII of the Section 106 PA. The assessment in the chapter is arranged from north to south, beginning in Fresno County and continuing south to Bakersfield (Kern County). Chapter 5 presents the assessment of impacts of the proposed project on the seven built environment resources that are historical resources under CEQA, but that are not Section 106 historic properties.

4.1 Methodology

4.1.1 Criteria of Adverse Effect

In accordance with the Section 106 PA, the Criteria of Adverse Effect (36 CFR 800.5) were applied to the historic properties within the APE. An "adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."

Application of the criteria of adverse effect is an assessment of an undertaking's impacts on the historic integrity of a historic property and about how an undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. Effects can be direct, indirect, and cumulative. Direct effects include such actions as physical destruction or damage. Indirect effects include the introduction of visual elements or noise or vibration, and also can include the neglect of a historic property or cumulative effects. Cumulative effects are the impacts of the project taken into account with known past or present projects along with foreseeable future projects.

This FOE assesses whether the proposed project will have an adverse effect on historic properties within the APE for built environment resources between the northern end of the section in the city of Fresno, and the southern end in the city of Bakersfield. Table 4-1 lists examples of adverse effects, as provided in 36 CFR 800.5(a)(2). Of the seven typical effects, 36 CFR 800.5(a)(2)(vi) and (vii) are not applicable to this project because this project would not result in the neglect of a historic property (vi), or in the transfer, lease, or sale of property out of federal ownership or control (vii).

Table 4-1
 Adverse Effects in 36 CFR 800.5(a)(2)

Adverse effects on historic properties described in 36 CFR 800.5 include, but are not limited to:	
(i)	Physical destruction of or damage to all or part of the property;
(ii)	Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
(iii)	Removal of the property from its historic location;
(iv)	Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
(v)	Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
(vi)	Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
(vii)	Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance. ^a
^a 36 CFR 800.5, "Assessment of adverse effects," incorporating amendments effective August 5, 2004.	

4.1.2 Conditions Proposed to Avoid, Minimize, or Mitigate Adverse Effects

This FOE identifies effects on historic properties and, in accordance with the Section 106 PA, also presents potential methods that would avoid, minimize, or mitigate adverse effects on historic properties. These methods seek to address potential effects first through avoidance conditions, and then through minimization or mitigation treatments if an effect cannot be avoided (see 36 CFR 800.6).

Measures to avoid or minimize adverse effects include steps taken in both the design and construction phases of the project. Avoidance measures implemented during the design phase consist of identifying, and then applying conditions that would eliminate the effect through redesign of project components, characteristics, or construction activities that could adversely affect historic properties. Minimization measures implemented at either the design or construction phases are treatments that would reduce the degree of adverse effect or impacts on historic properties. Finally, measures to mitigate adverse effects on historic properties are treatments developed for adverse effects that cannot be avoided or minimized.

The conditions and treatments (avoidance, minimization, and mitigation), either those presented in this FOE or others developed by project stakeholders, will be stipulated in the Memorandum of Agreement (MOA). Each condition and treatment will be refined accordingly for each particular historic property and included in the treatment plans. Detailed direction for implementation of conditions and treatments for historic architectural properties will be presented in the Built Environment Treatment Plan (BETP). Although no known NRHP-eligible archaeological resources exist in the APE and therefore no effects assessments for archaeology are included herein, an Archaeological Treatment Plan (ATP) will be prepared to direct additional identification and

effects assessment and to outline mitigation for adverse effects. The BETP and ATP will be prepared in consultation with the State Historic Preservation Officer (SHPO), appropriate agencies, and other signatories to the MOA. The concerns of these parties will also be considered in determining the measures to be implemented. Most treatment measures will be implemented before the commencement of construction activities; however, depending on the nature of the selected measures, some treatments may not be completed until after construction of the undertaking is completed.

4.1.3 Project-Wide Avoidance Measures

The HST design was refined to enable the project to avoid certain types of adverse effects, specifically noise and vibration. Adverse noise and vibration effects on historic properties could occur during construction activities and during operation of the HST System.

Condition Proposed to Avoid Adverse Noise Effects. Construction and operational noise have the potential to cause indirect adverse effects on historic properties that have an inherent quiet quality that is part of a property's historic character and significance (36 CFR 800.5[a][2][iv] and [v]). As a precaution, the project will develop measures to avoid adverse effects on historic properties that could result from construction noises, such as impact pile driving, jackhammering, and truck loading and operations. Conditions implemented to avoid adverse effects from construction noise would include use of alternative techniques, such as the use of low-noise emission equipment and noise-deadening equipment for machinery. Preliminary project design options, such as noise walls, have also been developed to help reduce operational noise impacts and follow FRA methodologies for noise abatement. These conditions will minimize potential noise impacts from construction throughout the project area.

Condition Proposed to Avoid Adverse Vibration Effects. Steps taken to address potential adverse effects on historic properties include developing methods to avoid construction vibration effects. Potential structural damage caused by construction vibration is anticipated only from impact pile driving at very close distances to buildings. Vibration from impact pile driving during construction could reach up to 0.12 inch/second (in/sec) peak particle velocity (PPV), or approximately 90 root mean square vibration velocity level, decibels [VdB], at 135 feet from the project centerline. This level could cause the physical destruction, damage, or alteration of historic properties within 135 feet. Because impact pile driving could cause indirect adverse effects, alternative construction methods causing vibration of less than 0.12 in/sec PPV will be employed near historic properties, or CEQA historical resources, located within 135 feet from the project centerline. Implementation of this condition (development of alternative construction methods) will minimize adverse vibration effects on historic properties.

4.1.4 Project-Wide Minimization or Mitigation Treatments

Treatment Proposed to Minimize Adverse Effects of Inadvertent Damage. A plan for repair of inadvertent damage will be prepared and implemented as a treatment to minimize inadvertent adverse effects on historic properties caused by project construction activities. The plan content will be detailed in the BETP and will be developed before construction begins. The plan will use any survey or preconstruction photographic documentation prepared for the property as part of the baseline condition for assessing damage. The plan will describe the protocols for documentation of inadvertent damage (should it occur), as well as notification, coordination, and reporting to the SHPO and the owner of the historic property. The plan will direct that inadvertent damage to historic properties will be repaired in accordance with the Secretary of the Interior's (SOI) *Standards for the Treatment of Historic Properties* (U.S. Department of the Interior 1995). The plan will be developed in coordination with the Authority and FRA, and will be submitted to the SHPO for review and comment.

Treatment Proposed to Mitigate Direct Adverse Effects. Historic properties that would be physically altered, damaged, relocated, or destroyed by the project that will be documented in detailed recordation that includes photography. This documentation may consist of preparation of updated recordation forms (DPR 523), or may be consistent with the Historic American Buildings Survey (HABS), the Historic American Engineering Record (HAER), or the Historic American Landscape Survey (HALS) programs; a Historic Structure Report; or other recordation methods stipulated in the MOA and detailed in the BETP.

The recordation undertaken by this treatment would focus on the aspects of integrity and significance that would be affected by the project for each historic property subject to this treatment. For example, historic properties in an urban setting that would experience an adverse visual effect would be photographed to capture exterior and contextual views; interior spaces would not be subject to recordation if they would not be affected. Consultation with the SHPO and the consulting parties will be conducted for the historic architectural resources to be documented. Recordation documents will follow the appropriate guidance for the recordation format and program selected.

Before construction, consultation will be initiated with the SHPO and the signatory parties to identify the appropriate level of documentation. In general, photography should capture views of the historic property from multiple views, and could include reproduction of historic images as well. All fieldwork necessary for photographic documentation, architectural or engineering drawings, cartography, and/or digital recordation through geographic information or global positioning systems (GIS and GPS, respectively) will be completed before project construction begins. The written data will include a historic narrative for the historic property.

Preparation of the photo documentation may require coordination with an interdisciplinary team, as stipulated in the MOA, and may include an architectural historian, a historian, and a photographer. The BETP will detail the qualification standards for these preparers. The documentation will be prepared by the Regional Consultant (RC) and submitted to the Authority and FRA for review and comment. The Authority will submit the documentation to the SHPO for review and comment. The BETP will also identify the distribution of printed and electronic copies of the photo documentation as well as permanent archival disposition of the record, if applicable.

4.2 Built Environment Historic Properties

This section describes 16 historic properties within the project APE that have the potential to be affected by the proposed project. These properties are within or near the cities of Fresno, Hanford, Shafter, and Bakersfield, and generally represent a wide variety of property types, including commercial/industrial, residential, railroad, irrigation, and institutional. Nearly one-half of the historic properties studied were constructed from the 1870s to 1899, and the rest were built between 1900 and 1960.

Six historic properties were identified in previous studies: one was listed in the NRHP, one was determined eligible for the NRHP; two were found eligible for the NRHP, and two properties were identified in previous surveys but had not been evaluated for listing in the NRHP. The remaining properties were found eligible as part of the studies conducted for the HST project. See summary of historic properties in Table 4-2, below.

The remainder of this report section provides a summary of the significance of each historic property and its character-defining features, representative photographs of the historic properties, analysis of potential adverse effects that may be caused by the HST project, and conditions or treatments proposed to address those effects.

Table 4-2
 Summary of Historic Properties and Effects Findings

Map ID No.	APN	Resource Name and Address	City, County	Year Built	CHRS Status Code	NRHP Criteria	Effect Finding
1	46702013	Holt Lumber 1916 S. Cherry Ave.	Fresno, Fresno	1920s	2S2, 5S1	C	No Adverse Effect
2	n/a	South Van Ness Entrance Gate 2208 S. Van Ness (vicinity)	Fresno, Fresno	ca. 1925-29	2S2, 5S1	A, C	Adverse Effect - Indirect
3	n/a	Washington Irrigated Colony Rural Historic Landscape	n/a, Fresno	1878-present	2D2	A, C	Adverse Effect - Direct
3a	n/a	Contributor: Washington Colony Canal	n/a, Fresno	1878-80	2D2	A, C	Adverse Effect - Direct
3b	33425016	Contributor: 6422 S. Maple Ave.	n/a, Kings	ca. 1908	2D2	A, C	No Adverse Effect
3c	n/a	Contributor: North Branch Oleander Canal	n/a, Fresno	ca. 1880	2D2	A, C	Adverse Effect - Direct
3d	33511011	Contributor: 7870 S. Maple Ave.	n/a, Fresno	1911	3D	A, C	Adverse Effect - Indirect
3e	33511042	Contributor: 7887 S. Maple Ave.	n/a, Fresno	ca. 1900	2D2	A, C	Adverse Effect - Indirect
4	n/a	People's Ditch	n/a, Kings	1873-75	2S2	A	Adverse Effect - Direct
5	028202004000	Lakeside Cemetery Kent Ave.	n/a, Kings	1870s	2S2	A	Adverse Effect - Indirect
6	02703008	Santa Fe Depot 150-200 Central Valley Hwy.	Shafter, Kern	1917	1S	C	No Adverse Effect
7	02707028	San Francisco & San Joaquin Valley Railroad Section House 434 Central Valley Hwy.	Shafter, Kern	1898	2S2	A, C	No Adverse Effect
8	n/a	Friant-Kern Canal	Bakersfield, Kern	1945-51	2S2	A	No Adverse Effect
9	00405201	Harvey Auditorium	Bakersfield, Kern	1934	2S2	C	No Adverse Effect
10	00629001	Kern County Civic Administrative Center	Bakersfield, Kern	1956-59	2S2	A, C	No Adverse Effect
11	00643002 00643003	Stark/Spencer Residence	Bakersfield, Kern	1898	2S2, 5S1	C	Adverse Effect - Indirect
12	n/a	Union Avenue Corridor	Bakersfield, Kern	1933	2S2	A	No Adverse Effect
13	01728004	Salon Juarez	Bakersfield, Kern	ca. 1912-48	2S2	A	No Adverse Effect

Table 4-2
 Summary of Historic Properties and Effects Findings

Map ID No.	APN	Resource Name and Address	City, County	Year Built	CHRS Status Code	NRHP Criteria	Effect Finding
14	01726007	1031 E. 18th Street	Bakersfield, Kern	ca. 1900	2S2	C	No Adverse Effect
15	01749014	San Joaquin Cotton Oil Company	Bakersfield, Kern	1924-29	2S2	A	No Adverse Effect
16	14113025	2509 E. California	Bakersfield, Kern	ca. 1898	2S2	C	No Adverse Effect
Acronyms: APN Assessor Parcel Number CHRS California Historical Resource Status; for complete listing see Appendix B n/a not applicable							

4.2.1 Holt Lumber Company

Map ID No. 1
APN: 46702013
1916 S. Cherry Avenue, Fresno



Property Description

The Holt Lumber Company building is a one-story, brick Italian Renaissance Revival office constructed circa 1920. The building was determined eligible for listing on the NRHP in February 2012. It is significant at the local level under Criterion C as a distinctive example of an early-twentieth-century Italian Renaissance commercial architecture. Character-defining features include its size and massing, tiled hip roof with boxed eaves, modillions, and dentiled frieze, one-over-one double-hung wood windows set within brick arches with stone keystones and voussoirs, symmetrical façade, common-bond brick, and recessed arched entrance with pilasters and glass double entrance doors. The period of significance for this building is the early 1920s, when the building was constructed. The boundary of this historic property consists only of the office building itself and its landscaped setback along South Cherry Avenue; none of the other buildings or structures on the parcel are contributing elements for the property. This building is also listed in the California Register of Historical Resources (CRHR) and the City of Fresno's Local Register of Historic Resources (No. 101).

Application of Criteria of Adverse Effect: No Adverse Effect

The proposed project would not cause direct or indirect adverse effects on the Holt Lumber Company building from the construction and operation of an at-grade rail line or interlocking site, a radio communication tower, the relocation of utilities, or the closure of sections of East California and South Cherry avenues. This historic property would be approximately 420 feet from the closest construction activity under this project, and the activities would not result in the removal of, the physical destruction of, or damage to this historic building (36 CFR 800.5[a][2][i], [ii], and [iii]). Therefore, there would be no direct adverse effects from construction of the proposed project.

Similarly, no indirect adverse effects are anticipated for this historic property from potential visual elements, noise, or vibration because this historic property is a considerable distance from the proposed tracks and gas line relocation (36 CFR 800.5[a][2][iv] and [v]). The historic property would be located approximately 420 feet north of the proposed HST tracks, approximately 670 feet northeast of the closest utility relocation and 655 and 560 feet north of the road closures and interlocking site, respectively. The closest communication tower would be more than 1,000

feet southwest of the property and on the west side of the proposed HST tracks. No indirect noise or vibration effect is predicted because of the distance and because the property is and has been located in an industrial area since it was constructed. Furthermore, the project components would largely not be visible from the historic property because its view is shielded by extant surrounding buildings.

The proposed project results in a finding of *No Adverse Effect* to the Holt Lumber Company building. See Figure 4-1 for the location map of the Holt Lumber Company building.

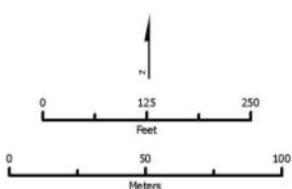
Conditions and Treatments Proposed

The project would not cause an adverse effect on this historic property; therefore, no treatment measures are required or proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



- # Direct adverse effect
- # Indirect adverse effect
- # No adverse effect
- # Evaluation pending
- Canal
- Rural historic landscape district
- Historic corridor
- At-grade alignment
- Elevated alignment
- Below-grade alignment
- Alignment footprint
- Architectural APE
- Parcel

Figure 4-1
 Location Map
 Holt Lumber Company

4.2.2 South Van Ness Entrance Gate

Map ID No. 2

APN: n/a

2208 South Van Ness Avenue (vicinity), Fresno



Property Description

Constructed in the 1920s, the South Van Ness Entrance Gate is an arched truss with a sheet metal sign supported by two Ionic columns on pedestals bearing the inscription, "Fresno: The Best Little City in the U.S.A. Van Ness Ave Entrance." The structure was determined individually eligible for listing in the NRHP in February 2012. The structure is significant at the local level under Criterion A within the context of early-twentieth-century transportation. Its period of significance under Criterion A extends from the 1920s, when it was constructed, to circa 1940, when State Route 99 was realigned around the intersection of Railroad and Van Ness avenues. The gate is also significant under Criterion C for its architectural merit as an early roadside sign with a period of significance of the 1920s. Its character-defining features are its size and massing, materials (steel and sheet metal), location spanning Van Ness Avenue, Ionic columns, arched truss, and signage. The boundary of this historic property is its footprint in the right-of-way for Van Ness Avenue. The South Van Ness Entrance Gate is also listed in the CRHR, the City of Fresno's Local Register of Historic Resources (No. 82), and Fresno County's List of Historic Places (No. 136).

Application of Criteria of Adverse Effect: Indirect Adverse Effect

The construction or operation of this proposed project would not cause a direct adverse effect on this historic property. The proposed project would include the construction of an at-grade rail line near the location of this historic property, as well as an interlocking site that would parallel the west side of the extant UPRR tracks and South Railroad Avenue southwest of the property. A communication tower would be constructed about 750 feet northwest of the South Van Ness Entrance Gate. The project would also include the permanent closure of South Railroad Avenue and Van Ness Avenue and a cul-de-sac would be constructed at the intersection of South Van Ness and East Lorena avenues. Utilities would also be relocated along East California and East

Lorena avenues. The South Van Ness Entrance Gate would be approximately 20 feet from the closest construction activity (Van Ness Avenue cul-de-sac) under the proposed project, but the proposed project would not cause the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed permanent closure of South Railroad and South Van Ness avenues, and the construction of the associated South Van Ness Avenue cul-de-sac at the location of this historic property would cause an indirect adverse effect on the South Van Ness Entrance Gate under 36 CFR 800.5(a)(2)(iv) and (v). Historically, this road sign welcomed travelers from the old highway (via South Railroad Avenue) to the entrance of the city of Fresno at South Van Ness Avenue. The closure of South Railroad Avenue and the 100-foot segment of South Van Ness that intersects that street, together with the construction of a cul-de-sac on South Van Ness approximately 20 feet north of the entrance gate, would stop all through-automobile traffic at the location of this historic property. Because no automobiles would be able to pass under the gate, the use of this historic property would be changed, and the property's integrity of design and setting, which contribute to the gate's significance, would be diminished and would result in an indirect adverse effect.

The construction and operation of the proposed HST tracks, interlocking station, communications tower, or utility relocations would not result in an indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) because the South Van Ness Entrance Gate was originally constructed less than 50 feet from an extant, at-grade UPRR railway and over a highway transportation corridor. The introduction of a rail line approximately 115 feet south and west of the historic property (on the west side of the UPRR) would not, therefore, adversely diminish the industrial and transportation setting of this historic property. While the communication tower, overhead catenary system, and/or protective fencing of the proposed rail line will be visible from the gate, the introduction of these new infrastructural elements in this industrial area would not result in an indirect adverse effect (36 CFR 800.5[a][2][iv] and [v]).

The construction of the interlocking site and utility relocation would not adversely affect this historic property. The interlocking site would parallel the west side of the proposed HST track and would be a considerable distance (more than 260 feet) from the Van Ness Entrance Gate. While it may be visible from the historic property, the interlocking site would not adversely alter the setting or integrity of this historic property. Similarly, the closest utility relocations would be approximately 105 feet south and 150 northwest of the historic property, and the communication tower would be about 775 feet away to the northwest. While these project features may be visible from the historic property, they would not adversely alter the setting or integrity of this historic property.

Lastly, the proposed project would not cause adverse effects through introduction of noise or vibration (36 CFR 800.5[a][2][iv] and [v]) with implementation of the avoidance conditions proposed in Section 4.1. Vibration from impact pile driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from the project centerline, a level that would potentially cause the physical destruction, damage, or alteration of historic properties (Authority and FRA 2012). Alternative construction methods that would cause less than 0.12 in/sec PPV would be developed near historic properties that are within 135 feet of the project centerline. The implementation of this avoidance condition, i.e., development of alternative construction methods for the proposed project activities near the South Van Ness Entrance Gate, would avoid indirect adverse vibration effects on this historic property under 36 CFR 800.5(a)(2)(v). There would be no anticipated adverse effects through the introduction of noise because this project activity would not diminish the integrity of this property, which has always been located in a transportation and industrial area (36 CFR 800.5[a][2][v]).

The proposed project results in a finding of *Indirect Adverse Effect* on the South Van Ness Entrance Gate. See Figure 4-2 for the location map of the South Van Ness Entrance Gate and Figure 4-3 for existing and simulated views.

Conditions and Treatments Proposed

This section presents conditions or treatments that could avoid, minimize, or mitigate adverse effects on this historic property. These measures may be developed as stipulations in the MOA, in consultation with the SHPO, the other MOA signatories, and consulting parties such as landowners or land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.

1. Relocate Van Ness Gate to another Fresno Street

The South Van Ness Entrance Gate will be relocated to another location in the City of Fresno to avoid its destruction and minimize the direct adverse effect of physical damage or alteration. This treatment will partly mitigate the indirect adverse effect caused by the permanent closure of South Van Ness Avenue, but the relocation would require evaluation under the criteria of adverse effect and the property may still be adversely affected by the project.

A relocation plan will be prepared before relocation is implemented. The relocation plan will include input from consulting parties about relocation of the Van Ness Gate structure to provide a comprehensive and thorough approach that will best meet the needs of the parties and the property. The relocation plan for the historic property will take into account its historic site and layout. The plan will also provide for stabilization of the structure before, during, and after the move, as well as inadvertent damage.

2. Prepare Recordation Documentation

Recordation documentation of the South Van Ness Entrance Gate will be prepared, including current photographs and historic images, to mitigate the indirect adverse effect from the construction of the project. Photography would capture views of the gate as a structure that spans an active roadway and may be used in the relocation plan and/or in the interpretive or educational materials. See Section 4.1.4 for a description of this mitigation measure. The fieldwork needed for this mitigation measure (e.g., photography and reproduction of historic images), will be conducted before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

3. Prepare Interpretive or Educational Materials

The Van Ness Gate historic property will be subject to historic interpretation or preparation of educational materials about its history. The interpretive or educational materials will provide information about this specific historic property and the aspects of its significance that would be affected by the project. Interpretive or educational materials could include, but are not limited to: brochures, videos, websites, study guides, teaching guides, articles, or reports for general publication, commemorative plaques, or exhibits.

The interpretive or educational materials will use images, narrative history, drawings, or other material produced for the mitigation measure described above, including the additional recordation prepared, or other archival sources. The interpretive or educational materials may be advertised, and will be made available to the public. The interpretive materials may be made available in physical or digital formats, at local libraries, historical societies, or public buildings.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



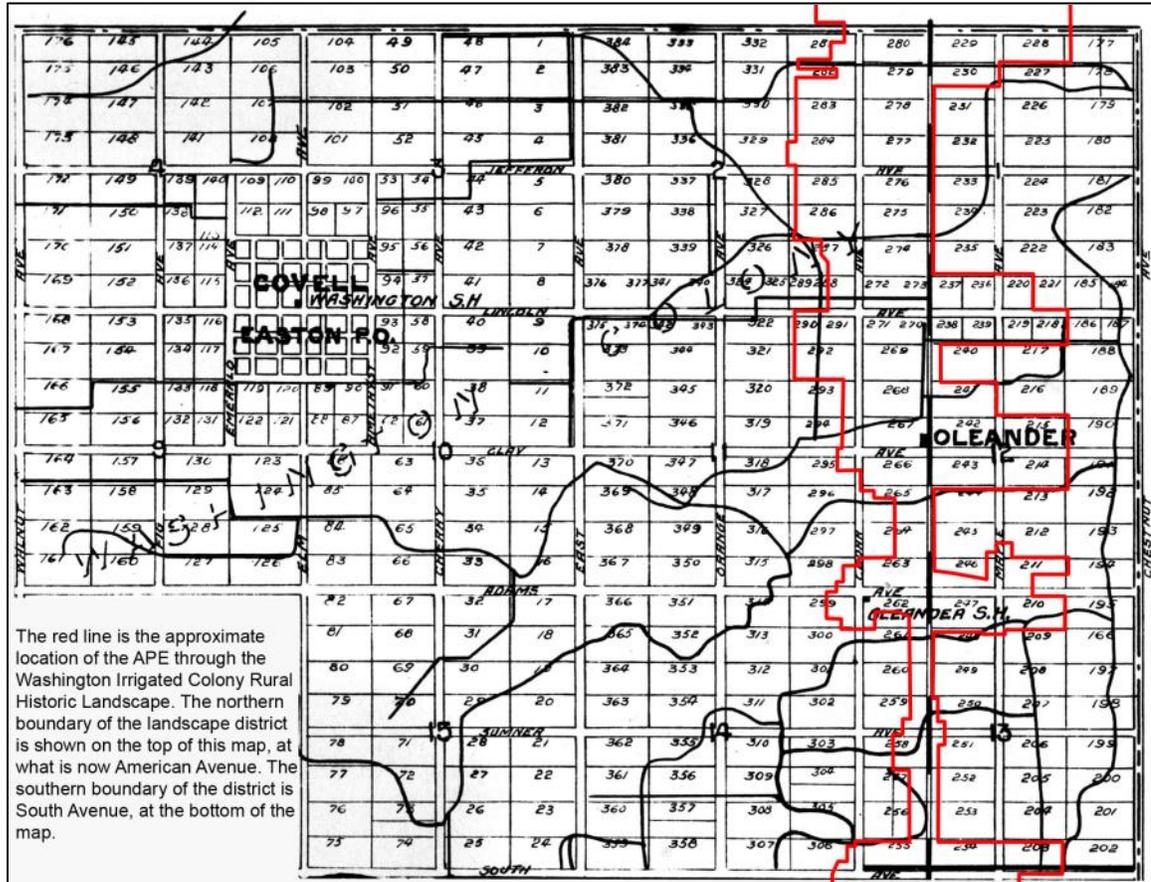
Figure 4-2
 Location map
 South Van Ness Entrance Gate



Figure 4-3
South Van Ness Entrance Gate. Existing view (top) and Simulated View (bottom)

4.2.3 Washington Irrigated Colony Rural Historic Landscape

Map ID No. 3
 APN: n/a
 Fresno County



Source: Weitze, Karen J. 1990a. "Architectural Inventory and Evaluation Form: Washington Colony," for Caltrans, District 6

Figure 4-4
 Map of Washington Colony

Property Description

The Washington Irrigated Colony Rural Historic Landscape was determined eligible for the NRHP as a rural historic landscape in Supplemental HPSR (February 2012) and is also listed in the CRHR. It is significant at the local level under Criterion A for its association with pioneering settlement patterns, and under Criterion C for its architecture. Its period of significance is between 1878 and 1910. Contributors to the district consist of 6,520 acres within the district boundaries (planted in raisin grapes, historic fruit and nut trees, oranges, and onions; dairy and pastureland; eucalyptus groves; tule ponds; minor remaining street trees); 55 farmsteads; approximately 22 linear miles of open earthen canals; the north-south, east-west grid platted for the colony; and the Santa Fe railroad line (1898) running north-south between Cedar and Maple avenues. The original study of the landscape district also identified 522 post-1910, noncontributing buildings and 1,060 noncontributing acres within the original boundaries of the Washington Irrigated Colony. Only a portion of this rural historic landscape is within the built environment APE for this project (Figure 4-4).

The built environment APE for this project includes five contributing elements of this rural historic landscape, which are summarized in Table 4-3 and are described following the general effects analysis for the landscape district below. Along with the five contributors (3 farmsteads and 2 canals), about 80 agricultural parcels in Fresno County, and portions of the orthogonal street grid, exist within the APE. Character-defining features of the rural historic landscape include the contributing farmsteads, agricultural acreage planted in historic crops, orthogonal street grid, earthen canals, and the land use pattern. The boundary of the rural landscape extends from East American Avenue on the north, East South Avenue on the south, South Walnut Avenue on the west, and South Chestnut Avenue on the east.

Table 4-3

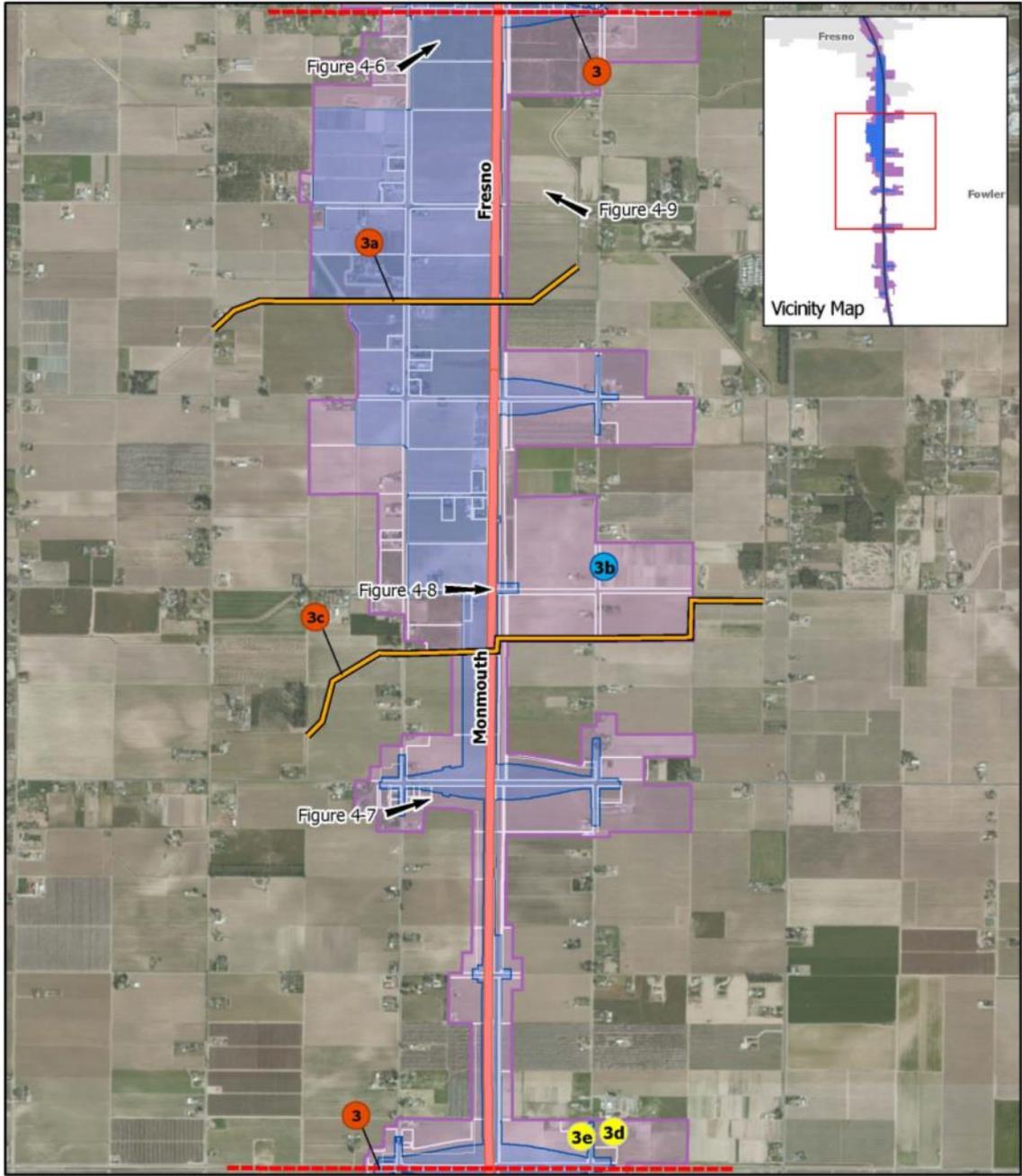
Washington Irrigated Colony Rural Historic Landscape and contributing elements within the APE

Map ID No.	APN	Resource Name and Address	City, County	Year Built	CHRS Status Code	NRHP Criteria	Effect Finding
3		Washington Irrigated Colony Rural Historic Landscape	n/a, Fresno	1878-present	2	A, C	Adverse Effect - Direct
3a	n/a	Contributor: Washington Colony Canal	n/a, Fresno	1878-80	2D2	A, C	Adverse Effect - Direct
3b	33425016	Contributor: 6422 S. Maple Ave.	n/a, Kings	ca. 1908	2D2	A, C	No Adverse Effect
3c	n/a	Contributor: North Branch Oleander Canal	n/a, Fresno	ca. 1880	2D2	A, C	Adverse Effect - Direct
3d	33511011	Contributor: 7870 S. Maple Ave.	n/a, Fresno	1911	3D	A, C	Adverse Effect - Indirect
3e	33511042	Contributor: 7887 S. Maple Ave.	n/a, Fresno	ca. 1900	2D2	A, C	Adverse Effect - Indirect

Application of Criteria of Adverse Effect: Direct Adverse Effect

The construction or operation of the proposed project would cause a direct adverse effect on this rural historic landscape (Figure 4-5). The project would require the construction of an at-grade rail line, power traction stations, communication towers, grade separations or overcrossings, canal and freight line relocations, as well as one road closure

The construction of the proposed at-grade rail line would result in the partial removal, physical destruction, or damage to the North Branch of the Oleander Canal and to the Washington Colony Canal, both of which contribute to the landscape’s historical significance. The construction of at-grade tracks and two radio communication towers, which would be 100 feet tall and 8 feet in diameter at the base, would also physically destroy or damage contributing agricultural lands that have historically been planted in raisin grapes, historic fruit and nut trees, oranges, or onions. The permanent closure of East Clayton Avenue at the proposed HST tracks and the construction of overcrossings for East South, East Adams, East American, and East Lincoln avenues would adversely alter the orthogonal street grid, which is a contributing element of the rural historic landscape. These components of the proposed project would result in a direct adverse effect on the Washington Irrigated Colony Rural Historic Landscape because they would result in the partial removal of, the physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii), and (iii) (Figures 4-6 to 4-9).



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013

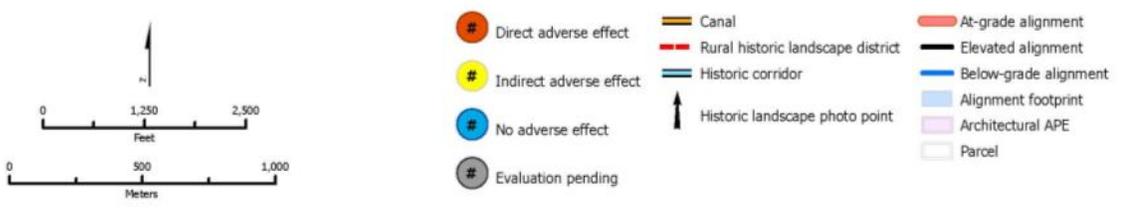


Figure 4-5
 Location map
 Washington Irrigated Colony Rural Historic Landscape



Figure 4-6
Existing View (top) and Simulated View (bottom)
View from South Cedar Avenue looking northeast to proposed
overcrossing along East American Avenue
Washington Irrigated Colony Rural Historic Landscape



Figure 4-7
Existing View (top) and Simulated View (bottom)
View from South Cedar Avenue looking northeast to proposed
overcrossing along East Adams Avenue
Washington Irrigated Colony Rural Historic Landscape



Figure 4-8
Existing View (top) and Simulated View (bottom)
View of proposed HST tracks and road closure at East Clayton Avenue
Washington Irrigated Colony Rural Historic Landscape



Figure 4-9
Existing View (top) and Simulated View (bottom)
View west of proposed HST tracks looking northwest from East Jefferson Avenue
Washington Irrigated Colony Rural Historic Landscape

The proposed project would also affect contributing elements of the landscape district and would result in diminished integrity of setting, location, design, and feeling of these components of the historic property (36 CFR 800.5[a][2][iv] and [v]). The effects include direct effects on two contributing canals, and indirect adverse effects on two contributing farmsteads; see Table 4-3.

The proposed project results in a finding of *Direct Adverse Effect* on the historic property known as the Washington Irrigated Colony Rural Historic Landscape. Treatments that may be selected for this property are listed below, after the visual simulations from multiple vantage points. Following the illustrations, effects analysis for the five contributing elements within the APE begins in Section 4.2.3.1.

Conditions and Treatments Proposed

This section presents conditions or treatments that could avoid, minimize, or mitigate adverse effects on this historic property. These measures may be developed as stipulations in the MOA, in consultation with the SHPO, the other MOA signatories, and consulting parties such as landowners or land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.

1. Project-wide Mitigation

The Washington Irrigated Colony Rural Historic Landscape will be subject to mitigation measures to minimize noise and vibration effects as described in Section 4.1.3, as well as the preparation of a plan for repair of inadvertent damage and historic recordation/documentation, as described in Section 4.1.4. The planned reduction of the noise and vibration will minimize effects on this rural historic landscape district along the project route. The plan for repair of inadvertent damage will identify specific contributing elements, such as canals, within the district that may require this treatment.

Updated recordation documentation of the Washington Irrigated Colony Rural Historic Landscape will be prepared to mitigate the indirect adverse effect from the construction of the project. Photography will capture views of the district and its contributing elements and may be used in the preparation of interpretive or educational materials. Section 4.1.4 describes this mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, mapping, and reproduction of historic images), will be conducted before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

2. Develop Protection and Stabilization Measures

Protection and stabilization measures will be developed before project construction for any contributing elements of the Washington Irrigated Colony Rural Historic Landscape that may require protection, such as historic irrigation canals. This treatment would ensure that adverse effects on the historic property would be minimized to the extent possible. Such measures could include physical barriers or canal wall stabilization to protect historic properties from construction activities (e.g., excavation, grading, construction equipment, or laydown areas).

3. Avoid Historic Architectural Resources at the Fresno Heavy Maintenance Facility Site

To avoid allowing construction of the heavy maintenance facility at the Fresno Works-Fresno HMF site to cause potential direct and indirect adverse effects, and direct and indirect substantial adverse changes to historic irrigation canals, the facility will be sited and constructed north of BNSF milepost 991.6. This treatment will avoid potential direct adverse effects caused by construction of the facility on the two historic canals located south of that point.

4. Prepare Recordation/Documentation

Recordation documentation of the Washington Irrigated Colony Rural Historic Landscape will be prepared to mitigate adverse effects caused by construction of the project. The updated recordation will include identification, description, and photography of contributing elements, character-defining features, and other elements of the landscape district such as canals and streets. This documentation effort may consist of preparing updated recordation forms (DPR 523), or other recordation methods stipulated in the MOA, and will be used to update the documentation of the remaining contributing elements of the district. See Section 4.1.4 for a description of this treatment measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

5. Prepare Interpretive or Educational Materials

The Washington Irrigated Colony Rural Historic Landscape historic property will be subject to historic interpretation or preparation of educational materials about its history. The interpretive or educational materials will provide information about this specific historic property and the aspects of its significance that would be affected by the project. Interpretive or educational materials could include, but are not limited to: brochures, videos, websites, study guides, teaching guides, articles or reports for general publication, commemorative plaques, or exhibits.

The interpretive or educational materials will use images, narrative history, drawings, or other material produced for the mitigation described above, including the additional recordation prepared, or other archival sources. The interpretive or educational materials should be advertised, and made available to, and/or disseminated to the public. The interpretive materials may be made available in physical or digital formats at local libraries, historical societies, or public buildings.

4.2.3.1 Washington Colony Canal

Map ID No. 3a
APN: n/a
Fresno County



Property Description

The Washington Colony Canal is a dirt-lined irrigation canal constructed between about 1878 and 1880. The canal is a contributor to the Washington Irrigated Colony Rural Historic Landscape. The rural historic landscape and the contributing canal were determined eligible for the NRHP and listed in the CRHR in February 2012. The Washington Colony Canal is not individually eligible for listing in the NRHP or the CRHR. Character-defining features of this canal include its original alignment, cross section, unlined construction, and any remaining original control structures. Its historic boundary is its right-of-way or the legal parcels created for its right-of-way.

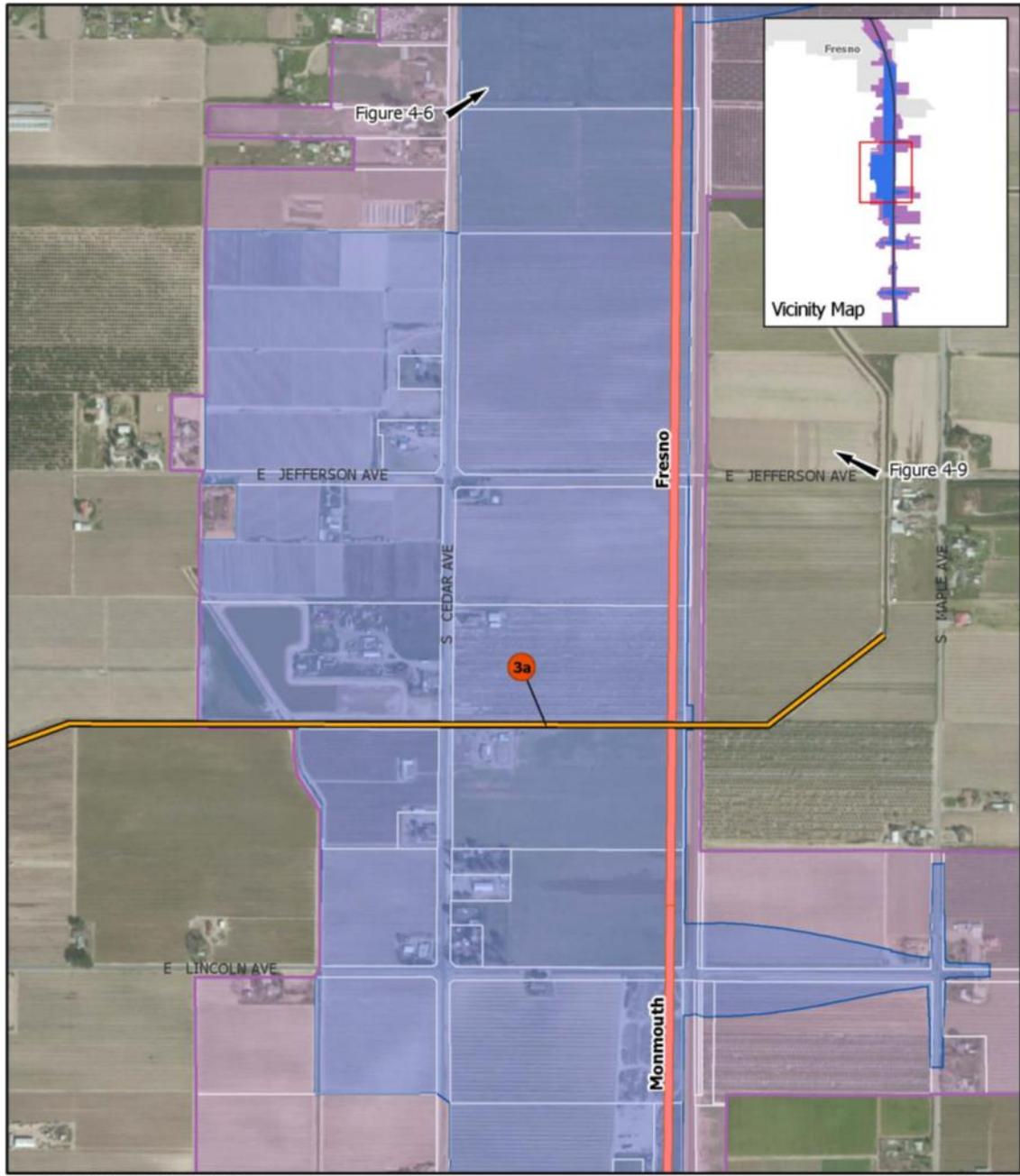
Application of Criteria of Adverse Effect: Direct Adverse Effect

The proposed project would cause direct adverse effects on the Washington Colony Canal as a contributing element to the historic landscape. The project would construct an at-grade rail line in the vicinity of this historic property. The at-grade rail line would be constructed through the alignment of the historic canal and would require the relocation of a segment of the canal in the immediate vicinity of the canal's intersection with the proposed tracks. As a result, the proposed project would result in the partial removal of, the physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii), and (iii).

The proposed project results in a finding of ***Direct Adverse Effect*** on the Washington Colony Canal as a contributing element to the historic landscape. See Figure 4-10 for the location map of the historic property.

Conditions and Treatments Proposed

The Washington Colony Canal is a contributing element of the Washington Irrigated Colony Rural Historic Landscape and is subject to the treatments proposed in earlier in Section 4.2.3 for the landscape and its contributing elements. Those conditions or treatments could avoid, minimize, or mitigate adverse effects on this contributing element of a historic property. These measures will be developed as stipulations in the MOA, in consultation with the SHPO, the other MOA signatories, and consulting parties such as landowners or land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-10
 Location Map
 Washington Colony Canal

4.2.3.2 6422 South Maple Avenue

Map ID No. 3b
APN: 33425016
Fresno County



Property Description

This historic property consists of a two-story, wood-frame, Queen Anne-style residence with an attached former tank house constructed around 1908. The residence and tank house were determined eligible for the NRHP in February 2012 as a contributor to the Washington Irrigated Colony Rural Historic Landscape, which is significant at the local level under Criterion A for its association with pioneering settlement patterns, and under Criterion C for its architecture. The rural historic landscape was determined eligible for the NRHP in February 2012. The period of significance for the historic landscape is from 1878 to 1910. The historic property boundary as part of the Washington Irrigated Colony Rural Historic Landscape is the historic district boundaries. Character-defining features include the general agricultural setting of the property surrounded by fields and other rural farmsteads, and its orientation to Maple Avenue.

The residence and its attached tank house were also determined individually eligible for NRHP and was individually listed in the CRHR in February 2012. The property is significant at the local level under Criterion C for its Queen Anne-style architecture. The tank house is also representative of a distinct method of constructing domestic water supply systems in rural California between 1870 and 1930. The period of significance is the construction date of these buildings, circa 1908. The elements that define the house as Queen Anne style and the elements that define the tank house are also character-defining features. These elements are the asymmetrical façade, roof form of the house and tank house, pediments including the decorative shingles, cutaway bay windows, wide window surrounds, and the full-width porch including support columns. The historic property boundary is the legal parcel boundary. A detached garage on this property does not contribute to the significance of these buildings or the historic landscape.

Application of Criteria of Adverse Effect: No Adverse Effect

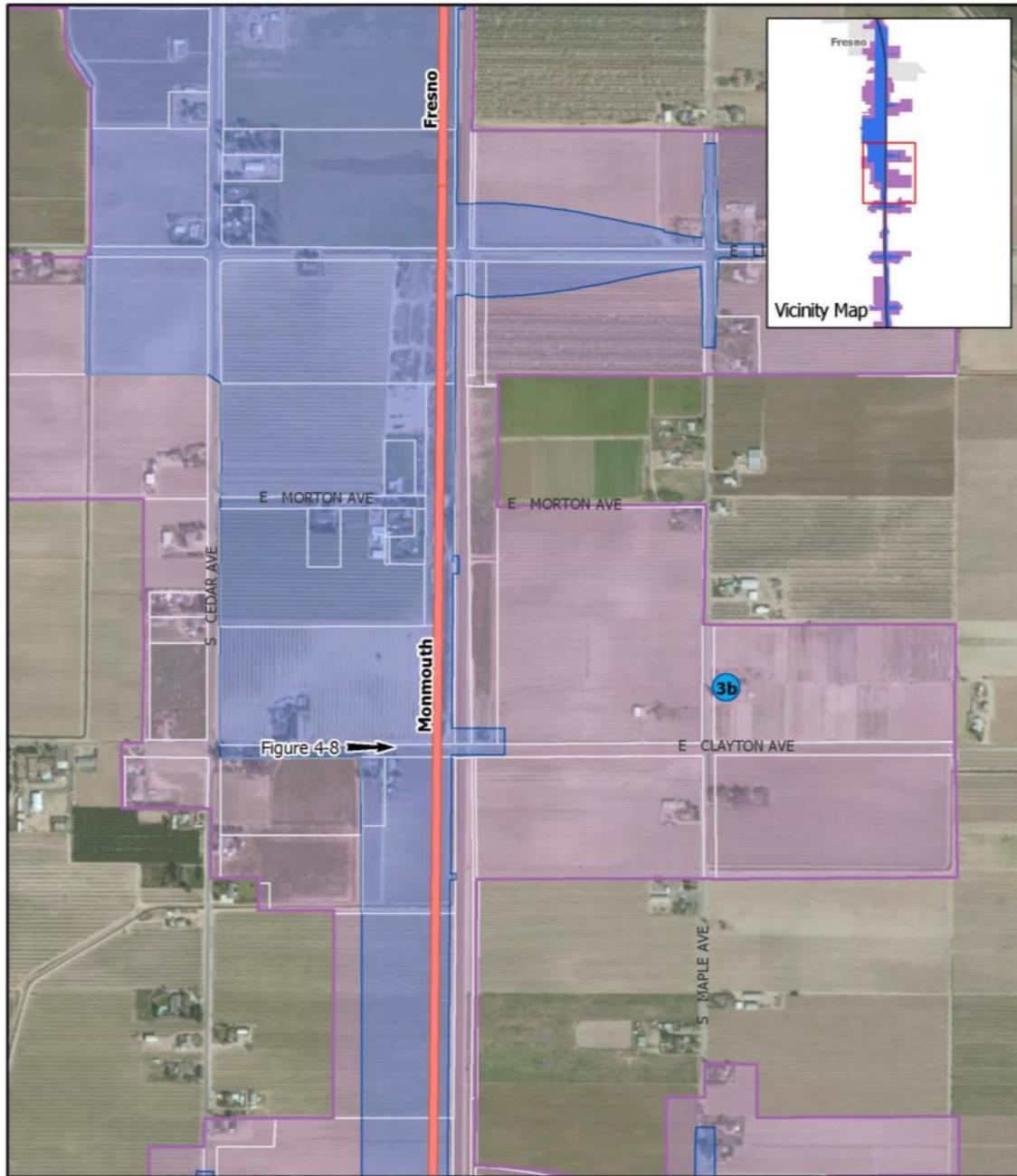
The proposed project would not cause direct or indirect adverse effects on this historic property from the construction or operation of an at-grade rail line, the permanent closure of East Clayton Avenue, or the relocation of a canal. The historic property would be more than 1,100 feet from all project construction activity; therefore, there would be no direct adverse effect under 36 CFR 800.5(a)(2)(i), (ii), and (iii).

Because this historic property would be a considerable distance (more than a 1,100 feet) from the proposed project components, the project would not result in indirect adverse effects through potential visual, noise, or vibration impacts (36 CFR 800.5[a][2][iv] or [v]). Although the proposed at-grade tracks may be visible from this property, the construction and operation of this component of the project would not cause adverse visual effects. The historic property was originally constructed around the turn of the twentieth century near an existing nineteenth-century rail line. The introduction of a new, at-grade rail line would not result in indirect adverse visual effects from the construction or operation of the proposed tracks (36 CFR 800.5[a][2][iv] and [v]). Similarly, the closure of East Clayton Street would not cause indirect adverse effects because it would not change the integrity of the property's significant historic features or its use, both of which contribute to its historic significance.

The proposed project results in a finding of *No Adverse Effect* on 6422 South Maple Avenue. See Figure 4-11 for the location map of the historic property.

Conditions and Treatments Proposed

The project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-11
 Location Map
 6422 South Maple Avenue

4.2.3.3 North Branch of the Oleander Canal

Map ID No. 3c
APN: n/a
Fresno County



Property Description

The North Branch of the Oleander Canal is a dirt-lined irrigation canal constructed in the 1880s. The canal is a contributing element of the Washington Irrigated Colony Rural Historic Landscape. The contributing canal and rural historic landscape were determined eligible for the NRHP and listed in the CRHR February 2012. The Oleander Canal is not individually eligible for listing in the NRHP or the CRHR. Character-defining features include its original alignment, cross section, unlined construction, and any remaining original control structures. The boundary of this historic property is its right-of-way, defined by the historic boundary of the canal parcel or easement, a narrow strip of land that contains the canal and the berms on either side, or the legal parcels created for its right-of-way.

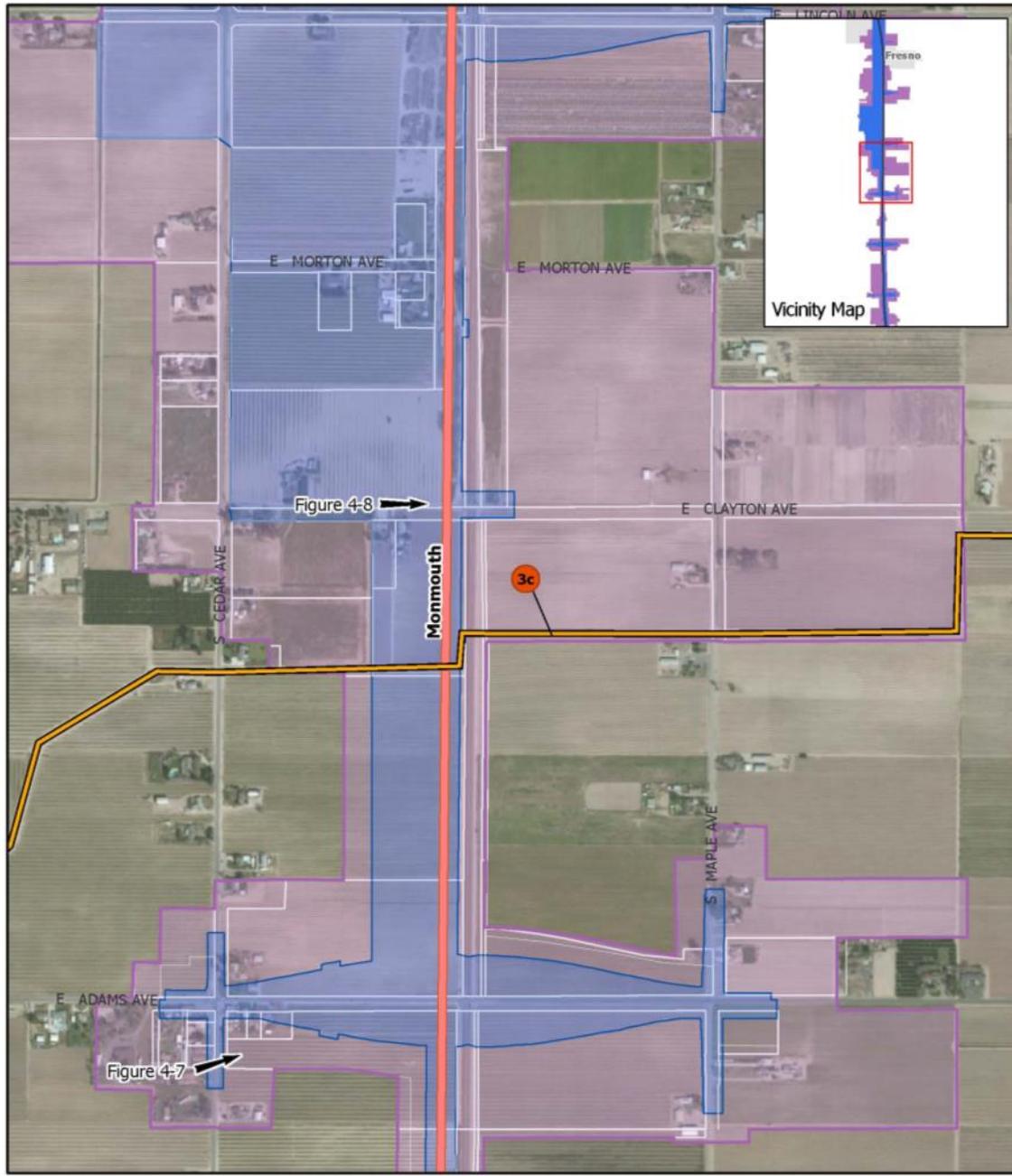
Application of Criteria of Adverse Effect: Direct Adverse Effect

The proposed project would cause direct adverse effects on the North Branch of the Oleander Canal as a contributing element to the historic landscape from the construction an at-grade rail line near this historic property. The at-grade rail line would be built through the alignment of this historic canal, and the project would relocate a short segment of the canal in the immediate vicinity of the canal's intersection with the proposed tracks. As a result, the proposed project would cause the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii), and (iii).

The proposed project results in a finding of *Direct Adverse Effect* on the North Branch of the Oleander Canal as a contributing element to the historic landscape. See Figure 4-12 for the location map of the historic property.

Conditions and Treatments Proposed

The North Branch of the Oleander Canal is a contributing element of the Washington Irrigated Colony Rural Historic Landscape and is subject to the treatments proposed earlier in Section 4.2.3, for the landscape and its contributing elements. Those conditions or treatments could avoid, minimize, or mitigate adverse effects on this contributing element of a historic property. These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners, land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-12
 Location Map
 North Branch of the Oleander Canal

4.2.3.4 7870 South Maple Avenue

Map ID No. 3d
APN: 33511011
Fresno County



Property Description

This contributing element of the landscape historic property consists of a wood-frame Neoclassical-style residence constructed in 1911. The residence is eligible for the NRHP as a contributor to the Washington Irrigated Colony Rural Historic Landscape. The original landscape district study concluded that 7870 S. Maple Avenue was a contributing element of the colony landscape and estimated that the building was built in about 1910, just within the period of significance for the historic landscape (1878 to 1910). Subsequent research has found that the house was built in 1911. The updated evaluation of this residence concludes that the residence does contribute to the continuity of the landscape district and should be considered a contributing element.

Although the property at 7870 South Maple Avenue is not individually eligible for listing in the NRHP or the CRHR, it is a contributor to the rural historic landscape. Its character-defining features as include the general agricultural setting of the residence surrounded by fields and other rural farmsteads within the historic landscape, and its orientation to South Maple and East South avenues, as well as those architectural features representative of the Neoclassical style: one-story hip-roof form, symmetrical façade, prominent gable dormers with round vents, full-width porch with square columns, horizontal wood siding, double-hung wood sash windows, and cutaway bay window. The secondary residence and storage building on this property do not contribute to the significance of the rural historic landscape. The historic property boundary for this contributing element to the rural historic landscape is its current legal parcel. Additionally, this property is eligible for the CRHR as a contributor to the rural historic landscape district.

Application of Criteria of Adverse Effect: Indirect Adverse Effect

The proposed project includes the construction of an at-grade rail line, canal and freight line relocations, and the construction of an overcrossing for East South Avenue near this historic

property. All construction activity would be more than 240 feet south and east of 7870 South Maple Avenue. The project would require a property take of approximately 0.5 acre (approximately 2.5%) from this 19-acre farm, which would constitute the physical alteration of this individual parcel as it relates to the larger Washington Irrigated Colony Rural Historic Landscape. The direct adverse effects on the landscape district in general are described above, in Section 4.2.3). The proposed construction activities would not cause the partial removal of, physical destruction of, or damage to the buildings of this historic property (36 CFR 800.5[a][2][i]), [ii], and [iii]).

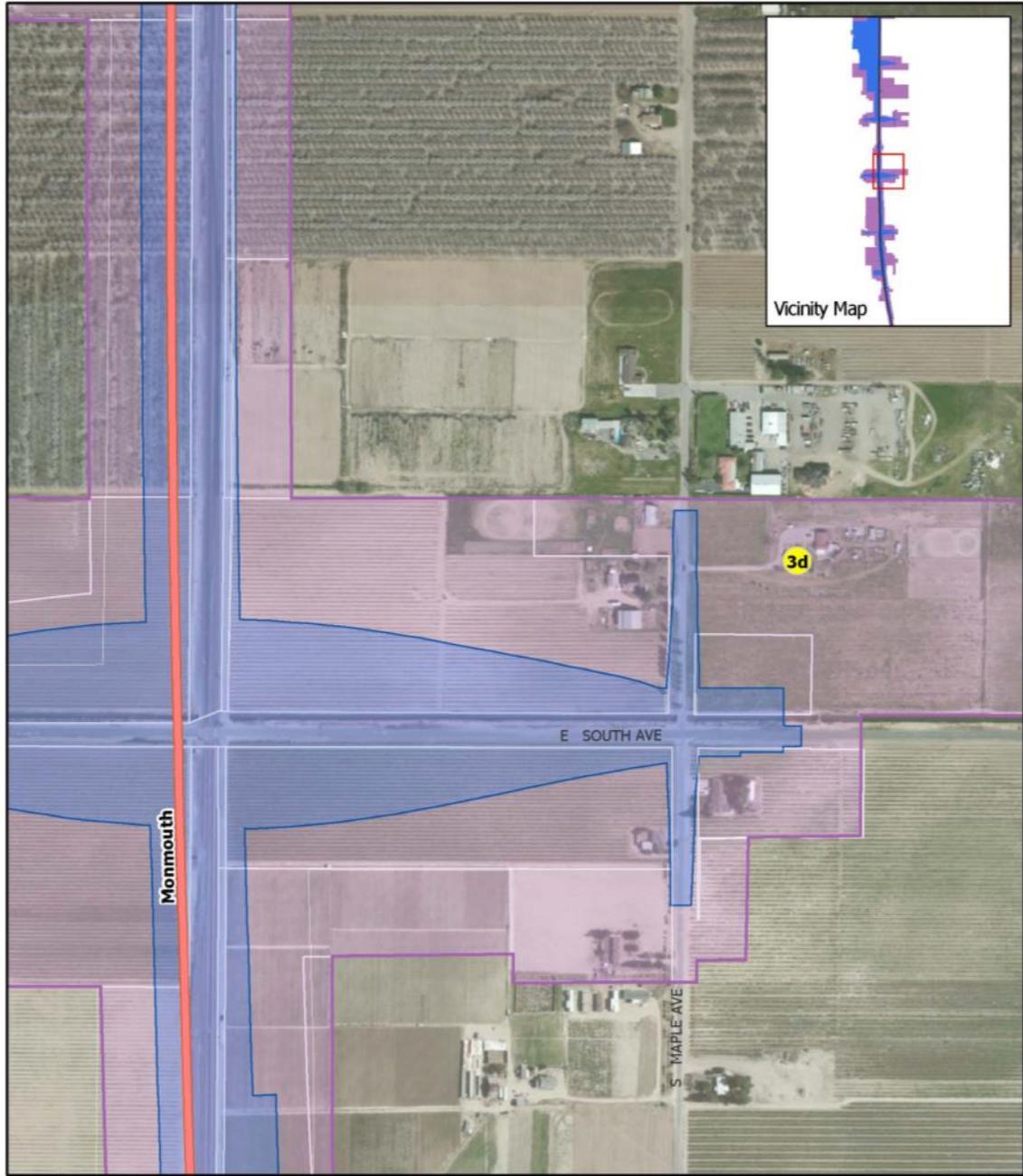
The proposed project would result in an indirect adverse effect under 36 CFR 800.5(a)(2)(iv) and (v) to this historic property from the construction of an overcrossing for East South Avenue. The replacement of a rural, at-grade road with an elevated structure about 245 feet from this historic residence would affect the setting and views to and from this historic property. The size, scale, and massing of the elevated overcrossing structure is not consistent with the historic setting and would cause an indirect adverse effect on the historic design, setting, location, and feeling from the introduction of new visual elements.

The proposed freight line relocation would be more than 1,500 feet west of the historic residence, and just east of the proposed at-grade HST tracks, which would be located along the west side of an existing at-grade rail line. The proposed HST tracks would be more than 1,600 feet from the closest building within this complex. Although both the freight relocation and the HST tracks may be visible from this front (west side) of this property, the construction and operation of either project component would not cause adverse visual effects. The historic property was originally constructed just after the turn of the twentieth century near an existing nineteenth-century rail line. The relocation of the existing rail line or the introduction of a new, at-grade rail line would not result in indirect visual adverse effects from the construction or operation of project tracks (36 CFR 800.5[a][2][iv] and [v]). The relocation of a segment of a canal south of this historic property would also not cause an indirect adverse effect through the introduction of new visual elements because the at-grade canal is more than 340 feet from this historic residence and is not visible currently from the residence.

The proposed project results in a finding of *Indirect Adverse Effect* on 7870 South Maple Avenue as a contributing element to the historic landscape. See Figure 4-13 for the location map of the historic property and Figure 4-14 for existing and simulated views.

Conditions and Treatments Proposed

The property at 7870 South Maple Avenue is a contributing element of the Washington Irrigated Colony Rural Historic Landscape and is subject to the treatments proposed earlier in Section 4.2.3, for the landscape and its contributing elements. . These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners, land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-13
 Location Map
 7870 South Maple Avenue



Figure 4-14
7870 South Maple Avenue. Existing View (top) and Simulated View (bottom)

4.2.4 7887 South Maple Avenue

Map ID No. 3e
APN: 33511042
7887 South Maple Avenue, Fresno County



Property Description

This contributing element of a historic property consists of a wood-frame Folk Victorian-style residence constructed around 1900. The residence is eligible for the NRHP as a contributor to the Washington Irrigated Colony Rural Historic Landscape, which was determined eligible for listing in the NRHP at the local level of significance under Criterion A for its association with pioneering settlement patterns, and under Criterion C for its architecture. The period of significance for the historic landscape is from 1878 to 1910, and the historic property boundary as part of the Washington Irrigated Colony Rural Historic Landscape is the historic district boundaries. The property at 7887 South Maple Avenue is not individually eligible for listing in the NRHP or the CRHR. Its character-defining features as a contributor to the historic rural landscape include the general agricultural setting of the residence surrounded by fields and other rural farmsteads within the historic landscape, and its orientation to Maple Avenue, as well as those architectural features representative of the Folk Victorian style. The garage and hay/horse shelter on this property do not contribute to the significance of the rural historic landscape. The historic property boundary for this contributing element to the rural historic landscape is its current legal parcel. Additionally, this property is eligible for the CRHR as a contributor to the rural historic landscape and was listed in the CRHR in February 2012.

Application of Criteria of Adverse Effect: Indirect Adverse Effect

The proposed project includes the construction of an at-grade rail line, canal and freight line relocations, and the construction of an overcrossing for East South Avenue near this contributing element of a historic property. All construction activity would be more than 80 feet south and west of 7887 South Maple Avenue. The project would require a property take of approximately 5.5 acres (approximately 36%) from this 15-acre farm, which would constitute the physical alteration of this individual parcel as it relates to the larger Washington Irrigated Colony Rural Historic Landscape. The direct adverse effects on the landscape district in general are described

above, in Section 4.2.3). The proposed construction activities would not cause the partial removal of, physical destruction of, or damage to the buildings of this historic property (36 CFR 800.5[a][2][i]), [ii], and [iii]).

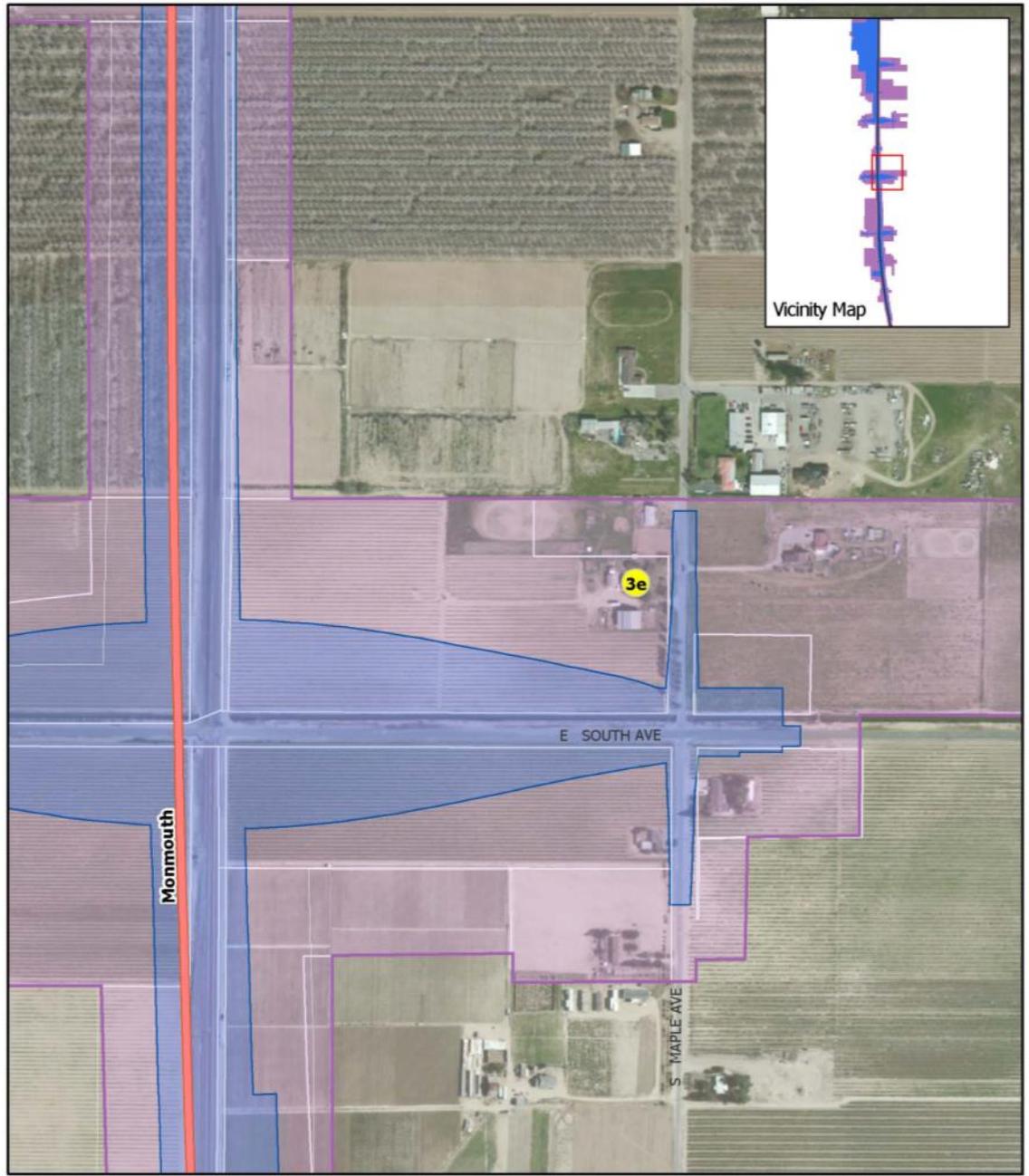
The proposed project would result in an indirect adverse effect under 36 CFR 800.5(a)(2)(iv) and (v) to this historic property from the construction of an overcrossing for East South Avenue. The replacement of a rural, at-grade road with an elevated structure about 190 feet from this historic residence would affect the setting and views to and from this historic property. The size, scale, and massing of the elevated overcrossing structure is not consistent with the historic setting and would cause an indirect adverse effect on the historic design, setting, location, and feeling from the introduction of new visual elements.

The proposed freight line relocation would be more than 1,000 feet west of the historic residence, and just east of the proposed at-grade HST tracks, which would be located along the west side of an existing at-grade rail line. The proposed HST tracks would be more than 1,100 feet from the closest building within this complex. Although both the freight relocation and the HST tracks may be visible from this rear (west side) of this property, the construction and operation of either project component would not cause adverse visual effects. The historic property was originally constructed around the turn of the twentieth century adjacent to an existing nineteenth-century rail line. The relocation of the existing rail line or the introduction of a new, at-grade rail line would not result in indirect visual adverse effects from the construction or operation of project tracks (36 CFR 800.5[a][2][iv] and [v]). The relocation of a segment of a canal south of this historic property would also not cause an indirect adverse effect through the introduction of new visual elements because the at-grade canal is more than 220 feet from this historic residence and is not visible currently from the residence.

The proposed project results in a finding of *Indirect Adverse Effect* on 7887 South Maple Avenue as a contributing element to the historic landscape. See Figure 4-15 for the location map of the historic property and Figure 4-16 for existing and simulated views.

Conditions and Treatments Proposed

The property at 7887 South Maple Avenue is a contributing element of the Washington Irrigated Colony Rural Historic Landscape and is subject to the treatments proposed earlier in Section 4.2.3, for the landscape and its contributing elements. These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners and land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-15
 Location Map
 7887 South Maple Avenue



Figure 4-16
7887 South Maple Avenue, Existing View (top) and Simulated View (bottom).

4.2.5 People's Ditch

Map ID No. 4
APN: n/a
Kings County



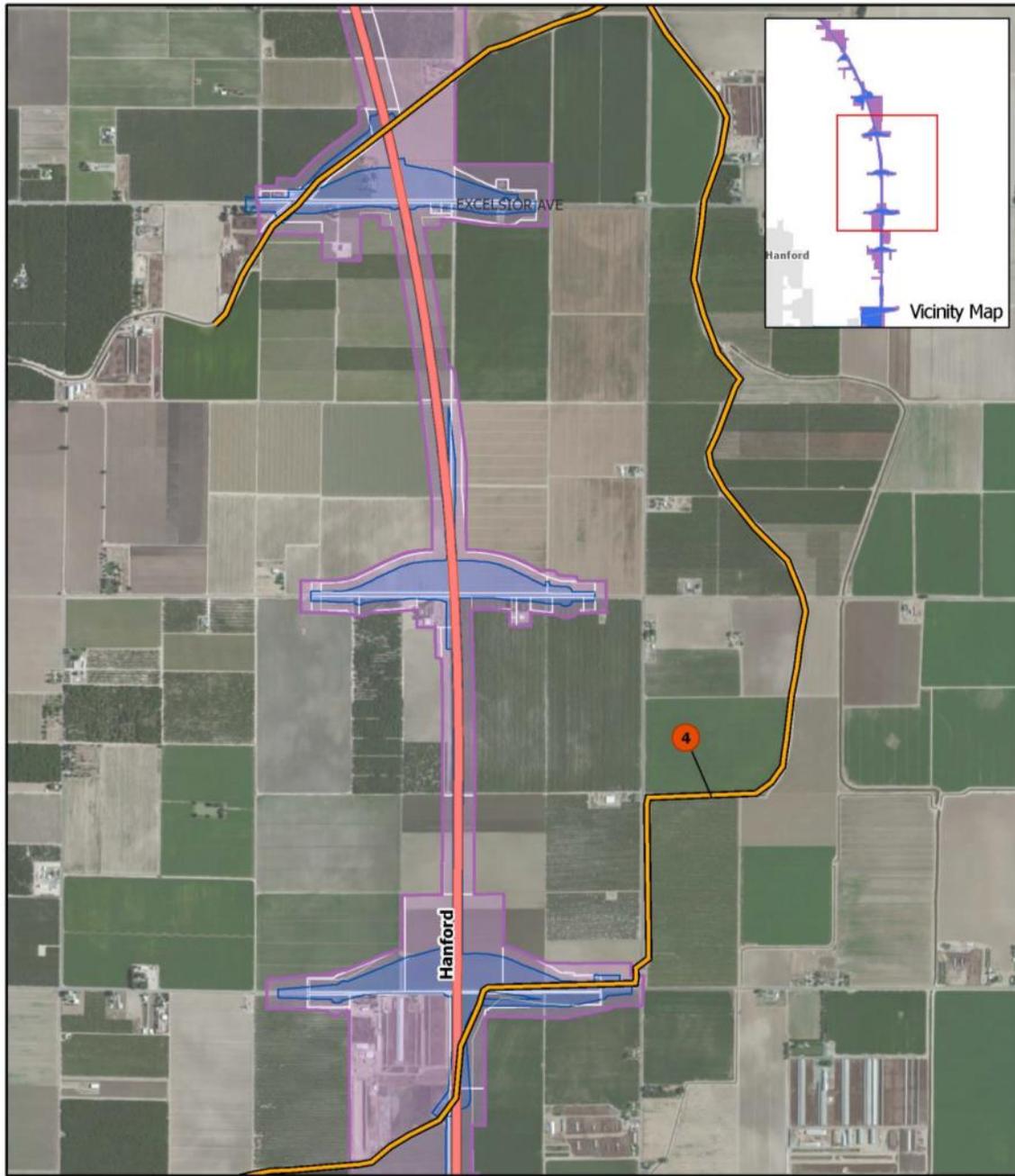
Property Description

People's Ditch is an earth-lined irrigation canal system constructed by local farmers between 1873 and 1875. The aggregate length of the main channel and its branches total 37 miles. A 1.4-mile segment of the main channel and a 4-mile segment of its east branch were determined eligible for the NRHP and listed in the CRHR in February 2012. People's Ditch is significant at the state level under Criterion A for its important role in the successful agricultural settlement pattern in the Mussel Slough region in the 1870s that developed and endured through the establishment of the secure irrigation water supply delivered by this and the other local pioneering canal systems. The canal is also important for its association with the events that led to the Mussel Slough Tragedy in 1880, a well-known deadly conflict that arose during land disputes between San Joaquin Valley settlers and the Southern Pacific Railroad at the time. The period of significance extends from 1873, when construction of the ditch was begun, to 1880 when the Mussel Slough Tragedy occurred. Character-defining features of People's Ditch include its alignment through the Mussel Slough area northeast of Hanford, the agricultural setting of this area, and its earth-lined banks. The boundary of this historic property is the canal right-of-way, or the legal parcels created for its right-of-way, along these two segments of the canal.

Application of Criteria of Adverse Effect: Direct Adverse Effect

The proposed project would cause direct adverse effects on this historic property (36 CFR 800.5[a][2][i], [ii] and [iii]) from the construction of an at-grade rail line, new grade separations and overcrossings to divert automobile traffic over the HST tracks at Excelsior and Flint avenues, power traction substations, and radio sites. The proposed tracks and Excelsior Avenue grade separation and overcrossing would result in the removal, physical destruction, or damage to the People's Ditch, which would cause a direct adverse effect on the property. Similarly, the proposed tracks and Flint Avenue grade separation and overcrossing would cause the removal, physical destruction, or damage of East Branch People's Ditch, resulting in a direct adverse effect on this historic property. The project would also include the relocation of a half-mile section of the East Branch People's Ditch north and south of Flint Avenue. This relocation of a segment of this historic canal would also result in a direct adverse effect under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

The proposed project results in a finding of *Direct Adverse Effect* on People's Ditch. See Figure 4-17 for the location map of the historic property.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-17
 Location Map
 People's Ditch

Conditions and Treatments Proposed

This section presents conditions or treatments that could avoid, minimize, or mitigate adverse effects on this historic property. These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners, land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.

1. Develop Protection and Stabilization Measures

Protection and stabilization measures will be developed before project construction for the segments of the People's Ditch that will be retained adjacent to project work that will alter the canal. This treatment will ensure that adverse effects on this historic property will be minimized to the extent possible during work that will alter a segment of the canal structure. Such mitigation measures will include, but are not necessarily limited to protection of the above ground historic canal from construction activities, specifically the demolition, re-alignment, and/or underground piping of a section of the canal.

2. Prepare Recordation Documentation

Recordation documentation of the adversely affected portion of People's Ditch will be prepared to mitigate the adverse effect from the construction of the project. Photography will capture views of the canal within the context of the larger historic landscape to which it contributes, and may be used in the preparation of interpretive or educational materials. See Section 4.1.4 for a description of this mitigation measure. The fieldwork that this mitigation measure requires (e.g., photography and reproduction of historic images), will be conducted before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

3. Plan Repair of Inadvertent Damage

A plan for repair of inadvertent damage of the People's Ditch will be prepared and implemented as a treatment to minimize adverse effects caused by project construction activities on the portions of the canal structure next to the project, as described in Section 4.1.4. The plan would be developed before construction begins. The plan may use the preconstruction photographic documentation prepared for the photo recordation (above) as the baseline condition for assessing damage and will include the protocols for documentation of inadvertent damage (should it occur), notification, coordination, and reporting to the SHPO and to the landowners or land-owning agencies.

4.2.6 Lakeside Cemetery

Map ID No. 5
APN: 028202004000
Kings County



Property Description

This historic property is a 1.5-acre rural cemetery located about 7 miles south of the city of Hanford. Established in the 1870s, the Lakeside Cemetery was determined individually eligible for the NRHP and listed in the CRHR in February 2012. The cemetery is significant under Criterion A, for its association with the early settlement of the area south of Hanford that would become known as the Lakeside District. This locally significant pattern of development resulted in a community based on irrigated agriculture, with a school, a church, and a common identity as members of the Lakeside District. Many pioneering families are represented by burials in the Lakeside Cemetery and the property has strong associations with the early years of development in the Lakeside District. This cemetery is one of few remaining properties that have survived from the early period of settlement, and as such, meets the Criteria Consideration D requirement for association with the settlement of the area. Character-defining features include the size and layout of the cemetery and the extant graves, headstones, and landscaping layout that date to its period of significance, as well as its open agricultural setting. Its period of significance is 1874, the earliest extant burial, to 1930, when most of the burials of local pioneers ceased. The boundary of this historic property is its legal parcel.

Application of Criteria of Adverse Effect: Indirect Adverse Effect

The proposed project includes the construction of an at-grade rail line, roadway overcrossing for Kent Avenue, and radio site near this historic property. None of these construction activities would result in the partial removal of, the physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the proposed project would not cause a direct adverse effect on Lakeside Cemetery.

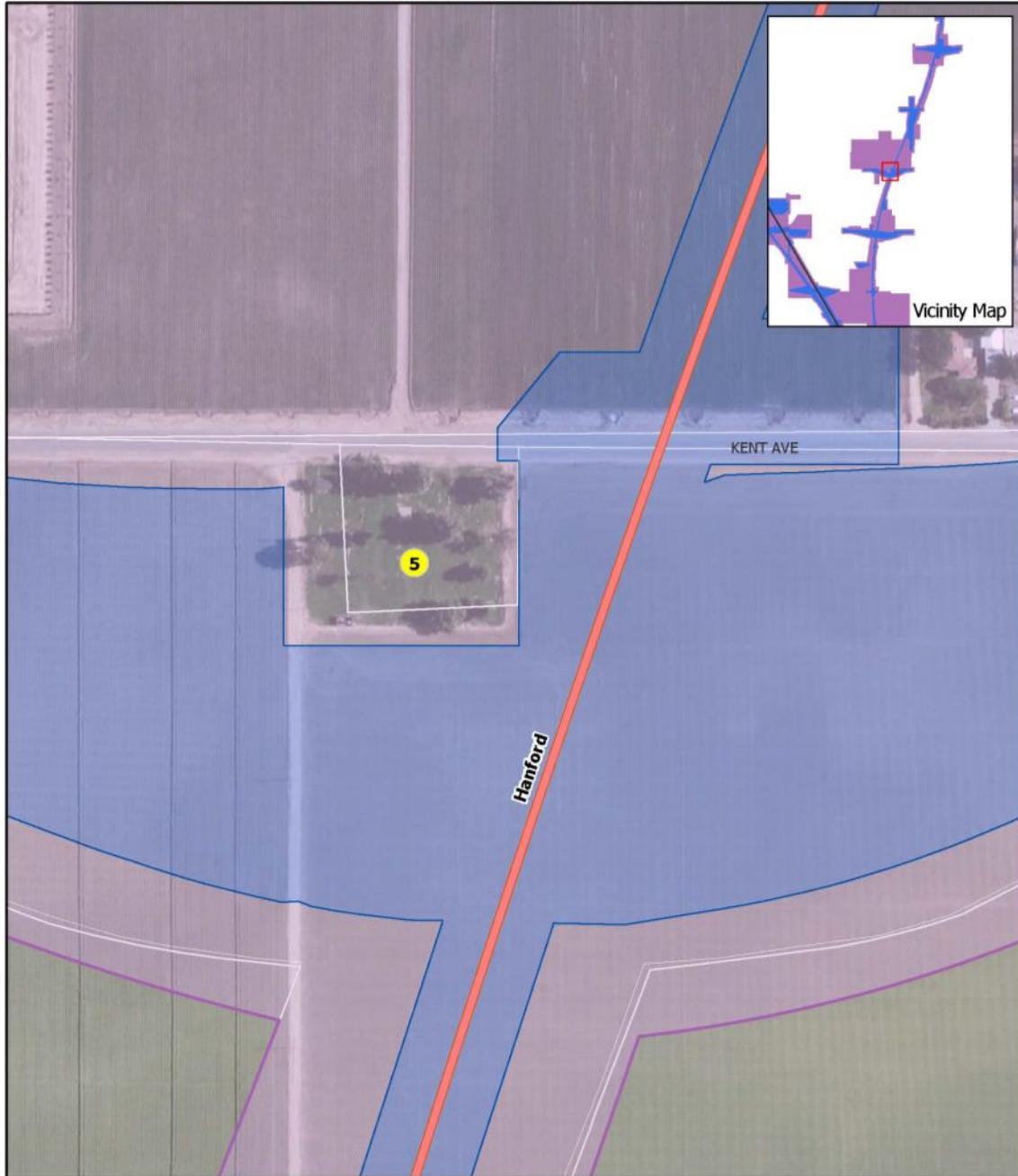
The proposed project would result in an indirect adverse effect on this historic property from the immediately adjacent construction the HST tracks, and the construction of the roadway overcrossing for Kent Avenue. The Kent Avenue grade separation and overcrossing would be approximately 46 feet tall at its highest point and would be sited adjacent to the southern and western boundary of the cemetery, where currently no such feature exists. The portion of Kent Avenue that currently serves the cemetery would be permanently closed east of the cemetery and west of Highway 43 as part of the re-routing of Kent Avenue onto the new roadway crossing over HST. Established in the 1870s, this cemetery has been surrounded by open agricultural fields and access from both east and west on Kent Avenue for its 140-year history. The construction of the elevated roadway structure in such close proximity to the cemetery and reconfiguration of Kent Avenue is not consistent with the historic design, setting, location, feeling, or setting of the cemetery, and would block views looking west, south, and east from this historic property. The construction of HST tracks, the overcrossing, and the reconfiguration of Kent Avenue would adversely affect the views to and from this historic cemetery and would cause an indirect adverse effect on the historic design, setting, location, feeling, and setting of the cemetery from the introduction of visual elements (36 CFR 800.5[a][2][iv] and [v]).

In addition to the roadway overcrossing, the construction of the at-grade tracks and radio site, which would contain a 100-foot-tall tower and a small communication shelter, would cause indirect adverse effects through introduction of visual elements not historically present (36 CFR 800.5[a][2][iv] and [v]). The proposed tracks would be approximately 70 feet from the boundary of this historic property and the closest radio site option is about 25 feet east of the cemetery. The introduction of a new rail line and a radio tower in such close proximity would adversely affect this historic nineteenth-century cemetery in a manner that is not consistent with its historic design, setting, location, feeling, or setting and would diminish its historic integrity.

The construction activities for the roadway overcrossing and HST tracks would not cause any adverse effects on this historic property through introduction of vibration (36 CFR 800.5[a][2][v]). Because vibration from impact pile-driving during construction of this alignment could reach levels that could potentially cause damage historic properties, the project will implement a condition to develop alternative construction methods adjacent to sensitive historic properties, see Section 4.1. The development of alternative construction methods at the location of the cemetery would avoid indirect adverse vibration effects on this historic property. Furthermore, the operation of the project is not be anticipated to cause adverse vibration effects operational vibration levels at the cemetery are predicted to be 71 VdB (0.015 in/sec PPV), lower than the 0.12 in/sec PPV that may cause adverse effects (Authority and FRA 2012e).

The FRA (2005) guidance manual, High-Speed Ground Transportation Noise and Vibration Impact Assessment, was the primary source of guidance for analyzing HST noise and vibration impacts and mitigation, which was supplemented by the Federal Transit Administration (FTA) 2006 guidance, Transit Noise and Vibration Impact Assessment, for non-HST noise. The operational noise caused by the project would have an adverse indirect effect on the Lakeside Cemetery because the HST will be in close proximity to the historic property and operations would diminish the inherent quiet quality that is part of the property's historic character and significance (36 CFR 800.5[a][2][iv] and [v]). An operational noise level of 74 dB Ldn is predicted for this site for the project. This is determined to be a severe impact according to the FRA (2005) and FTA (2006) criteria and would therefore be an adverse indirect effect on the historic property.

The proposed project results in a finding of *Indirect Adverse Effect* on Lakeside Cemetery. See Figure 4-18 for the location map of the historic property and Figure 4-19 for existing and simulated views.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-18
 Location Map
 Lakeside Cemetery



Figure 4-19
Lakeside Cemetery. Existing View (top) and Simulated View (bottom)

Conditions and Treatments Proposed

This section presents conditions or treatments that could avoid, minimize, or mitigate adverse effects on this historic property. These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners, land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.

1. Project-wide Mitigation

The Lakeside Cemetery will be subject to mitigation measures to minimize noise and vibration effects, as described in Section 4.1.3, as well as the preparation of a plan for repair of inadvertent damage and historic recordation/documentation, as described in Section 4.1.4. Mitigation measures will minimize effects on this rural historic cemetery. The noise reduction measure is proposed because operational noise has the potential to cause indirect adverse effects on the Lakeside Cemetery, which has an inherent quiet quality that is part of its historic character and significance (36 CFR 800.5[a][2][iv] and [v]). Preliminary project design options, such as sound walls, have been developed to help reduce noise impacts and follow FRA methodologies for noise abatement (Section 4.1.3). Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

Updated recordation documentation of the Lakeside Cemetery will be prepared to mitigate the indirect adverse effect from the construction of the project. Photography will capture views of the property and its character-defining features, and may be used in preparation of a protection plan. See Section 4.1.4 for a description of the recordation documentation mitigation measure. The fieldwork that this mitigation measure requires (e.g., photography, mapping, and reproduction of historic images) will be conducted before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

2. Develop Protection and Monitoring Measures

Protection measures for the Lakeside Cemetery will be developed prior to construction of the project. This mitigation would ensure that inadvertent adverse effects on this historic property will either be avoided entirely, or minimized to the extent possible. Such treatment measures could include, but are not necessarily limited to, the following: installation of protective barriers around the historic property to prevent accidental damage from construction activities (e.g., excavation, grading, construction equipment, or laydown areas).

3. Prepare Archival Photo Documentation

Recordation documentation of the Lakeside Cemetery will be prepared to mitigate the indirect adverse effect from the construction of the project. Photography should capture views of and from the cemetery to show the existing context of the property to Kent Avenue and the surrounding area. See Section 4.1.4 for a description of the recordation documentation mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) will be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

4. Visual Screening

The Lakeside Cemetery will be subject to visual screening measures that will consist of plant material placed to minimize the view of the project from the property. This treatment will help reduce or minimize adverse effects on the cemetery. Plant species will be selected on the basis of their mature size and shape, growth rate, and drought tolerance. No species that is listed on the Invasive Species Council of California's list of invasive species will be planted.

Visual screen planting may be undertaken in the form of boundary planting on the affected property, planting at affected viewpoints, and planting on project property, as appropriate. This treatment will be developed in consultation with the landowner or land-owning agencies, as well as the SHPO and the MOA signatories. The visual screen planting measures will include preparation of a planting plan that uses evergreen tree or shrub species, and will take into account both the growth rate and ultimate height and density for the selected species, to ensure that the visual screen can be accomplished effectively. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

4.2.7 Shafter Santa Fe Depot

Map ID No. 6
APN: 02703008
1500-200 Central Valley Highway, Shafter



Property Description

The Santa Fe Depot is a two-story, wood-frame railroad depot constructed in 1917. The building is listed in the CRHR and NRHP (NRHP Reference No. 82002187, certified on January 19, 1982) and is significant at the local level under Criterion C as an example of the standard combination frame depot. Its period of significance is 1917, when the building was originally constructed. No specific character-defining features were noted in the NRHP nomination. However, key elements of this building include its massing, plan, wood siding, hip roof, exterior porch, and fenestration. The boundary of this property is defined by its legal parcel boundary.

Application of Criteria of Adverse Effect: No Adverse Effect

The construction and operation of the proposed project would not result in direct adverse effects on the Shafter Santa Fe Depot. The project would include the construction of a proposed elevated rail line with a maximum height of 45 feet. Because all construction activity for the elevated tracks would be approximately 200 feet east of this historic building, the project would not result in the removal of, the physical destruction of, or damage to the historic depot (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed project would not cause an indirect adverse effect on the Santa Fe Depot under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements that would diminish the integrity of the historic property. The proposed elevated rail line, equivalent to a four- to five-story building, would be sited east of the existing at-grade railroad and would require the demolition of buildings along the east side of the extant railroad. While the elevated tracks would be visible from this historic building's southern, eastern, and northern facades, the depot building would be approximately 200 feet west of all project construction activity and 210 feet from the elevated tracks, a distance that would not adversely diminish the viewshed or the industrial and rail transportation setting of this historic property. The historic building was originally constructed on this nineteenth-century, at-grade railroad and the introduction of an elevated rail line adjacent to it would not diminish the qualities of the property that qualify it for listing in the NRHP. A radio communication tower would be construction more than 1,600 feet to the northeast of the

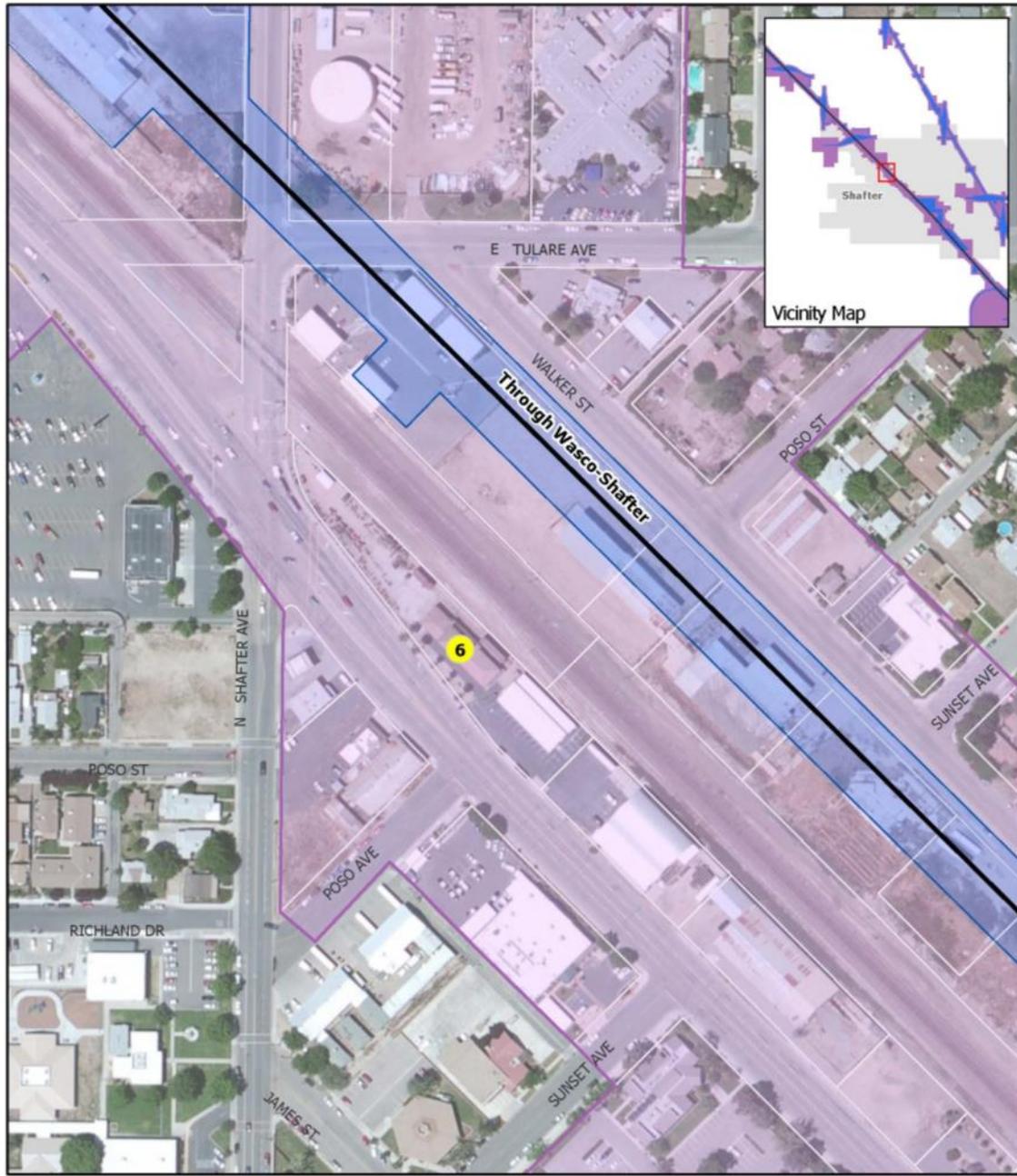
property (on the eastern side of the proposed elevated rail line), a distance that would not diminish the integrity of the historic depot building.

The construction of the proposed project would not cause indirect adverse noise or vibration effects on the Santa Fe Depot (36 CFR 800.5[a][2][v]). The noise impacts from the construction and operation of the proposed project are not anticipated to cause adverse indirect effects on this historic property. Vibration from impact pile driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from the project centerline, a level that would potentially cause the physical destruction of, damage to, or alteration of historic properties. However, this historic building would be more than 200 feet from the project centerline, therefore; no indirect adverse vibration effects would result from the construction or operation of this project (Authority and FRA 2012).

The proposed project results in a finding of ***No Adverse Effects*** on the Santa Fe Depot. See Figure 4-20 for the location map of the historic property and Figure 4-21 for existing and simulated views.

Conditions and Treatments Proposed

The project would not cause an adverse effect on this historic property; therefore, no treatment measures are required or proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-20
 Location Map
 Santa Fe Depot



Figure 4-21
Existing View (top) and Simulated View (bottom)
Santa Fe Depot

4.2.8 San Francisco & San Joaquin Valley Railroad Section House

Map ID No. 7
APN: 02707028
434 Central Valley Highway, Shafter



Property Description

This building is a small, wood-frame, folk-style residence with Craftsman details located adjacent to the present-day BNSF railroad. The building was determined eligible for the NRHP and listed in the CRHR in February 2012. The property is significant at the local level under Criterion A for its association with the founding of Shafter, and under Criterion C as an example of a section house along the San Francisco & San Joaquin Valley Railway (predecessor to the BNSF). Its period of significance under Criterion A extends from 1898, when it was constructed, to the 1910s, when it played an important part in the founding and early development of Shafter. Its period of significance under Criterion C is its year of construction. The character-defining features are the horizontal wood siding, double-hung wood windows with wide wood casing, recessed porch with square supports and capitals facing the railroad tracks, diamond-pattern tin shingle roofing, and wide eaves with exposed rafter tails. The boundary of this historic property is its legal parcel.

Application of Criteria of Adverse Effect: No Adverse Effect

The construction and operation of the proposed project would not result in direct adverse effects on the San Francisco & San Joaquin Valley Railroad Section House. The project would include the construction of a proposed elevated rail line with a maximum height of 45 feet. Because all construction activity would be approximately 200 feet east of this historic property, the project would not result in the removal of, the physical destruction of, or damage to the Section House (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed project would not result in an indirect adverse effect on the Section House under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements that would diminish the integrity of the historic property. The proposed elevated rail line, equivalent to a four- to five-story building, would be sited east of the existing at-grade railroad and would require the demolition of buildings along the east side of the extant railroad. While the elevated tracks would be visible from its eastern, southern and northern facades, the historic Section House would be approximately 200 feet west of all project construction activity and 210 feet from the elevated tracks, a distance that would not adversely diminish the viewshed or the industrial and rail

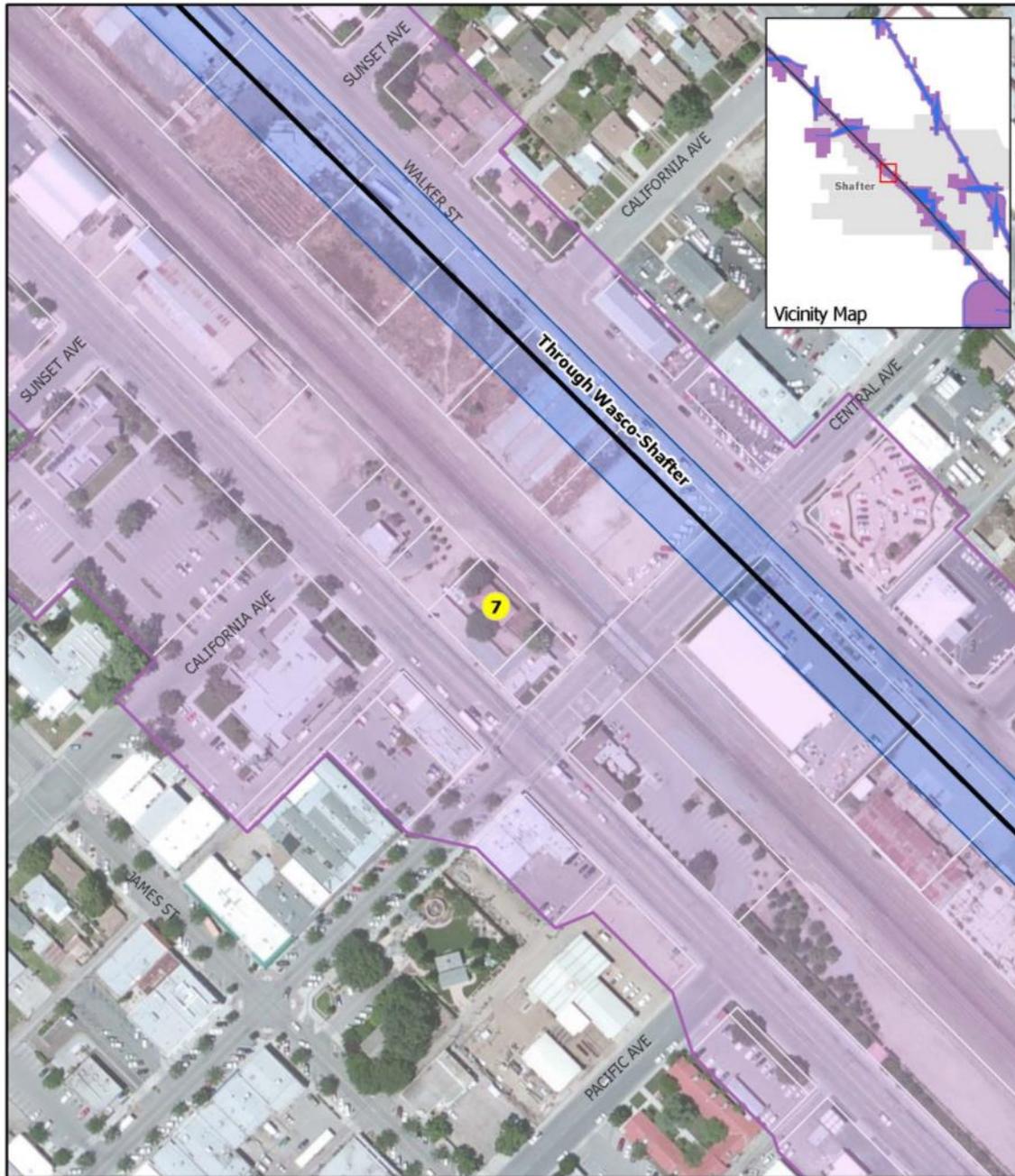
transportation setting of this historic property. The historic building was originally constructed on this nineteenth-century, at-grade railroad and the introduction of an elevated rail line immediately adjacent to it would not diminish the qualities of the property that qualify it for listing in the NRHP. Therefore, introduction of an elevated rail line in the direct vicinity of this historic property would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property.

The construction of the proposed project would not cause indirect adverse effects on this historic property from potential noise or vibration (36 CFR 800.5[a][2][v]). The noise impacts from the construction and operation of the project are not anticipated to cause adverse indirect effects on this historic property. Vibration from impact pile driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from project centerline, a level that would potentially cause the physical destruction of, damage to, or alteration of historic properties. However, this historic building is 200 feet from the edge of all construction activity; therefore, no indirect adverse vibration effects would result from the construction or operation of this project (Authority and FRA 2012).

The proposed project results in a finding of ***No Adverse Effects*** on the San Francisco & San Joaquin Valley Railroad Section House. See Figure 4-22 for the location map of the historic property and Figure 4-23 for existing and simulated views.

Conditions and Treatments Proposed

The project would not cause an adverse effect on this historic property; therefore, no treatment measures are required or proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-22
 Location Map
 San Francisco & San Joaquin Valley Railroad Section House



Figure 4-23
Existing View (top) and Simulated View (bottom)
San Francisco & San Joaquin Valley Railroad Section House

4.2.9 Friant-Kern Canal

Map ID No. 8

APN: n/a

Bakersfield Vicinity



Property Description

The Friant-Kern Canal is a 152-mile-long gravity-fed earth- and concrete-lined canal that terminates at the Kern River northwest of Bakersfield. As a key component of California's Central Valley project (CVP), the canal has been determined eligible for the listing in the NRHP. It is historically significant at the state level under NRHP Criterion A, within the context of development, construction, and operation of the CVP. The period of significance is 1945 to 1951, its period of construction. Character-defining features include its overall length, width, and its major contributing structures, which include major canal siphons, wasteways, checks, overchutes, an equalizing reservoir, culverts, drains, pumps, turnouts, recording houses/structures, the operation roads immediately adjacent to canal prism on either side along its entire length, and miscellaneous structures (e.g., irrigation pipe crossings, minor siphons, drainage inlets). Noncontributing features consist of bridges (farm, county, state, and railroad bridges), power and utility crossings, cattle guards, historic wood trapezoidal canal and CVP signs, fencing, and levees. The historic boundary at this location of the Friant-Kern Canal is limited to the area immediately adjacent to the lined canal (between the tops of its banks) and the Kern River Spillway structures and rock revetment area at the end of the canal (Authority 2013). The Friant-Kern Canal is also listed in the CRHR.

Application of Criteria of Adverse Effects: No Adverse Effect

The proposed project would not result a direct adverse effect on the Friant-Kern Canal under (36 CFR 800.5[a][2][i], [ii], and [iii]). The project would include relocation of underground petroleum and gas pipelines in the vicinity of this property, construction of an elevated rail line over historic canal, and the construction of a new off-ramp for the Westside Parkway's Brimhall Road. None of these construction activities would cause the partial removal, physical destruction, or damage to this historic property. The HST design at the location of this historic property was refined to enable the project to avoid adverse effects to the Friant-Kern Canal. Modifications include redesign of bridge structures spanning the canal and modification of construction methods for pipeline relocations. The track design would avoid placing piers within this historic property's boundary. Furthermore, a gas pipeline and a petroleum pipeline will also be relocated for project

construction in the vicinity of the Friant-Kern Canal. The relocation of these utilities will consist of realignment of the pipelines underneath the canal using construction methods that will not require any physical alteration of the character-defining features of the historic canal. The pipeline relocations would not, therefore, cause a direct adverse effect on the historic property at either the concrete-lined canal or the Kern River Spillway.

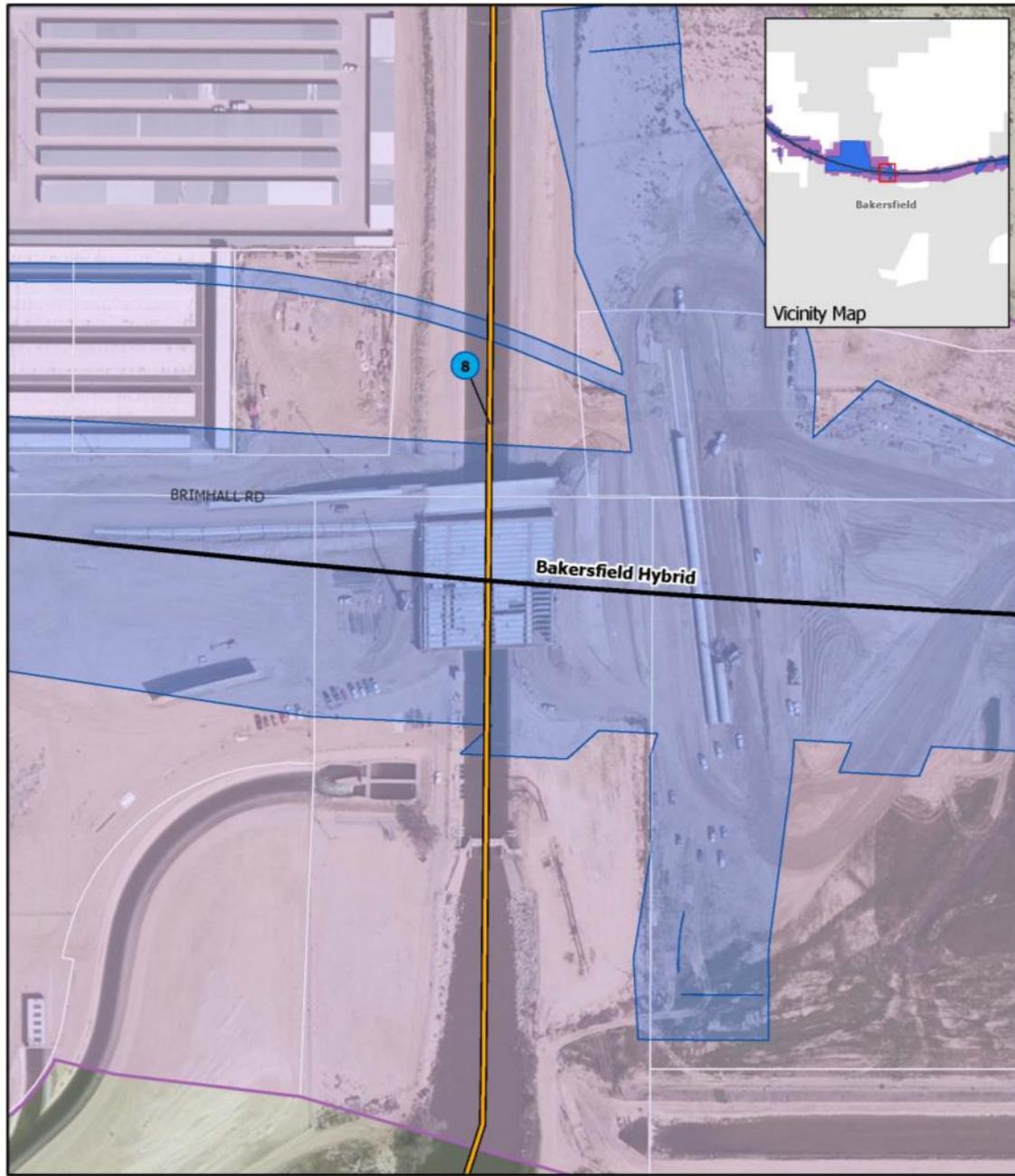
The construction of the elevated HST and the Brimhall Road off-ramp at the location of this historic property would not cause an indirect adverse effect on the Friant-Kern Canal under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. The proposed elevated tracks would measure between 30 and 90 feet in height and would be constructed directly over the terminus of the Friant-Kern Canal at the Kern River. Although the elevated structure would somewhat alter the setting and view of this historic property, it would not do so in an adverse manner because the canal has already been altered by the construction of two road bridges recently constructed over the canal for the Westside Parkway. The introduction of a third transportation feature at the same location would not diminish the integrity of design, setting, and feeling of the canal. Therefore, the introduction of elevated rail tracks would not cause an indirect adverse effect on this property under 36 CFR 36 CFR 800.5(a)(2)(iv) and (v). For similar reasons, the construction of a new Brimhall Road off-ramp over the canal would not adversely affect the historic property because the canal has already been altered by the Westside Parkway and its associated Brimhall Road off-ramp which cross over the canal.

Neither the construction nor the operation of the proposed elevated rail line would cause indirect adverse effects on this historic property from potential noise or vibration (36 CFR 800.5[a][2][v]). Because vibration from impact pile-driving during construction of the tracks could reach levels that could potentially damage historic properties, the project will implement a condition to develop alternative construction methods to be used in locations next to sensitive historic properties, see Section 4.1 and Figure 4-25. None of the other components of the proposed project would cause indirect effects on this historic property.

The proposed project results in a finding of *No Adverse Effects* on the Friant-Kern Canal. See Figures 4-24 and 4-25 for the location map and engineering drawing of the project at this historic property.

Conditions Proposed/Treatment Measures

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-24
 Location Map
 Friant-Kern Canal

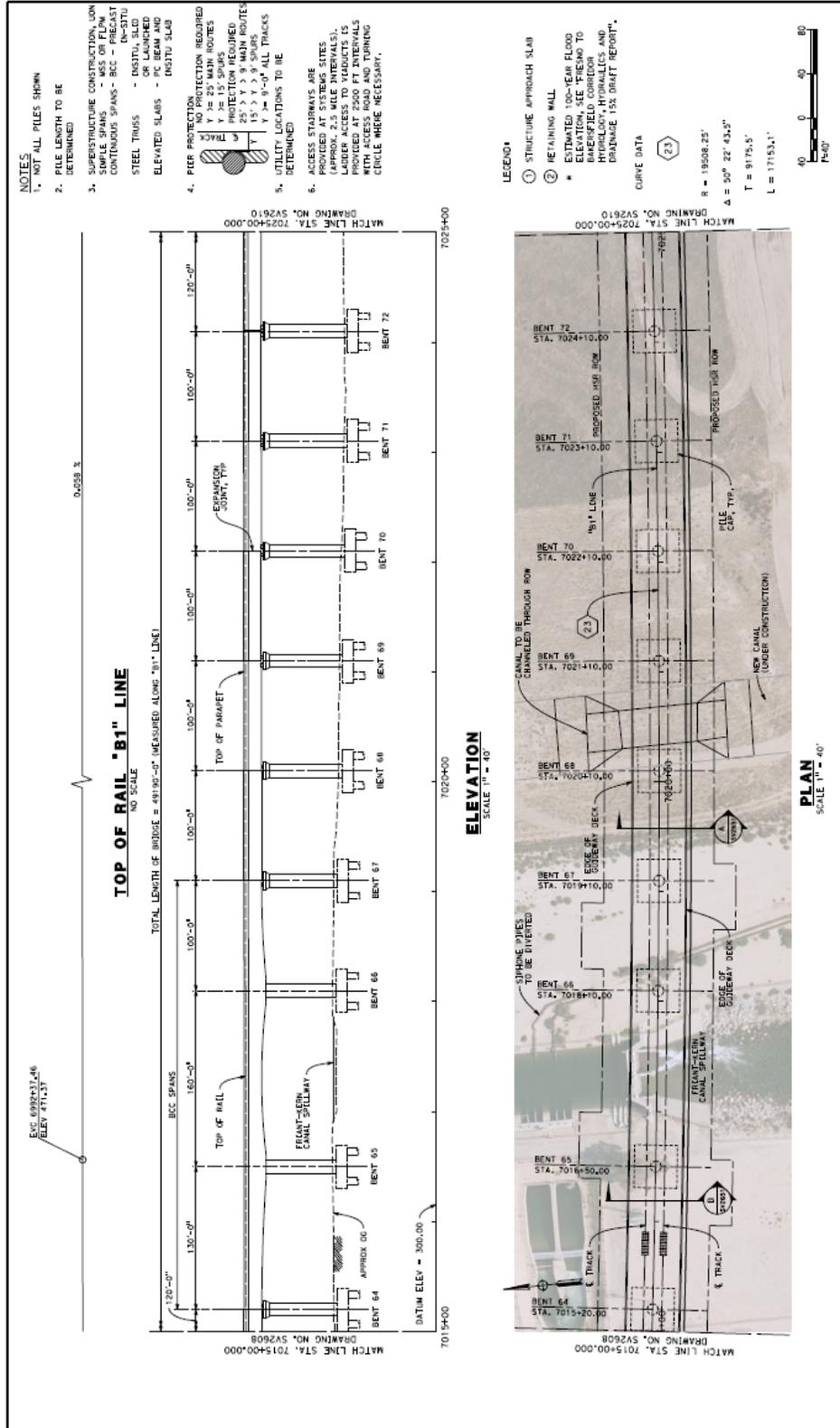


Figure 4-25
 Engineering Drawing
 Friant-Kern Canal

4.2.10 Harvey Auditorium

Map ID No. 9
APN: 00405201
1241 G Street, Bakersfield



Property Description

Bakersfield High School's Harvey Auditorium is a Streamline Moderne-style, concrete theater completed in 1948. The building was determined eligible for the NRHP and listed in the CRHR in February 2012 at the local level of significance under Criterion C, as a significant example of the work of local master architect Charles Biggar. Its period of significance extends from 1934, when Biggar began designing the building, to 1948, when it was completed. Character-defining features for the auditorium include its massing, shape, flat roof, smooth concrete surface, horizontal and vertical bands, rounded corners, multiple double-door entrances separated by vertical columns, wide concrete steps and entrances, large frosted windows above doors, prominent projecting walls that bookend the west entrance, rows of multi-light metal awning windows, and flat concrete awnings with rounded corners. Other character-defining features include the location and orientation of the auditorium facing the central quadrangle of Bakersfield High School and its visual relationship to the other buildings and structures of the campus, including the Industrial Arts building complex located diagonally across the street to the northwest. During the period of significance (1934-1948), the setting of the auditorium was urban, and included both educational and commercial buildings. The boundary of Harvey Auditorium is its legal parcel, as bordered by the sidewalks along H, G, 13th, and 14th streets.

Application of Criteria of Adverse Effects: No Adverse Effects

The construction and operation of the proposed project would not result in direct adverse effects on Harvey Auditorium. The project would include the construction of a proposed elevated rail line that would measure between 30 and 90 feet in height. The historic property would be more than 280 feet from all construction activity for the proposed project and would not result in the removal of, the physical destruction of, or damage to Harvey Auditorium (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed project would not cause indirect adverse effects on Harvey Auditorium under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. While the proposed three-

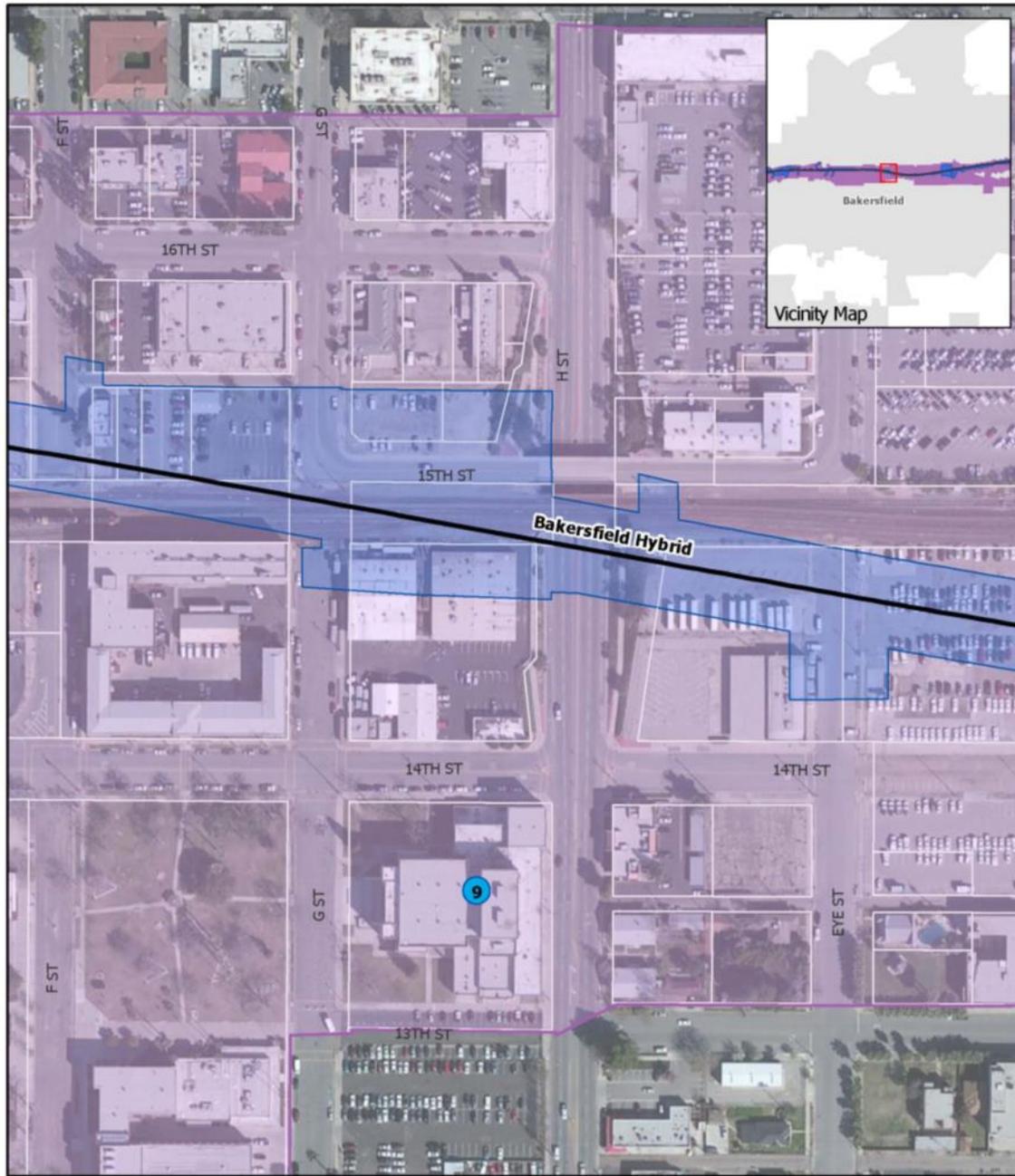
to nine-story-tall elevated tracks would be visible from this historic building's secondary (north and west) façades, it would be approximately 290 feet to the north, a distance that would not adversely alter the viewshed or setting of this historical property. The integrity of the property's significant historic features and its use, both of which contribute to its historic significance, would remain unchanged.

The construction and operation of the project would not cause indirect adverse effects on this historic property from potential noise or vibration elements (36 CFR 800.5[a][2][v]). No adverse indirect noise impacts would be anticipated from the construction and operation of the rail line or water line relocation because of the distance of the historic property from either project component. Similarly, no adverse indirect vibration impacts would be anticipated from the construction and operation of the proposed project because the historic property would be a considerable distance from all project components.

The proposed project results in a finding of *No Adverse Effects* on the Harvey Auditorium. See Figure 4-26 for the location map of the historic property and Figure 4-27 for existing and simulated views.

Conditions Proposed/Treatment Measures

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-26
 Location Map
 Harvey Auditorium



Figure 4-27
Existing View (top) and Simulated View (Bottom)
Harvey Auditorium

4.2.11 Kern County Civic Administration Center

Map ID No. 10

APN: 00629001

1315-1415 Truxtun Avenue, Bakersfield



Property Description

This property consists of a large U-shaped governmental complex with four buildings built between 1956 and 1959 in the International style. The Kern County Civic Administration Center was determined eligible for the listing in the NRHP and listed in the CRHR in February 2012. It is significant at the local level of significance under Criterion A as one of the key projects in the redevelopment of Bakersfield and Kern County after the devastating earthquake that rattled the area in the summer of 1952. The period of significance under Criterion A extends from 1953, when City and County began planning for the construction of the complex, until the mid-1960s, when the effort to rebuild after the earthquake was essentially overtaken by general post-war economic growth. The complex is also significant under Criterion C for its use of unifying architectural elements and materials to provide a cohesive design, as well as its use of seismic safety features in response to the recent disaster. Its period of significance under Criterion C is the period of its construction, 1956-59. Character-defining features include its International-style features, as well as the placement and proximity of the four distinct buildings to one another, Mo-Sai concrete panels on each building, louvers, concrete panel shells, aluminum-frame windows and doors, and glass mosaic mural at the entrance. The boundary of this historic property is its legal parcel.

The Kern County Superior Court building, which is part of the Kern Civic Administrative Center, is also associated with Cesar Chavez and the 1968 ruling in the Delano grape strike – part of the general effort of farm laborers to organize a union. The court building was the site of both protests and the ruling and has been determined eligible for the NRHP under Criteria A and B for these associations.

Application of Criteria of Adverse Effects: No Adverse Effects

The construction and operation of the proposed project would not result in direct adverse effects on the Kern County Civic Administration Center. In the vicinity of this historic property the project would include the construction of a proposed elevated rail line measuring between 30 and 90 feet in height. The proposed rail line would be located approximately 160 feet south of the southern boundary of this historic property and approximately 355 feet from its contributing structures.

Because all project construction activity and operation would be a considerable distance away from the buildings of this historic property, it would not result in the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

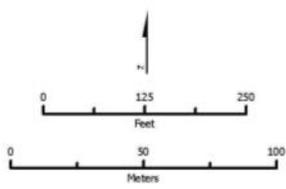
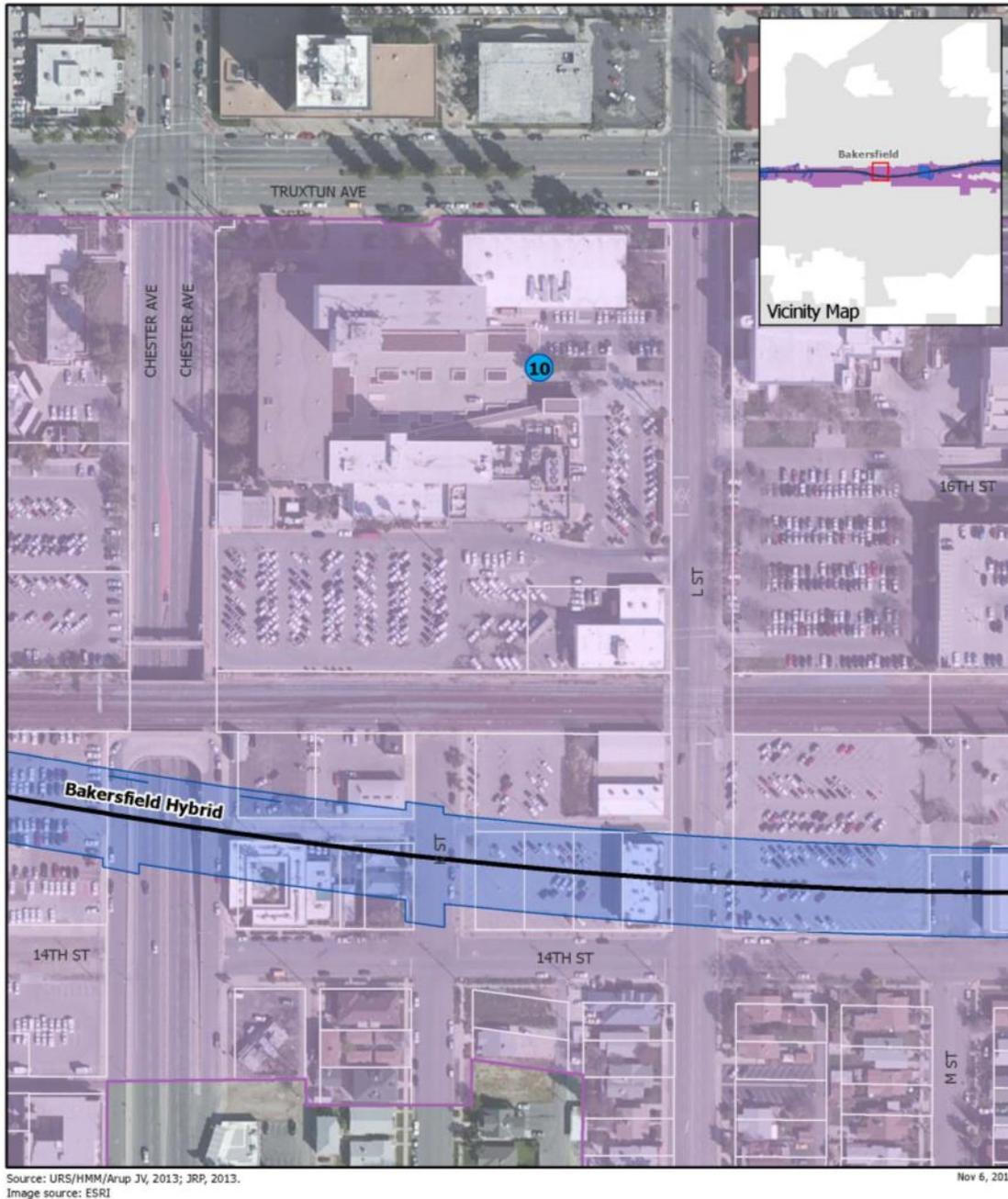
The proposed project would not cause indirect adverse effects on this historic property under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. While the proposed three- to nine-story-tall elevated structure would be visible from this historic building's secondary (south and west) façades, it would not adversely alter the viewshed or setting of this historical property, which has always been located adjacent to the existing rail line. The integrity of the property's significant historic features and its use, both of which contribute to its historic significance, would remain unchanged.

The construction and operation of this proposed project would not cause indirect adverse effects on this historic property from potential noise or vibration elements (36 CFR 800.5[a][2][v]). No adverse indirect noise impacts would be anticipated from the construction and operation of the project because of the distance of the historic property from the tracks or water line relocation. Similarly, no indirect effects from vibration would be anticipated from the construction and operation of the proposed project because of the distance of the historic property from the project components.

The proposed project results in a finding of *No Adverse Effects* on the Kern County Civic Administration Center. See Figure 4-28 for the location map of the historic property.

Conditions Proposed/Treatment Measures

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



- Direct adverse effect
- Indirect adverse effect
- No adverse effect
- Evaluation pending
- Canal
- Rural historic landscape district
- Historic corridor
- At-grade alignment
- Elevated alignment
- Below-grade alignment
- Alignment footprint
- Architectural APE
- Parcel

Figure 4-28
 Location Map
 Kern County Civic Administration Center

4.2.12 Stark/Spencer Residence

Map ID No. 11
APN: 00643002, 00643003
1321 N Street, Bakersfield



Property Description

The Stark/Spencer residence is a two-story, wood-frame building constructed in 1898 in the Queen Anne and Eastlake styles. The building was determined eligible for the NRHP in February 2012 at the local level of significance under Criterion C as a distinguished example of its architecture. The period of significance is 1898 to 1929, from the year it was constructed through 1929, when it was moved to its current location; the historic property boundary is the building footprint. Character-defining features are those architectural features typical to the Queen Anne and Eastlake style: massing, square plan, gable and hip roofs, fenestration, corniced eaves, decorative frieze bands, fish scale and horizontal beveled siding, half-timber accents siding, exterior porches, turned posts, and spandrel brackets. Additionally, this residence is listed in the CRHR and the Bakersfield Register of Historic Places.

Application of Criteria of Adverse Effects: Indirect Adverse Effects

The construction and operation of the proposed project would not result in direct adverse effects on this historic property. In this vicinity of this property, the project proposes to construct an elevated rail line that would measure between 30 and 90 feet in height. All project construction would be more than 170 feet north of this historic property and would not result in the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The proposed project would cause indirect adverse effects on the Stark/Spencer Residence under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. The elevated HST tracks and a temporary construction easement would be approximately 180 and 170 feet, respectively, north of the Stark/Spencer residence. The proposed project would only be visually separated from the historic property by a small, one-story residence at N and 14th streets. The area surrounding this historic property was historically predominately one-story residential in nature, with a mix of single-family residences and some one-story commercial/industrial buildings. The elevated tracks would be equivalent to a three- to nine-story-tall building and would be prominently visible from this historic building's main (east) and secondary (north and west) façades. The introduction of a new, elevated transportation infrastructure in the immediate vicinity of this nineteenth century residence would adversely alter the viewshed and setting of this historical property. The size, scale, and massing of such a structure would not be consistent

with the historic design, setting, location, and feeling of this historic property and would diminish its historic integrity.

The construction and operation the proposed project would not cause indirect adverse effects on this historic property from potential noise or vibration elements (36 CFR 800.5[a][2][v]). Vibration from impact pile-driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from project centerline, a level that would potentially cause the physical destruction, damage, or alteration of historic properties (Authority and FRA 2012e). No indirect effects from vibration would be anticipated from the construction and operation of elevated tracks because of the historic property would be sited more than 135 feet from the project centerline. Similarly, no adverse indirect noise impacts would be anticipated from the construction and operation of the elevated tracks because of the distance of the historic property from the project (Authority and FRA 2012e).

The proposed project results in a finding of *Indirect Adverse Effects* on the Stark/Spencer Residence. See Figure 4-29 for the location map of the historic property and Figure 4-30 for existing and simulated views.

Conditions and Treatments Proposed

This section presents conditions or treatments that could avoid, minimize, or mitigate adverse effects on this historic property. These measures will be developed as stipulations in the MOA, in consultation with SHPO, the other MOA signatories, and consulting parties such as landowners, land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be described in the BETP.

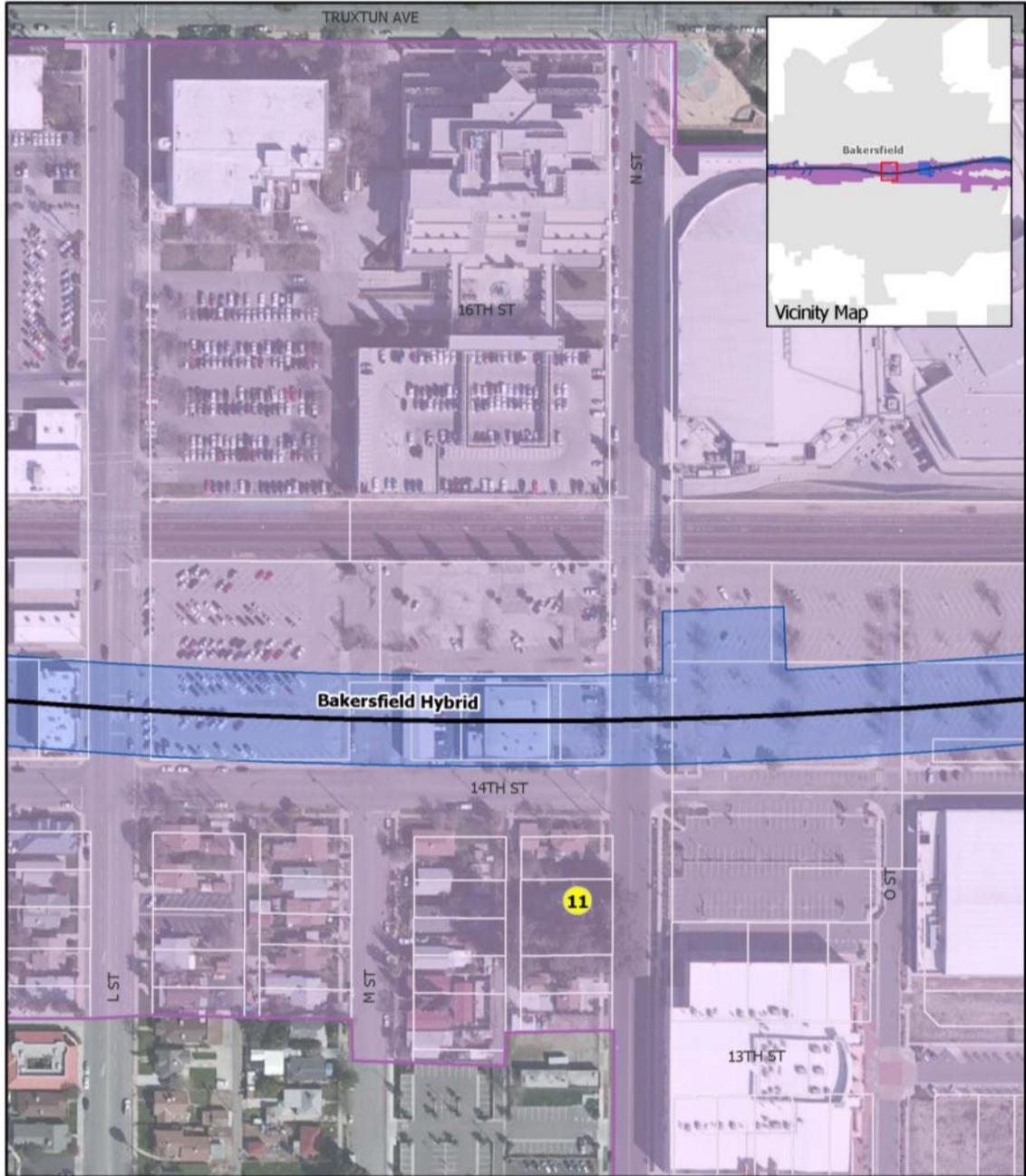
1. Prepare Recordation Documentation

Recordation documentation of the Stark/Spencer Residence will be prepared to mitigate the indirect adverse effect caused by the construction of the project. Photography will capture views of and from the house and its relationship to the existing neighborhood. The documentation may include reproduction of historic views of the residence as well. See Section 4.1.4 for a description of the recordation documentation mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

2. Visual Screening

The Stark/Spencer Residence will be subject to visual screening measures that will consist of plant material placed to minimize the view of the project from the property. This treatment will help reduce or minimize adverse effects on the historic property. Plant species will be selected on the basis of their mature size and shape, growth rate, and drought tolerance. No species that is listed on the Invasive Species Council of California's list of invasive species will be planted.

Visual screen planting may be undertaken in the form of boundary planting on the affected property, planting at affected viewpoints, and planting on project property, as appropriate. This treatment will be developed in consultation with the landowner, as well as the SHPO and the MOA signatories. The visual screen planting measures will include preparation of a planting plan that uses evergreen tree or shrub species and will take into account both the growth rate and ultimate height and density for the selected species to ensure that the visual screen can be accomplished effectively. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-29
 Location Map
 Stark/Spencer Residence



Figure 4-30
Existing View (top) and Simulated View (bottom)
Stark/Spencer Residence

4.2.13 Union Avenue Corridor

Map ID No. 12
APN: n/a
Bakersfield



Property Description

This segment of Union Avenue (State Route 204) is located in Bakersfield and formerly carried Highway 99 through the city. Constructed in 1933, Caltrans determined it eligible for the NRHP in September 2010 at the state level of significance under Criterion A for its association twentieth century highway construction and the associated commercial development that occurred as a result of its routing through Bakersfield. The period of significance for this historic property is from 1933 through 1963. Seven engineering structures associated with the 1933 construction of the route contribute to this historic property: the Union Avenue underpass bridge, Stine Canal bridge, Kern River bridge, Calloway Canal bridge, and three reinforced concrete cattle under-crossings. Character-defining features of this historic property include the 1933-alignment, the turn of its route onto Golden State Boulevard, the spatial layout of six lanes with center landscaped median to the Chester Avenue Bridge, the 1953-four lane divided highway with associated berms to post mile 6.22, mid-twentieth century sidewalks, curbs, and gutters with deep curved cuts at street intersections and with WPA and other concrete stamps; the 1946-47 landscaped center dividers with associated palm trees; and its setting along a commercial corridor with buildings with minimal setback. The boundaries of this historic property are a segment of the right-of-way of US Highway 99, known as State Route 204 in the eligible segment, from the south junction of Brundage Lane (post mile 0.04) to just north of the Largo Cattlepass (post mile 6.22).

Application of Criteria of Adverse Effects: No Adverse Effects

The construction and operation of the proposed project would not result in direct or indirect adverse effects on the Union Avenue Corridor. In the vicinity of this historic property, the project would include elevated tracks that would measure 30 to 90 feet in height, the relocation of water and transmission lines, and the construction of interlocking sites and a HST station.

The relocation of transmission lines and underground water lines or the construction of the interlocking sites would not result in a direct effect on this property. The transmission line

relocation would be located on the east side of Union Avenue while the water line relocation would be located adjacent to the west side of the transportation corridor. Both utility relocations would be outside the historic property boundary while the interlocking sites would each be sited more than 600 feet east and west of the corridor. Therefore, none of these project components would cause the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The construction of the proposed HST tracks would not result in a direct effect on this property. The elevated tracks would pass over Union Avenue and the extant at-grade BNSF railroad. No piers or any other structural component of the elevated track structure would be placed within the historic boundary of Union Avenue; therefore, the construction of the tracks would not result in the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The construction and operation of the proposed HST station would not result in a direct effect on the Union Avenue Corridor. The 24-acre station site would be generally bordered by U Street to the west, Truxtun Avenue to the north, Hayden Street to the south, and Sonora Street to the east. The site would include a bus transit center, surface parking lots, and three seven-story parking structures. The 57,000-square-foot main station building with entry concourse would be centered on V Street with the main entrances sited north and south of the proposed HST and extant BNSF railroad. The two-level station would have a maximum height of approximately 95 feet. Parking structures, surface parking lots, and a facility power substation are the only components of this station alternative that are located in the immediate vicinity of this historic property. Two of the parking structures would be located east of Union Avenue, bordered to the south and east by Alpine and Sonora streets, respectively, and the proposed HST tracks to the north, while one parking structure would be sited at the southwest corner of Union and Truxtun avenues, just north of the extant BNSF railroad. The facility power substation would be located north of the HST tracks (south of the extant BNSF railroad) and immediately west of Union Avenue. All of components of this proposed station would be constructed adjacent to this segment of Union Avenue, but would not result in the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The construction and operation of the HST tracks, station, and interlocking site, or the relocation of transmission or water lines would not cause indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). The proposed HST tracks would be sited south of, and parallel to, the existing railroad, which was constructed in the nineteenth century. Union Avenue at this location is primarily below-grade, and passes under the BNSF railroad and its Union Avenue underpass bridge (see above photograph). Although the viewshed from this historic property would be somewhat altered by the proposed elevated structure, it would not do so in an adverse manner because the setting of this transportation corridor at this location has historically included a railroad crossing over the historic roadway. The introduction of a second, although taller railroad structure, would be consistent with the historic design, setting, location, and feeling of this historic property. Because the water line relocation would be below ground, there would be no visual impacts from its construction. The interlocking sites would be a considerable distance away from this historic property and would not be visible when looking any direction from Union Avenue. Furthermore, the relocation of a transmission line that currently runs parallel to the Union Avenue corridor would not adversely alter the viewshed or setting of the historic property. Therefore, these project components would have no adverse effect on this historic property under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements.

The construction and operation of the HST station would not result in indirect adverse effects from the introduction of new visual under 36 CFR 800.5(a)(2)(iv) and (v). At the location of this proposed station, Union Avenue is primarily below-grade, and passes under the extant BNSF railroad and its Union Avenue underpass bridge (see above photograph). The station parking

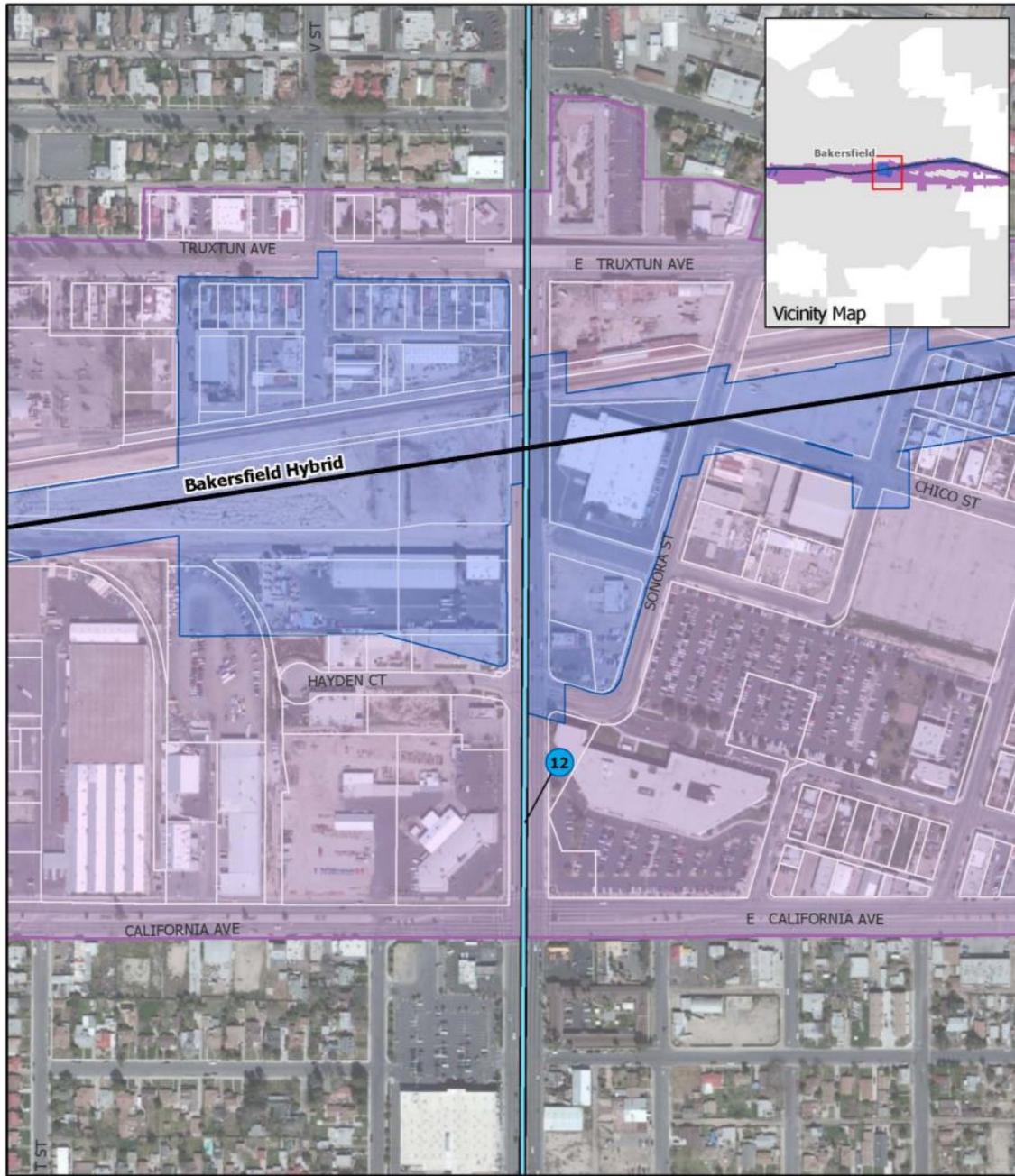
structures and substation would be visible from the underpass; however, they would not obstruct the view when looking northwest or southeast from that location. Although the viewshed from this historic property in the at-grade section (around Hayden Court) would be somewhat altered by the proposed elevated structure, it would not do so in an adverse manner because the historic setting of this transportation corridor, which included commercial building with minimal setback, would be retained.

Vibration from impact pile-driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from project centerline, a level that would potentially cause the physical destruction, damage, or alteration historic properties (Authority and FRA 2012e). However, Union Avenue and its contributing elements are activity-used roadway features that are not anticipated to experience vibration-induced damage at such a low level. If it is determined that this impact pile-driving could cause indirect adverse effects, alternative construction methods that would cause less than 0.12 in/sec PPV would be developed near historic properties within 135 feet of the project centerline. See Section 4.1 for a description of this mitigation measure. The development of alternative construction methods for the proposed project at this location of Union Avenue would avoid indirect adverse vibration effects on this historic property under 36 CFR 800.5(a)(2)(v). There would be no anticipated adverse effects through the introduction of noise because this project activity would not diminish the integrity of this transportation property, which has always been located in an industrial area [36 CFR 800.5(a)(2)(v)]

The proposed project results in a finding of ***No Adverse Effects*** on the Union Avenue Corridor. See Figure 4-31 for the location map of the historic property.

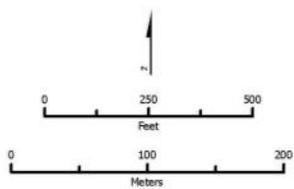
Conditions Proposed/Treatment Measures

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



- Direct adverse effect
- Indirect adverse effect
- No adverse effect
- # Evaluation pending
- Canal
- Rural historic landscape district
- Historic corridor
- At-grade alignment
- Elevated alignment
- Below-grade alignment
- Alignment footprint
- Architectural APE
- Parcel

Figure 4-31
 Location Map
 Union Avenue Corridor

4.2.14 Sal3n Ju3rez

Map ID No. 13
APN: 01728004
815 East 18th Street, Bakersfield



Description

This historic property consists of two buildings, a circa-1948 false-front Quonset hut and a wood-frame stucco-clad building constructed about 1912. Both buildings were constructed as part of Sociedad Ju3rez Mutualista Mexicana, a mutual aid society for Mexican-Americans from the Ju3rez area of Mexico. The historic property was determined eligible for the NRHP and listed in the CRHR in October 2013. The Sal3n Ju3rez is significant at the local level under Criterion A as a traditional cultural property associated with the early development and social structure of Bakersfield's Mexican immigrant and Mexican-American community. The period of significance is circa 1912, the approximate time that the Sociedad Ju3rez Mutualista Mexicana was established on this property, through the present. Its character-defining features include the Quonset hut, including its false-front with mural; the "casita" building at the rear and its multiple uses; and Sociedad Ju3rez Mutualista Mexicana's association and continual use of Sal3n Ju3rez. The boundary for this historic property is its legal parcel.

Application of Criteria of Adverse Effects: No Adverse Effects

The construction and operation of the proposed project would result in no direct adverse effects on this historic property. In the vicinity of this historic property, the project would include the construction of an elevated rail line, closure of segments of East 18th and King streets, as well as the relocation of water lines. The elevated tracks would be located directly north of Sal3n Ju3rez. Construction would not require the removal of or the physical destruction of this historic property, nor would the construction damage any of the contributing buildings of this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

The construction and operation of the project would not cause indirect adverse effects with implementation of the conditions described below which would avoid, minimize, and mitigate effects under 36 CFR 800.5(a)(2)(iv) and (v). The elevated rail line would be approximately 42 feet in height at the tracks, and would require permanent closure of East 18th and King streets near the property, as well as the relocation of water lines. Although close by, these project

components would not diminish the integrity of the property's significant historic features or the use of this traditional cultural property. Because of the proximity of the project to Salón Juárez, the HST project has developed conditions to avoid and minimize potential effects. With the implementation of the conditions listed below, the project would not cause any indirect adverse visual effects to this historic property, in accordance with Stipulation VII.C. of the Section 106 PA.

Furthermore, the construction or operation of the project would not cause indirect adverse noise or vibration effects under 36 CFR 800.5(a)(2)(iv) and (v). The Salón Juárez is already subject to noise and vibration impacts from the extant freight railroad that is approximately 200 feet north of the historic property and a sound barrier is planned at this location. The conclusion is that with a sound barrier there would be no net change over existing conditions resulting from operational noise. The Salón Juárez would be approximately 63 feet from project centerline and the operational noise level at that distance is predicted to reach 60 dBA Ldn (Authority and FRA 2013f). According to the FRA (2005) and FTA (2006) criteria, as discussed in Section 4.2.6, this would not cause indirect adverse effects on this historic property.

Similarly, there would be no adverse effects from operational vibration, as predicted vibration levels (63 VdB) at this location would be below the FTA impact threshold of 72 VdB (Authority and FRA 2013f). Because vibration from impact pile-driving during construction of the tracks could reach levels that could potentially damage historic properties, the project will implement a condition to develop alternative construction methods to be used in locations next to sensitive historic properties, see Section 4.1.

The proposed project results in a finding of **No Adverse Effect** on the Salón Juárez. See Figure 4-32 for the location map of the historic property and Figure 4-33 for existing and simulated views; Figure 4-34 depicts the project design elements in relation to the property; and Figure 4-35 depicts proposed conditions in relation to the property.

Conditions Proposed

Pursuant to PA Stipulation VII.C., this section presents conditions that are proposed to avoid and minimize adverse effects on the Salon Juarez Traditional Cultural Property. These conditions will be developed in greater detail in the MOA, in consultation with the SHPO, the other MOA signatories, and consulting parties such as landowners or land-owning agencies, as required by the Section 106 PA. The details of the specific conditions and treatment measures, as well as their implementation, will be further codified in the BETP that will be prepared. . .

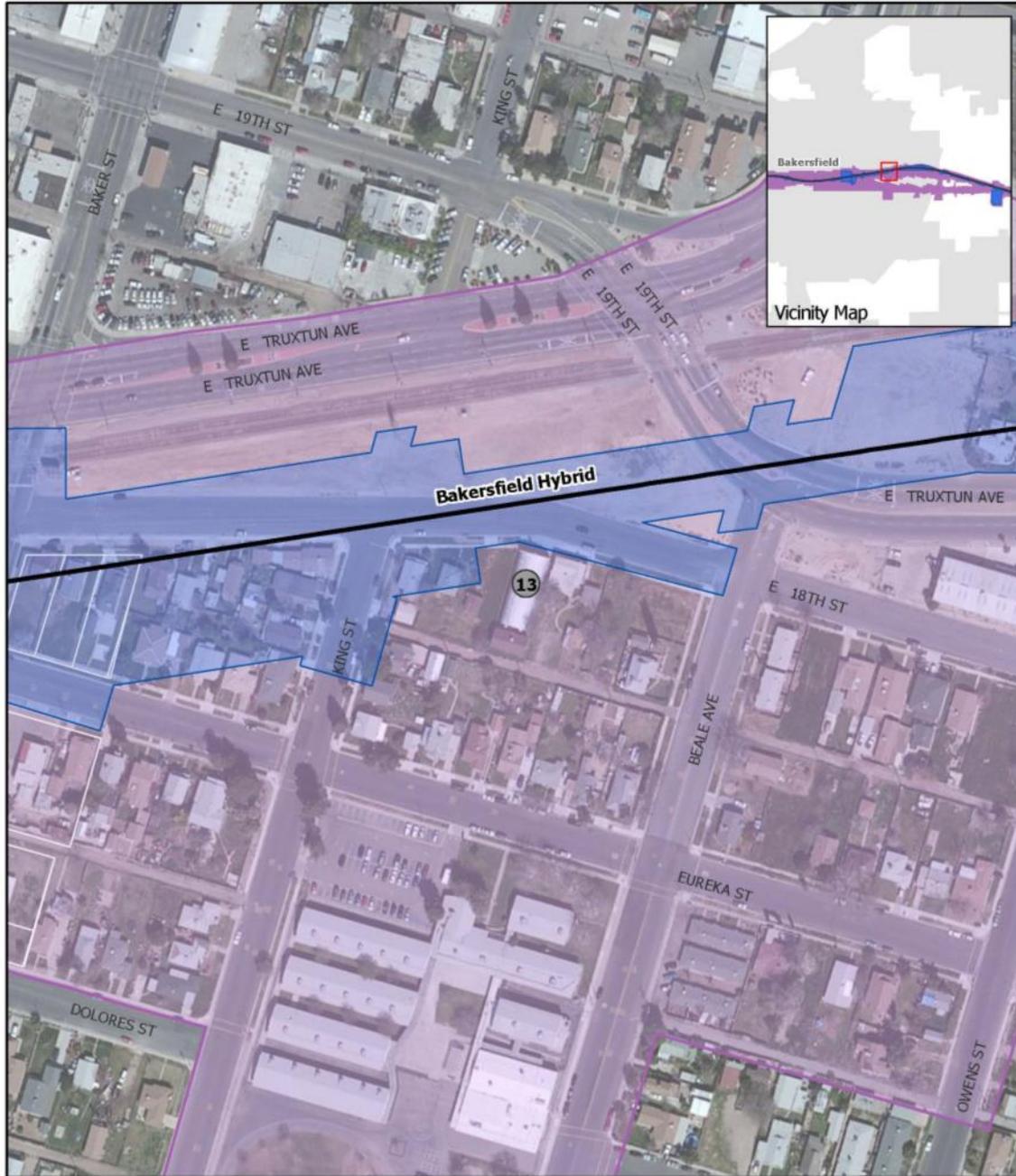
1. ***Create Parking and a New Entrance to the Salón Juárez.*** The primary project condition for the Salón Juárez would be to provide legal parking to help avoid effects from the permanent closure of East 18th Street. The Salón Juárez can accommodate 300 people and currently has approximately 50 events per year. Existing parking is along adjacent streets and informal parking takes place in the unpaved area next to the freight rail line north of and across E. 18th Street from Salón Juárez.

One of two options for parking will be implemented (see Figure 4-35 in *Draft Section 106 Findings of Effect*, November 2013). Option A is to acquire the four parcels directly to the east of Salón Juárez to provide for parking. This option is preferred by the Salón Juárez Board because it would increase the visibility of the Salón Juárez from the busy intersection of East 18th and Beale streets. This option will be implemented if the land to the east of the Salón can be acquired.

Option B would be undertaken if the land considered under Option A cannot be acquired. Option B would include providing parking on three lots directly to the west of Salón Juárez. These three parcels will be acquired by the project because they will lose access to/from East

18th Street. Access to the Option B parking would be reestablished to the parking lot from a cul-de-sac on King Street. Regardless of which option (A or B) is ultimately implemented, the possibility exists to establish overflow parking underneath and immediately north of the elevated rail platform, within HST right-of-way.

2. *Address Proximity of Salón Juárez Entrance to the HST Project.* Current plans are to permanently close East 18th Street at the Salón Juárez entrance and construct a cul-de-sac. Visual simulations demonstrate that the proximity of the HST project's elevated structure to the front entrance could diminish the desirability of use or rental of the facility. To avoid this effect, the project would provide the Salón Juárez with a new entrance on either the eastern or western side of the main Salón Juárez building to be combined with the new parking lot (Condition #1 listed above; see also Figure 4-35). The eastern entrance is preferred by the Salón Juárez Board because it would increase the visibility of their facility from the busy intersection of East 18th and Beale streets. This option will be implemented if the land to the east of the Salón can be acquired. Otherwise the western parking lot and entrance will be implemented.
3. *Maintain Front Entrance.* The current front entrance at the northern end of the main building would be preserved and could stay open for additional access and to provide hearse access during funerals.
4. *Miscellaneous other facility improvements.* Additional conditions could include providing advertisement assistance for event promotion, installation of a sign at the corner of Beale and East 18th Street, installation of an outdoor area large enough for kids to play in, installation of an exterior commemorative plaque, and providing an entrance design that includes outdoor space in conjunction with the new entrance and parking.
5. *Kitchen Area and Bathrooms.* A kitchen would be installed in the larger of the two existing buildings, and the existing bathrooms in that building would be renovated and made ADA-compliant.
6. *Prepare and Submit Historic Documentation with Oral Histories.* Historic documentation of the Salón Juárez would be prepared. The written portion of the documentation would address the history of the property and its importance to the Mexican-American community of Bakersfield and surrounding areas. Photographic documentation would include present views of the Salón Juárez and its relationship to the surrounding neighborhood, and, if they can be acquired, reproductions of historic images of the Salón Juárez as well. (See General Mitigation Measure #2 for a more detailed description of the recordation/documentation mitigation measure). The documentation would be produced in a format that can easily be published as a public educational booklet that the Sociedad Juárez Mutualista Mexicana organization can reproduce and sell. Details of the specifications and implementation of this condition will be presented in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-32
 Location Map
 Sociedad Juárez Mutualista Mexicana



Figure 4-33a
Existing View (top) and Simulated View (bottom)
Sociedad Juárez Mutualista Mexicana.



Figure 4-33b
Existing View (top) and Simulated View (bottom)
Sociedad Juárez Mutualista Mexicana.

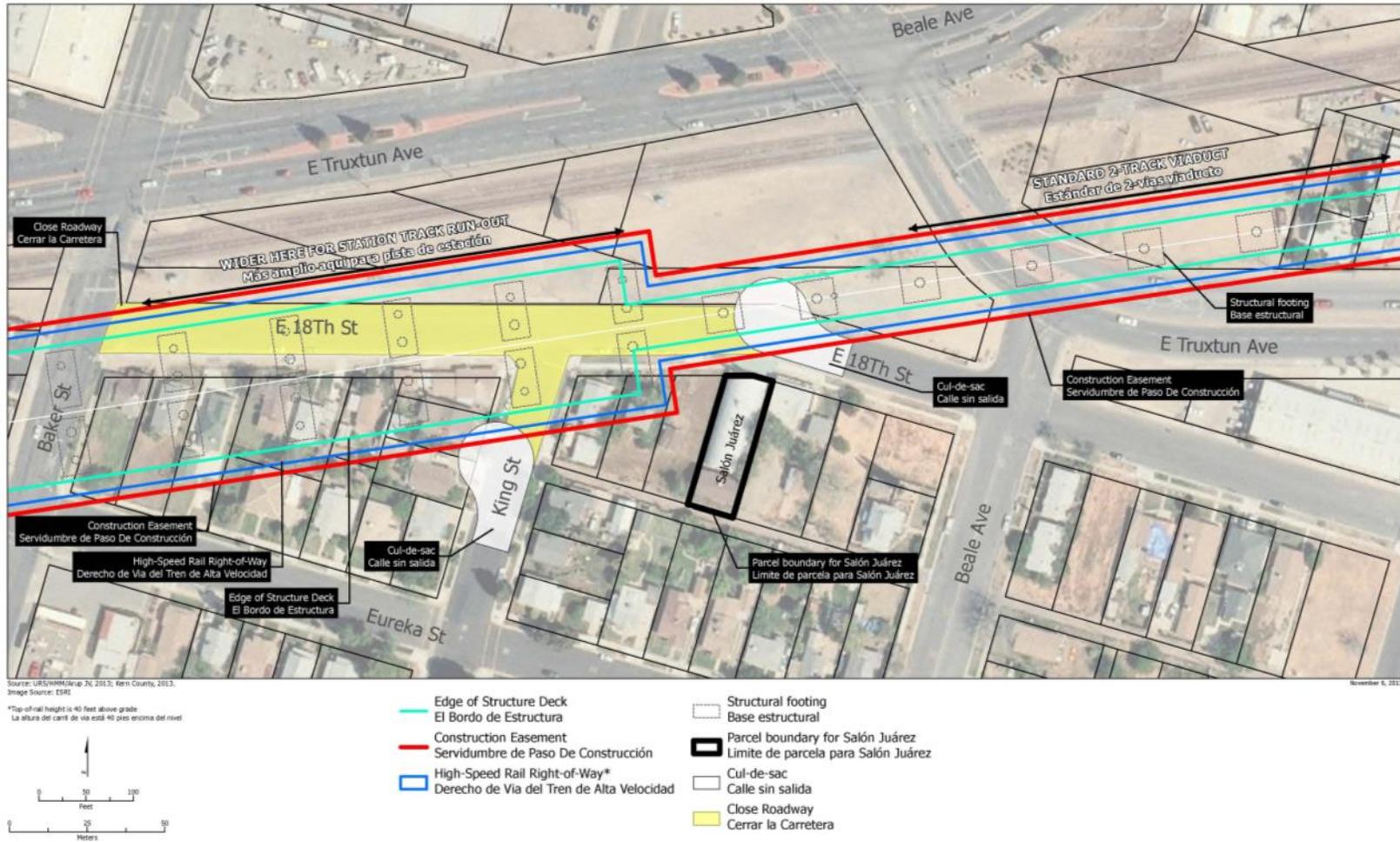
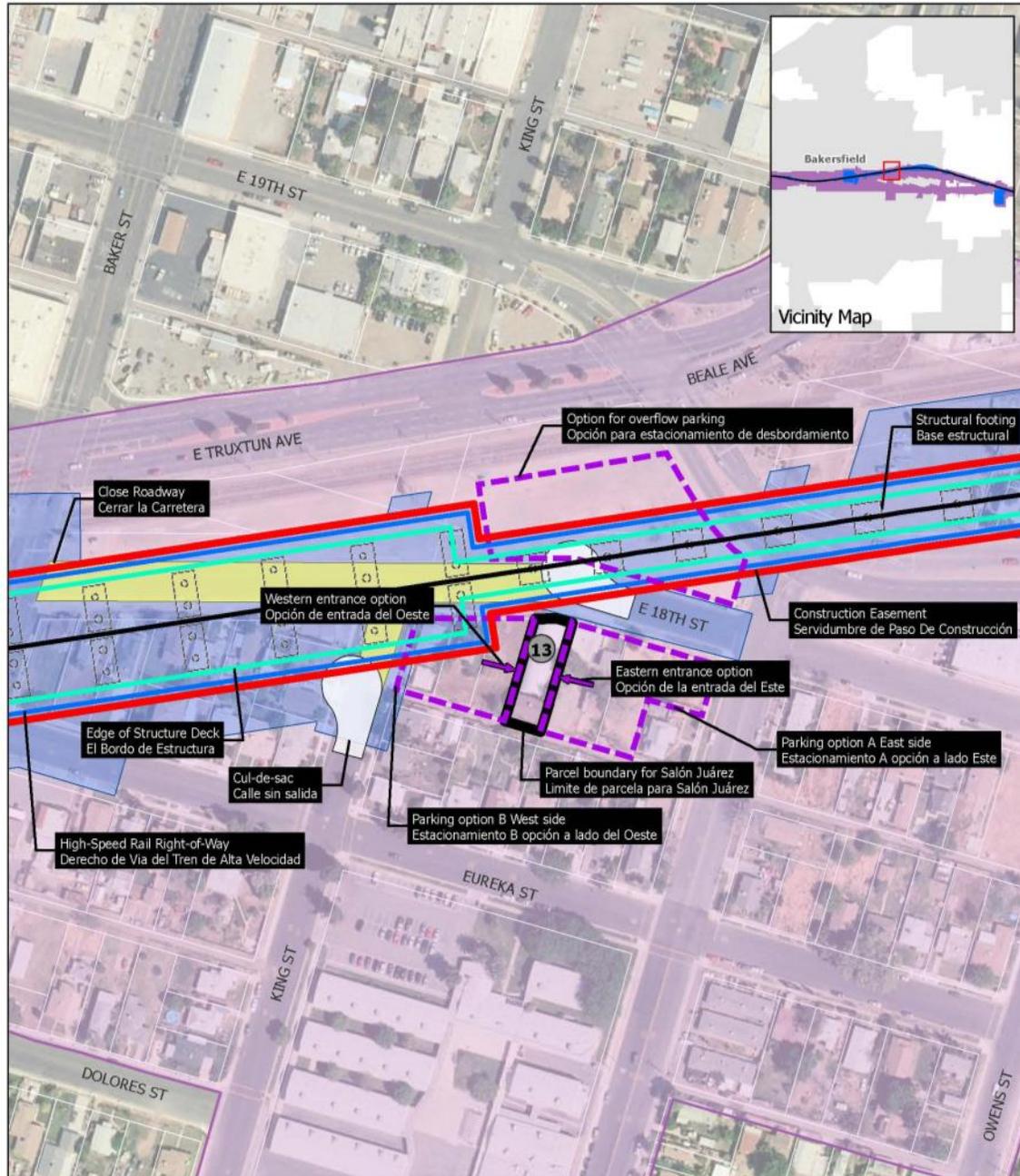


Figure 4-34
 Bakersfield Hybrid Project Effects/Efectos del Proyecto Híbrido B3
 Salón Juárez



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image Source: ESRI

Nov 5, 2013



Figure 4-35
 Salón Juárez Parking and Entrance Options/
 Salón Juárez estacionamiento y Opciones de entrada

4.2.15 1031 East 18th Avenue

Map ID No. 14

APN: 01726007

1031 East 18th Avenue, Bakersfield



Property Description

This property consists of a one-story, wood-frame Folk Victorian residence constructed in about 1900. The historic property was determined eligible for the NRHP and listed in the CRHR in April 2013. The building is significant at the local level under Criterion C, as an important example of Folk Victorian architecture. The period of significance is 1900, its approximate date of construction. Its character-defining features consist of its Folk Victorian architectural elements: hip roof and centered front gable, wood windows with wide wood surround and crowns, cornice, molding and fish scale shingles in the pediment, cutaway bay window, and square porch supports. The boundary for this historic property is its legal parcel.

Application of Criteria of Adverse Effects: No Adverse Effects

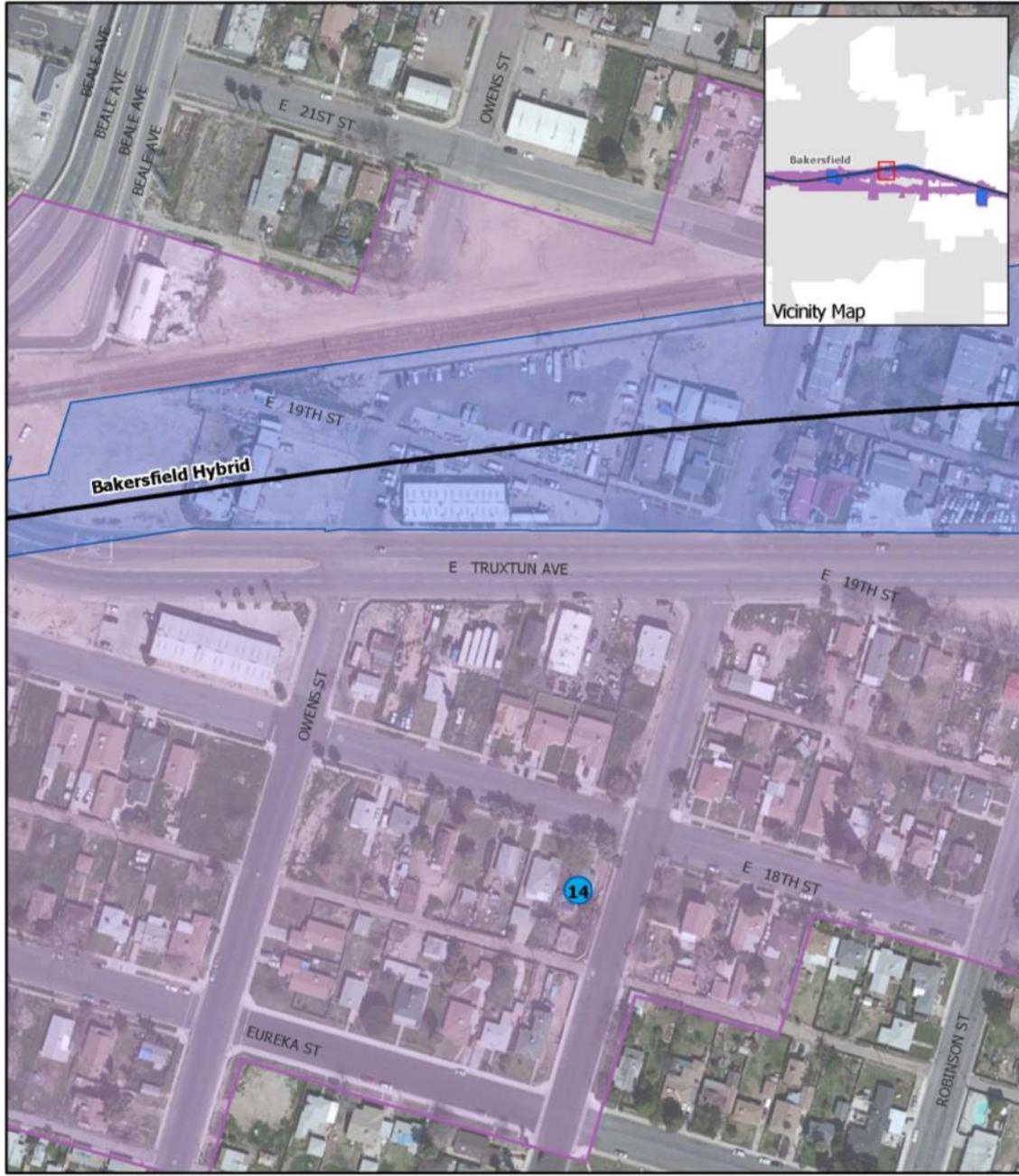
The proposed project would not cause direct or indirect adverse effects on this historic property. In the vicinity of this historic residence, the project would include a temporary construction area and the construction of elevated tracks that would have a maximum height of 30 to 90 feet at more than 400 feet north of this building. None of these proposed project components would require the removal of or the physical destruction of this historic property, or result in damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]). Therefore there would be no direct adverse effects on this residence from the construction or operation of the proposed project.

There would be no adverse indirect effects from the introduction of new noise, vibration, or visual elements (36 CFR 800.5[a][2][iv] and [v]). The elevated structure would be a considerable distance away (approximately 500 feet) from this historic property; therefore no noise or vibration impacts are anticipated. While the three- to nine-story-tall elevated structure may be partly visible to the north and northeast of this historic property, the view of the tracks from the residence would be mostly shielded by existing buildings and landscaping that currently front the north side of East 18th Street and south side of East Truxtun Avenue. Similarly, the temporary construction area would be sited north of East Truxtun Avenue and would not be visible from this historic property; therefore it would not result in indirect adverse visual effects. Furthermore the temporary construction easement would not cause adverse indirect noise or vibration effects on the historic property because it would be located more than 400 feet away.

The proposed project results in a finding of *No Adverse Effects* on the residence at 1031 East 18th Street. See Figure 4-36 for the location map of the historic property.

Conditions and Treatments Proposed

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-36
 Location Map
 1031 East 18th Avenue

4.2.16 San Joaquin Cotton Oil Company

Map ID No. 15

APN: 01749014

1660 East California Avenue, Bakersfield



Property Description

The former San Joaquin Cotton Oil Company complex is a 7.53-acre industrial property that contains eight utilitarian, wood and metal buildings and structures, most of which date to the early 1920s. The historic property was determined eligible for the NRHP and listed in the CRHR in April 2013. As the first cotton mill erected in Kern County, the property is significant at the local level under Criterion A, as the first such mill erected in Kern County, and among the first in the state, and for its association with this important historic event within the context of early development of the cotton industry in Kern County. The period of significance is from 1924, when the mill was constructed, through 1927, when it was sold to Anderson, Clayton & Company. Character-defining features include the site layout, massing and footprint of buildings, metal and wood framing, metal and wood siding, and proximity to the rail siding. The boundary of this historic property is its legal parcel.

Application of Criteria of Adverse Effects: No Adverse Effects

The construction and operation of the proposed project would not result in direct adverse effects on the San Joaquin Cotton Oil Company. The project would include the construction of a proposed elevated rail line measuring between 30 and 90 feet in height more 565 feet north of the historic property's northern boundary. Because all project construction activity and operation would be a considerable distance away from this historic property, it would not result in the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]).

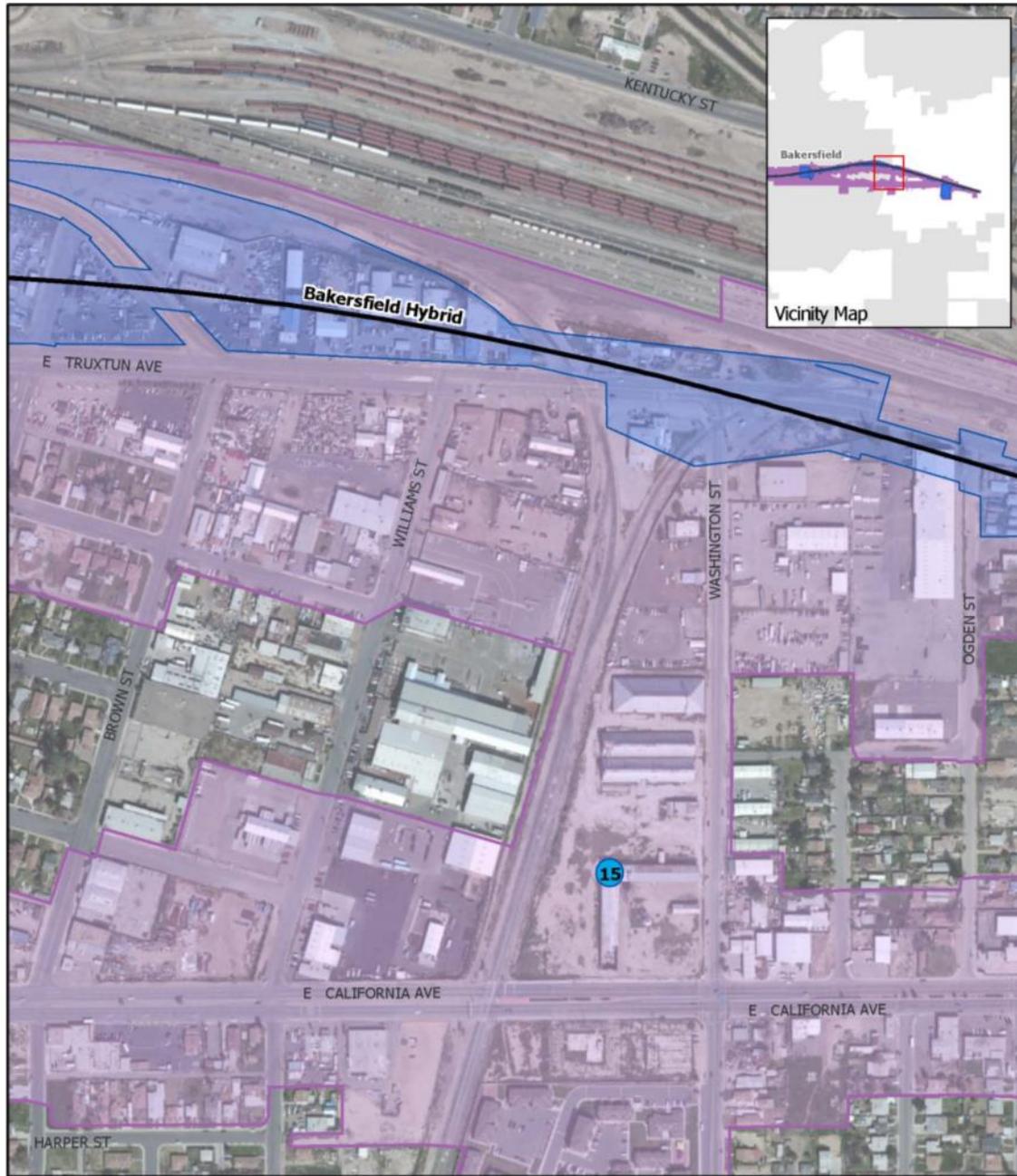
This construction and operation of the proposed project would not cause indirect adverse effects on this historic property under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. While the proposed three- to nine-story-tall elevated structure would be visible from one of the contributing structures sited at the northernmost boundary of this historic property, the proposed HST tracks would be more than 565 feet away. A radio communication tower would be approximately 450 feet northeast of the northern boundary of the mill complex. Neither the HST tracks nor the tower would adversely alter the viewshed or setting of this historical property. The integrity of the property's significant historic features and its use, both of which contribute to its historic significance, would remain unchanged.

The construction and operation of the project not cause indirect adverse effects on this historic property from potential noise or vibration elements (36 CFR 800.5[a][2][v]). No adverse indirect noise impacts would be anticipated from the construction and operation of the proposed project because of the distance of the historic property from the project. Similarly, no indirect effects from vibration would be anticipated from the project construction and operation because of the distance of the historic property from the project.

The proposed project results in a finding of *No Adverse Effects* on the San Joaquin Cotton Oil Company. See Figure 4-37 for the location map of the historic property.

Conditions and Treatments Proposed

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-37
 Location Map
 1660 East California Avenue

4.2.17 2509 East California Avenue

Map ID No. 16

APN: 14113025

2509 East California Avenue, Bakersfield



Property Description

This property consists of a one-story, wood-frame Folk Victorian residence constructed in about 1898. The historic property was determined eligible for the NRHP and listed in the CRHR in April 2013. The building is significant at the local level under Criterion C, as an important example of Folk Victorian architecture. The period of significance is 1898, its original date of construction. Its character-defining features consists of its Folk Victorian architectural elements: hip roof with rear gable, gable dormer with pediment, wood sash windows with wide wood surround, heavy cornice and molding in the pediment, cutaway bay window, partial-width porch, and spindlework frieze. The boundary of this historic property is its legal parcel.

Application of Criteria of Adverse Effects: No Adverse Effects

The proposed project would not cause direct or indirect adverse effects on this historic property. The project would include a temporary construction area, water line relocations, and the construction of a traction power substation and elevated tracks, which would have a maximum height of 30 to 90 feet in the vicinity of this historic property. None of these project components would require the removal of, the physical destruction of, or damage to this historic property (36 CFR 800.5[a][2][i], [ii], and [iii]). Therefore there would be no direct adverse effects on this residence from the construction or operation of the proposed project.

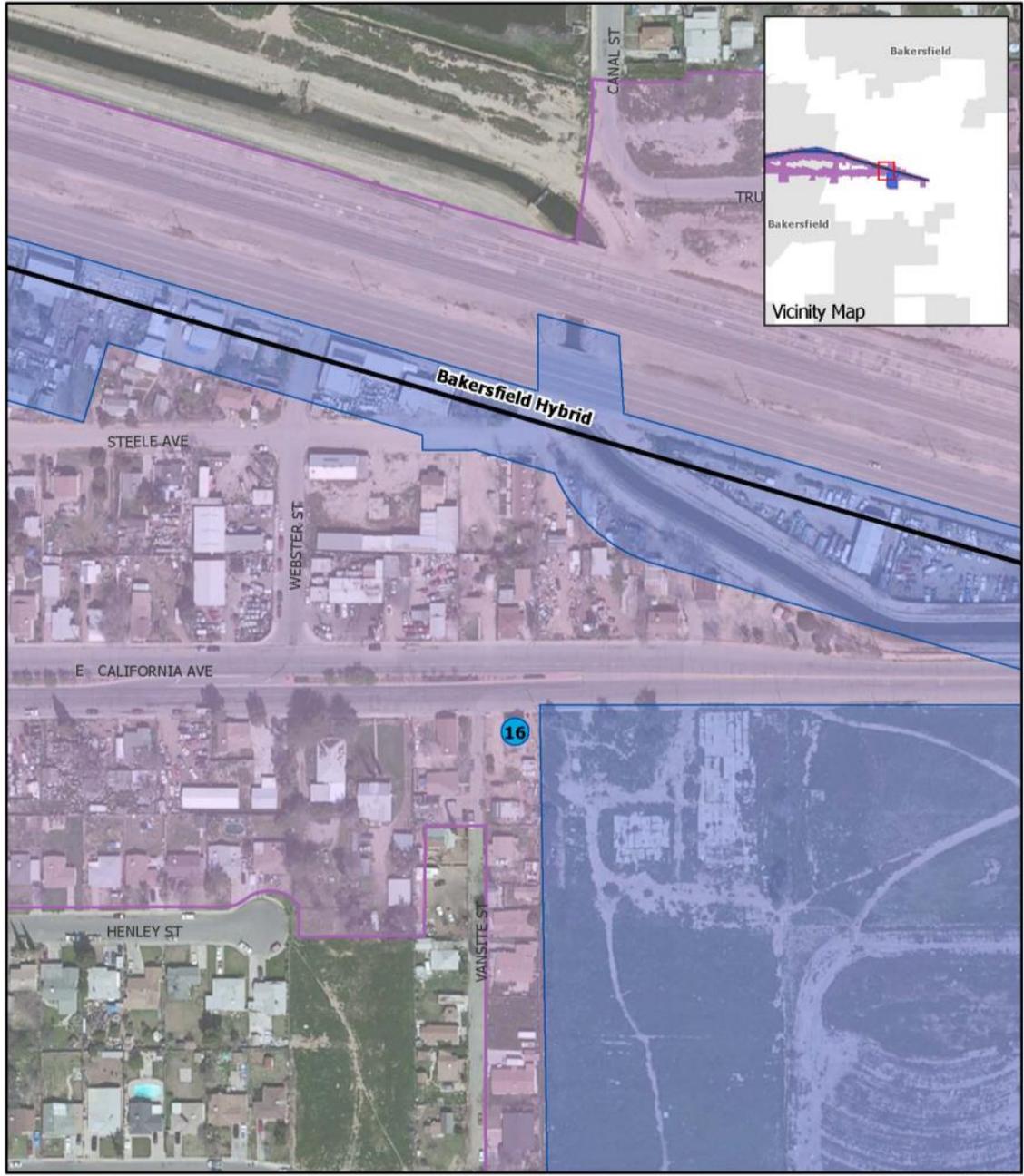
There would be no adverse indirect effects from the construction or operation of the elevated tracks from the introduction of new noise, vibration, or visual elements (36 CFR 800.5[a][2][iv] and [v]). The elevated structure would be a considerable distance away (approximately 340 feet) from this historic property; therefore no noise or vibration impacts are anticipated. While the elevated tracks may be visible to the north and northwest of this historic property, the view of

the tracks from the residence would be mostly shielded by existing buildings and landscaping that currently fronts the north side of East California Avenue.

The water line relocations, construction of traction power substation, radio communication tower, or the temporary construction area, would not cause indirect adverse effects from the introduction of new noise, vibration, or visual elements (36 CFR 800.5[a][2][iv] and [v]). The water line relocations would be not be visible from this historic property because they would be more than would be 250 feet north and 780 feet northwest of this historic property, separated by residential buildings sited along the north side of East California Avenue. The proposed traction power substation would located approximately 775 feet northwest of the residence and would be far enough away that it would not be visible, nor would it cause potential noise impacts. A radio communication tower would be located about 1,000 feet to the northwest, and although it may be partly visible from the historic property, at that distance it would not diminish its historic integrity. While a temporary construction area would be sited along the western boundary of this historic property in an already-vacant property and would be visible from west and south (secondary) sides of this residence, this proposed project component would be temporary and would not cause adverse indirect visual effects on the historic property. Because vibration from impact pile-driving during construction of the tracks could reach levels that could potentially damage historic properties, the project will implement a condition to develop alternative construction methods to be used in locations next to sensitive historic properties, see Section 4.1. The proposed project results in a finding of ***No Adverse Effects*** on the residence at 2509 East California Avenue. See Figure 4-38 for the location map of the historic property

Conditions and Treatments Proposed

The proposed project would not cause an adverse effect on this historic property; therefore, no conditions or treatment measures are proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



Figure 4-38
 Location Map
 2509 East California Avenue

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Section 5.0
“CEQA-Only” Cultural Resources:
Description of Historical Resources, CEQA
Analysis, and Conditions Proposed

5.0 “CEQA-Only” Cultural Resources: Description of Historical Resources, CEQA Analysis, and Conditions Proposed

This chapter assesses the impacts of the proposed project on the seven built environment resources within the project APE that are considered historical resources under CEQA, but are not historic properties as defined by Section 106. The assessment provided below identifies the direct, indirect, and cumulative effects as defined in the California Code of Regulations (CCR) Section 15064.5. All CEQA-only historical resources are located within the city of Bakersfield.

5.1 Methodology

This section discusses the methodology used to assess potential impacts on historical resources by the project.

5.1.1 “Substantial Adverse Change” and Impacts Analysis

CEQA requires that California public agencies identify the significant environmental impacts of their actions and either avoid those impacts, or mitigate those impacts. This analysis was prepared to assist state and local agencies, as well as the general public, in understanding the potentially significant impacts on historical resources that may be caused by the project, and how those impacts may be avoided and/or minimized.

The CCR, beginning with Section 15064.5(b), defines significant impacts for historical resources as follows:

1. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2. The significance of an historical resource is materially impaired when a project:
 - a. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
 - b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC, or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.
3. Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995), shall be considered as mitigated to a level of a less-than-significant impact on the historical resource.

4. A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.

For this proposed project, two categories of impacts have the potential to affect historical resources: direct and indirect. Direct impacts are those that would result in the physical destruction or material alteration of historical resources as a result of physical construction of the proposed project. Indirect impacts are not directly related to the physical construction of the proposed project. Indirect impacts for this analysis include noise, vibration, and visual impacts related to the proposed project.

5.1.2 Conditions Proposed to Avoid, Minimize, or Mitigate Substantial Adverse Changes

Measures to avoid or minimize substantial adverse change to historical resources include steps taken in both the design and construction phases of the project. Avoidance measures implemented during the design phase consist of identifying, and then applying conditions that would eliminate the effect through redesign of project components, characteristics, or construction activities that could adversely affect historical resources. Minimization measures implemented at either the design phase or construction phase are treatments that would reduce the degree of adverse change or impacts on historical resources.

The conditions or treatments (avoidance, minimization, and mitigation), either those presented in this document, or others developed by project stakeholders, will be addressed in the treatment plans and Mitigation Monitoring and Reporting Plan (MMRP). Each condition and treatment will be refined accordingly for each particular historical resource and included in the treatment plans. Detailed direction for implementation of conditions and treatments for historic architectural properties will be presented in the Built Environment Treatment Plan (BETP). Although there are no known NRHP-eligible archaeological resources in the APE and therefore no effects assessments for archaeology included herein, an Archaeological Treatment Plan (ATP) will be prepared to direct an additional identification and impacts assessment and to outline mitigation. The BETP and ATP will be prepared in consultation with the appropriate agencies, and other signatories to the MOA. The concerns of the consulting parties will also be considered in determining the measures to be implemented. Conditions, as well as most treatment measures will be implemented before the commencement of construction activities; however, depending on the nature of the selected measures, some treatments may not be completed until after the undertaking is completed.

5.1.3 Project-Wide Avoidance, Minimization, and Mitigation Measures

The HST design was refined to enable the project to avoid certain types of adverse change, specifically noise and vibration. Adverse noise and vibration impacts on historic properties could occur during construction activities and during operation of the HST System.

Condition Proposed to Minimize Adverse Noise. Construction and operational noise have the potential to cause indirect adverse change to historical resources that have an inherent quiet quality that is part of a property's historic character and significance (36 CFR 800.5[a][2][iv] and [v]). As a precaution, the project will develop measures to avoid adverse changes to historical resources that could result from construction noises, such as impact pile driving, jackhammering, and truck loading and operations. Conditions implemented to avoid adverse construction noise would include use of alternative techniques, such as the use of low-noise emission equipment and noise-deadening equipment for machinery. Preliminary project design options, such as noise walls, have also been developed to help reduce operational noise impacts and follow FRA

methodologies for noise abatement. This condition will minimize potential noise impacts from construction throughout the project area.

Condition Proposed to Minimize Adverse Vibration. Steps taken to address potential adverse effects on historical resources include developing methods to avoid adverse construction vibration. Potential structural damage caused by construction vibration is anticipated only from impact pile driving very close to buildings. Vibration from impact pile driving during construction could reach up to 0.12 inch/second (in/sec) peak particle velocity (PPV), or approximately 90 root mean square vibration velocity level, decibels [VdB], at 135 feet from the project centerline. This level could cause the physical destruction, damage, or alteration of historical resources within 135 feet. Because impact pile driving could cause indirect adverse impacts, alternative construction methods causing vibration of less than 0.12 in/sec PPV will be employed near historical resources located within 135 feet from the project centerline. Implementation of this condition (development of alternative construction methods) will avoid adverse vibration effects on historic properties.

Treatment Proposed to Minimize Adverse Change Caused by Inadvertent Damage. A plan for repair of inadvertent damage will be prepared and implemented as a treatment to minimize inadvertent adverse effects on historical resources caused by project construction activities. The plan content will be detailed in the BETP and will be developed before construction begins. The plan will use any survey or preconstruction photographic documentation prepared for the historical resource as part of the baseline condition for assessing damage. The plan will describe the protocols for documentation of inadvertent damage (should it occur), as well as notification, coordination, and reporting to the lead CEQA agency and the owner of the historic property. The plan will direct that inadvertent damage will be repaired in accordance with the Secretary of the Interior's (SOI) *Standards for the Treatment of Historic Properties* (U.S. Department of the Interior 1995). The plan will be developed in coordination with the Authority and FRA.

Treatment Proposed to Mitigate Direct Adverse Impacts. Photographic documentation will be prepared before construction begins for historical resources directly affected by the project. This documentation could be in the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscapes Survey (HALS) records, or other photo documentation, as stipulated in the MOA. Specifications for the implementation of this mitigation measure will be detailed in the BETP.

Before construction, consultation will be initiated with the Pacific West Regional Office of the National Park Service (NPS) if HABS, HAER, or HALS documentation is selected. This consultation will identify the appropriate level of documentation. In general, photography should capture views of the historic property from multiple views, and could include reproduction of historic images as well. Photo documentation to HABS/HAER/HALS standards will consist of written data; preconstruction photographs showing the property, its surrounding context, and details of the property's character-defining features; and archival and digital reproduction of historic images, plans, and drawings, if available. HABS/HAER/HALS documentation will follow the NPS Guidelines. All photographs (preconstruction and reproduction of historic images, plans, and drawings) will be processed for archival permanence in accordance with NPS program specifications. Each view will be fully captioned and, if necessary, the perspective will be corrected. All fieldwork necessary for photographic documentation, architectural or engineering drawings, cartography, and/or digital recordation through geographic information or global positioning systems (GIS and GPS, respectively) will be completed before project construction begins. The written data will include a historic narrative for the resource.

Preparation of the photo documentation may require coordination with an interdisciplinary team, as stipulated in the MOA, and may include an architectural historian, a historian, and a photographer. The BETP will detail the qualification standards for these preparers. The

documentation will be prepared by the Regional Consultant (RC) and submitted to the Authority for review and comment. The Authority will submit the documentation to the SHPO for review and comment. The BETP will also identify the distribution of printed and electronic copies of the photo documentation as well as permanent archival disposition of the record, if applicable.

5.2 Built Environment Historical Resources

This section describes seven historical resources within the project APE that have the potential to be affected by the proposed project. These resources are within the city of Bakersfield and represent residential buildings constructed in the first three decades of the twentieth century. All of these historical resources were evaluated as part of the HST project or previous surveys and found ineligible for the NRHP and CRHR; however these resources were identified in a study conducted for the City of Bakersfield in the 1980s as eligible for listing in a local register of historical resources. Completed at a time when there was little standardization of the evaluation process, the historical resources that were found to be locally significant often lacked clear and concise explanation of their historical importance, overall historic integrity was often not supplied, dates for period of significance were often not provided, and many do not identify character-defining features. These properties were revisited during the evaluation for the HST project, and additional description information and analysis has been provided in the original HPSR and Supplemental HPSR (Authority and FRA 2011d, 2012c) and within this section to facilitate completion of this effects analysis.

The following section includes a summary of the significance of each historical resource and its character-defining features, analysis of impacts that may be caused by the HST project, as well as representative photographs of the historical resources. See Table 5-1 for a summary of the historic properties and the CEQA impacts findings.

Table 5-1
 Summary Table of Built Environment CEQA Impacts Findings

Map Id No.	APN	Resource Name and Address	City, County	Year Built	CHRS Status Code	Impacts Findings
1	00641104	1300-1316 H St.	Bakersfield, Kern	ca. 1912-1920	5S2, 6Z	No Substantial Adverse Change
2	00641206	1310-1312 Eye St.	Bakersfield, Kern	1926	5S2, 6Z	No Substantial Adverse Change
3	00639102	1401-1409 K St.	Bakersfield, Kern	1913	5S2, 6Z	Substantial Adverse Change - Direct
4	00646003	1323 K St.	Bakersfield, Kern	ca. 1921	5S2, 6Z	No Substantial Adverse Change
5	00645002	1323 L St.	Bakersfield, Kern	ca. 1912-1920	5S2, 6Z	Substantial Adverse Change - Indirect
6	00644026	1330 L St.	Bakersfield, Kern	1920	5S2, 6Z	Substantial Adverse Change - Indirect
7	00644025	1326 L St.	Bakersfield, Kern	1920	5S2, 6Z	Substantial Adverse Change - Indirect

5.2.1 1300-1316 H Street

Map ID No. 1
APN: 00641104
1300-1316 H Street, Bakersfield



Description

These two residences were constructed in the Craftsman style between 1912 and 1920. The property was identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its architectural design. For this reason, the Authority consider this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features for the property; however, its appropriate period of significance is the construction period (1912 to 1920) and character-defining features include the plan, massing, material, and Craftsman detailing, including double-hung wood-frame windows, wide exposed eaves, and substantial porches. Its boundary is its legal parcel.

These buildings were evaluated for the HST project and neither was found eligible for listing in the CRHR or NRHP because they do not meet any of the significance criteria and both buildings lack integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: No Substantial Adverse Change

The proposed project would not cause direct substantial adverse changes to this historical resource. The project would include the construction of an elevated rail line that would measure about 45 feet in height, water line relocations and the closure of a section of Eye Street between 14th and 15th streets in the vicinity of this historical resource. All components of the project would be more than 330 feet north and northeast of this historical resource and would not result in the physical demolition, destruction, relocation, or alteration of either residence (CCR Section 15064.5[b][1][2]).

The proposed project would not cause an indirect substantial adverse change to these historic residences from the introduction of visual, vibration, or noise impacts. While the three- to five-story-tall elevated rail line would be visible when looking northwest from north side of 1316 H Street, the rail line would be located approximately 415 feet north of this property. The view from the historical resource would be partially obscured by two-story buildings fronting H and

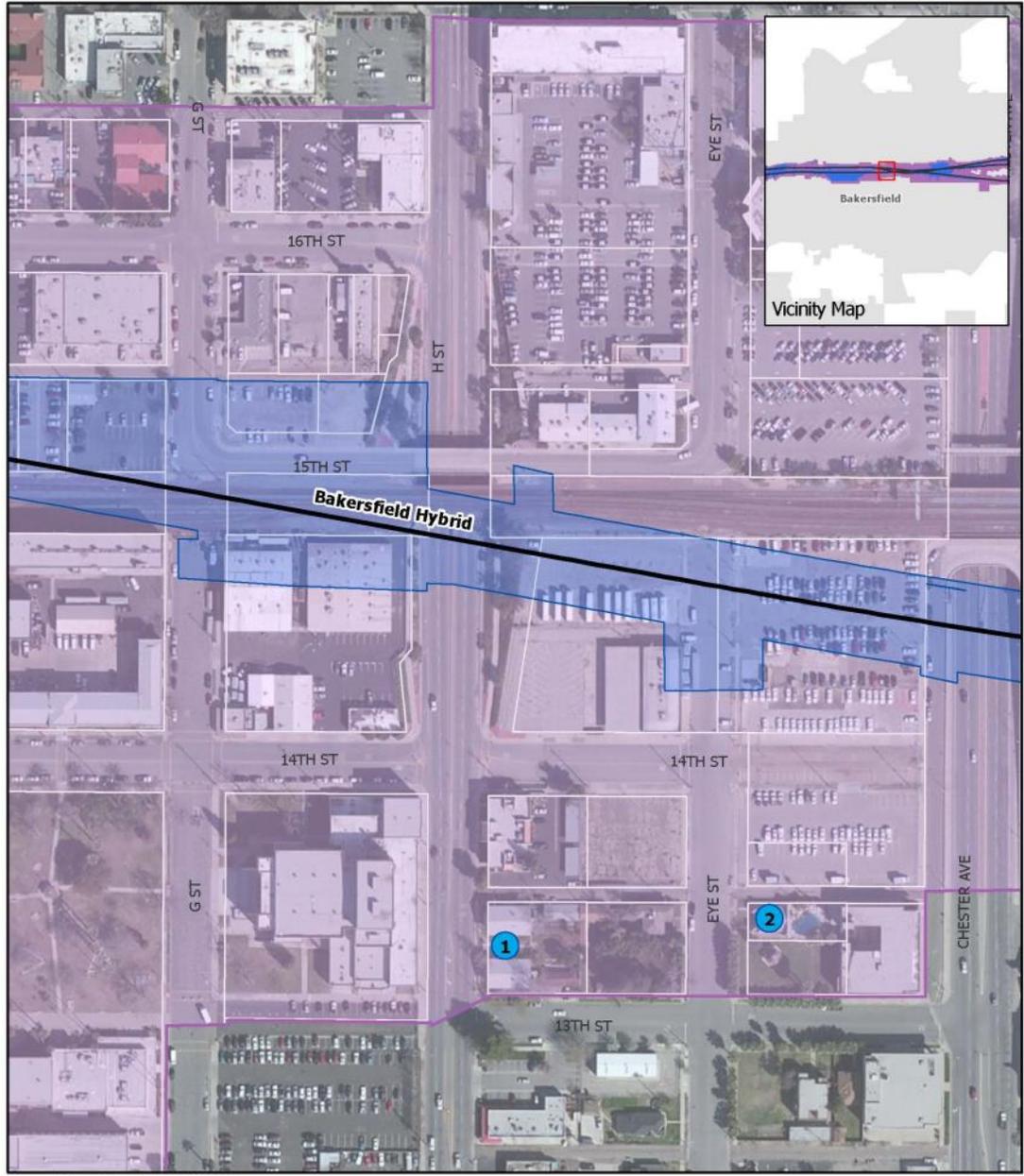
14th streets. Because the property is located a considerable distance from the elevated rail line, is not oriented toward the proposed structure, and is buffered by existing properties, the introduction of the rail line would not materially alter the setting or view of this historical resource.

The closest water line relocation would be 400 feet north of this historical resource but would not be visible from this resource because the view would be blocked by an extant two-story building sited at the corner of H and 14th streets. While the closure of Eye Street might be visible when looking northwest from second-floor windows of the north and east (secondary) sides of these residences, this project component would be 330 feet away from this historical resource. Neither the water line relocations nor street closure would materially alter the view or setting of this historical resource, and therefore would not result in any substantial adverse changes from potential visual effects. Similarly, because this historical resource is a substantial distance from all construction and operational activities, there would be no impacts anticipated from vibration or noise (Authority and FRA 2012e).

The proposed project results in a finding of *No Substantial Adverse Change* to 1300-1316 H Street. See Figure 5-1 for the location map of the historic property

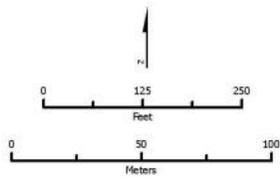
Conditions and Treatments Proposed

The project would not cause a substantial adverse change to this historic property; therefore, no treatment measures are required or proposed.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



- # Direct substantial adverse change
- # Indirect substantial adverse change
- # No substantial adverse change
- Elevated alignment
- Alignment footprint
- Architectural APE
- Parcel

Figure 5-1
 Location Map
 1300-1316 H Street

5.2.2 1310-1312 Eye Street

Map ID No. 2
 APN: 00641206
 1310-1312 Eye Street, Bakersfield



Description

The Tudor-style duplex built in 1926 was identified in *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its architectural design. For this reason, the Authority consider this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features; however, its appropriate period of significance is the construction date of 1926, and character-defining features include the plan, massing, material, and Tudor design elements, including the steeply pitched roof and wood-frame windows. Its boundary is its legal parcel.

This property was evaluated for the HST project and was found not eligible for listing in the CRHR or NRHP because it does not meet any of the significance criteria and has diminished integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register

Impacts Analysis: No Substantial Adverse Change

The proposed project would not cause direct substantial adverse changes to this historical resource from the construction of an elevated rail line that would measure about 45 feet in height, or the closure of Eye Street between 14th and 15th streets. The historical resource would be located more than 290 feet south of all project construction activity; therefore, the project would not cause the physical demolition, destruction, relocation, or alteration of this resource (CCR Section 15064.5[b][1][2]).

The proposed project would not cause an indirect substantial adverse change to 1310-1312 Eye Street from the introduction of visual, vibration, or noise impacts. While the three- to five-story-tall elevated rail line would be visible when looking north and northwest from this duplex, the rail line would be located a considerable distance (approximately 360 feet) from this property. The introduction of the elevated structure would not substantially alter the immediate visual setting of the resource. While the closure of Eye Street would be visible when looking north from this

historical resource, this project component would be more than 290 feet away from this historical resource and would not materially alter the view or setting of this historical resource. Similarly, because this historical resource is a substantial distance from all construction and operational activities, there would be no impacts anticipated from vibration or noise (Authority and FRA 2012e).

The proposed project results in a finding of *No Substantial Adverse Change* to 1310-1312 Eye Street. See Figure 5-1 for the location map of the historic property.

Conditions and Treatments Proposed

The project would not cause a substantial adverse change to this historic property; therefore, no treatment measures are required or proposed.

5.2.3 1401-1409 K Street

Map ID No. 3
APN: 00639102
1401-1409 K Street, Bakersfield



Description

This parcel includes three bungalows built in 1913. The property was identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its bungalow architecture. For this reason, the Authority considers this property to be an historical resource under CEQA for the purposes of the HST project. The evaluation did not specify a period of significance or character-defining features; however, the appropriate period of significance is 1913, the construction date of the buildings

and character-defining features include the plan, massing, material, and bungalow design elements, including the low hipped roof, centered porches, and double-hung wood-frame windows of each building. The resource boundary is its legal parcel.

These buildings were evaluated for the HST project and were found not eligible for listing in the CRHR or NRHP because they do not meet any of the significance criteria and both buildings lack integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: Direct Substantial Adverse Change

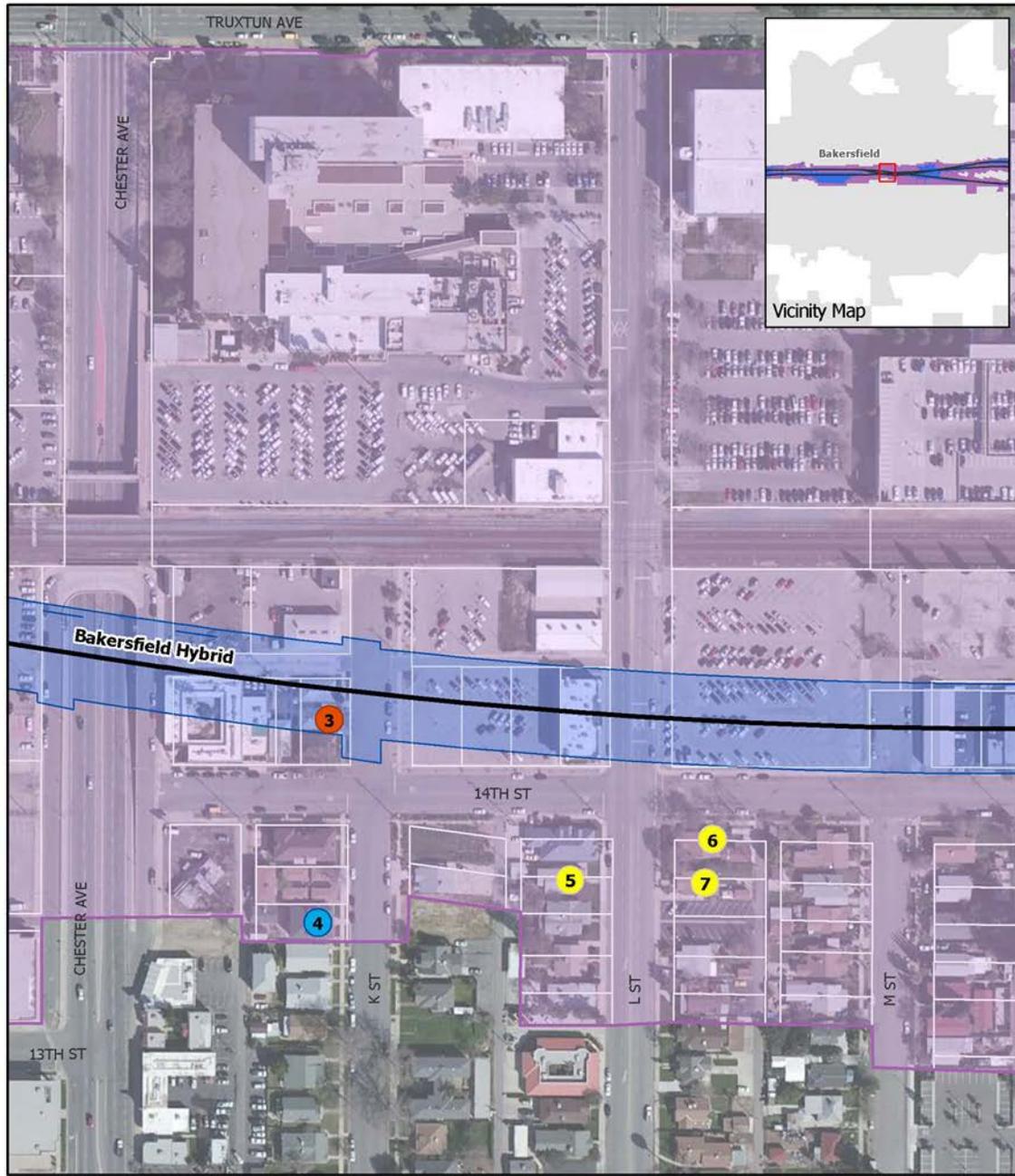
The construction of the proposed project would cause a direct substantial adverse change to this historical resource. The project would construct an elevated rail line that would measure about 45 feet in height directly through this property. Therefore, the project would result in the physical demolition, destruction, relocation, or alteration of the three historical resources located on this parcel (CCR Section 15064.5[b][1][2]).

The proposed project results in a finding of a *Direct Substantial Adverse Change* to 1401-1409 K Street. See Figure 5-2 for the location map of the historic property.

Conditions and Treatments Proposed

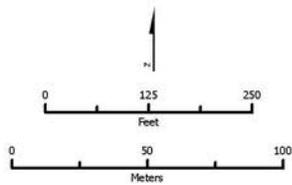
1. Prepare Archival documentation

Prepare photo documentation of the buildings at 1401-1409 K Street prior to construction. Documentation format may follow Historic American Buildings Survey (HABS) guidelines, or other format as stipulated in the Mitigation Monitoring Plan. This documentation will mitigate the direct adverse change to the property from the construction of the project. Photography should capture views of and from the building to show the existing context of the property in the surrounding area. See Section 5.1.3 for a description of this mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.



Source: URS/HMM/Arup JV, 2013; JRP, 2013.
 Image source: ESRI

Nov 6, 2013



- # Direct substantial adverse change
- # Indirect substantial adverse change
- # No substantial adverse change
- Elevated alignment
- Alignment footprint
- Architectural APE
- Parcel

Figure 5-2
 Location Map
 1401-1409 K Street

5.2.4 1323 K Street

Map ID No. 4
 APN: 00646003
 1323 K Street, Bakersfield



Description

This Georgian Revival residence was constructed in about 1921 and identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its architectural design. For this reason, the Authority considers this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features for the property. The period of significance would be its construction date (circa 1921), and character-defining features would include its plan, massing, material, and Georgian Revival design elements, including the centered and columned porch, prominent brackets at the roofline, and vented dormers. The garage and detached secondary residence also on this parcel are not historical resources for the purpose of CEQA. The resource boundary is its legal parcel.

This property was evaluated for the HST project and was found not eligible for listing in the CRHR or NRHP because it does not meet any of the significance criteria and has diminished integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: No Substantial Adverse Change

The construction and operation of the proposed project would not result in direct substantial adverse changes to this historical resource. The project would include the construction of an elevated rail line that would measure about 45 feet in height. All construction activities for these project components would be more than 230 feet north of this property and would not result in the physical demolition, destruction, relocation, or alteration of this resource (CCR Section 15064.5[b][1][2]).

The proposed project would not cause an indirect substantial adverse change to this historic residence from the introduction of visual, vibration, or noise impacts. While the three- to five-story-tall elevated rail line would be visible when looking northeast from north side of 1323 K Street, the rail line would be located approximately 240 feet north of this property. The view from the historical resource would be partially obscured by one-story buildings fronting K Street. Because the property is located a considerable distance from the elevated rail line, is not oriented toward the proposed structure, and is buffered by existing properties, the introduction of the rail line would not materially alter the setting or view of this historical resource.

The construction and operation of this project would not cause indirect substantial adverse changes to this historical resource from potential vibration elements. Vibration from impact pile-driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from the project centerline, a level that could potentially cause the physical destruction of, damage to, or alteration of historical resources. However, this historical resource is more than 240 feet from project centerline; therefore there would be no indirect substantial adverse change cause from potential vibration impacts (Authority and FRA 2012e). Furthermore, potential noise impacts from the construction and operation of the proposed project are not anticipated to cause indirect substantial adverse change (Authority and FRA 2012e).

The proposed project results in a finding of *No Substantial Adverse Change* to 1323 K Street. See Figure 5-3 for the location map of the historic property

Conditions and Treatments Proposed

The project would not cause a substantial adverse change to this historic property; therefore, no treatment measures are required or proposed.

5.2.5 1323 L Street

Map ID No. 5
 APN: 00645002
 1323 L Street, Bakersfield



Property Description

This single-story bungalow was constructed between circa 1912 and 1920 and was identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its bungalow architectural design. For this reason, the Authority considers this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features for the property. The period of significance would be its construction period (1912–1920) and character-defining features would include the plan, massing, material, and bungalow design elements, including the low hipped roof, centered porch, and double-hung wood-frame windows. The resource boundary is its legal parcel.

This property was evaluated for the HST project and was found not eligible for listing in the CRHR or NRHP because it does not meet any of the significance criteria and has diminished integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: Indirect Substantial Adverse Change

The construction and operation of the proposed project would not result in direct substantial adverse changes to this historical resource. The project would include the construction of an elevated rail line that would measure about 45 feet in height. All construction activities for these project components would be more than 135 feet north of this property and would not result in the physical demolition, destruction, relocation, or alteration of this resource (CCR Section 15064.5[b][1][2]).

This project would cause indirect substantial adverse changes to this residence from the introduction of visual elements. The proposed elevated rail line would be located approximately 160 feet north of this historical resource. The resource would only be separated from the

proposed elevated structure by a one-story residence and 14th Street and would have a direct view of the elevated structure from this historic building's main (east) and secondary (north and west) façades. The area immediately adjacent to this historical resource has historically been predominately residential in nature, housing single-family residences and some one-story commercial/industrial buildings. The introduction of new, elevated transportation infrastructure equivalent to a three- to five-story-tall building in the immediate vicinity of this early twentieth century building would adversely alter the viewshed and setting of this historical resource. The size, scale, and massing of such a structure would not be consistent with the historic design, setting, location, and feeling of this historical resource and would diminish the historic integrity of the building.

The construction and operation of the proposed project would not cause indirect substantial adverse changes to this historical resource from potential vibration elements. Vibration from impact pile-driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from the project centerline, a level that could potentially cause the physical destruction of, damage to, or alteration of historical resources. However, this historical resource more than 150 feet from project centerline; therefore there would be no indirect substantial adverse change cause from potential vibration impacts (Authority and FRA 2012e). Furthermore, potential noise impacts from the construction and operation of the project are not anticipated to cause indirect substantial adverse change (Authority and FRA 2012e).

The proposed project results in a finding of an *Indirect Substantial Adverse Change* to this 1323 L Street. See Figure 5-3 for the location map of the historic property

Conditions and Treatments Proposed

1. Prepare Archival Documentation

Prepare photo documentation the building at 1323 L Street prior to construction. Documentation format may follow Historic American Buildings Survey (HABS) guidelines, or other format as stipulated in the Mitigation Monitoring Plan. This documentation will mitigate the indirect adverse change from the construction of the project. Photography should capture views of and from the building to show the existing context of the property in the surrounding area. See Section 5.1.3 for a description of this mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

5.2.6 1330 L Street

Map ID No. 6
APN: 00644026
1330 L Street, Bakersfield



Description

The single-story bungalow was constructed in 1920 and identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its bungalow architectural design. For this reason, the Authority considers this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features for the property. The period of significance would be its 1920 construction date, and character-defining features include the plan, massing, material, and bungalow design elements — including the low gabled roof, vented gables, centered porch, and double-hung wood-frame windows. The resource boundary is its legal parcel.

This property was evaluated for the HST project and was found not eligible for listing in the CRHR or NRHP because it does not meet any of the significance criteria and has diminished integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: Indirect Substantial Adverse Change

The construction and operation of the proposed project would not result in direct substantial adverse changes to this historical resource. The project would include the construction of an elevated rail line that would measure about 45 feet in height. All construction activities for these project components would be more than 90 feet north of this property and would not result in the physical demolition, destruction, relocation, or alteration of this resource (CCR Section 15064.5[b][1][2]).

This project would cause indirect substantial adverse changes to this residence from the introduction of visual elements. The proposed elevated rail line would be located directly across 14th Street (within approximately 100 feet) from this historical resource and would be visible from this historic building's main (west) and secondary (north and east) façades. The area immediately adjacent to this historical resource has historically been predominately residential in nature,

housing single-family residences and some one-story commercial/industrial buildings. The introduction of new, elevated transportation infrastructure equivalent to a three- to five-story-tall building in the immediate vicinity of this early twentieth century building would adversely alter the viewshed and setting of this historical resource. The size, scale, and massing of such a structure would not be consistent with the historic design, setting, location, and feeling of this historical resource and would diminish the historic integrity of the building.

Because vibration from impact pile-driving during construction of the tracks could reach levels that could potentially damage historic properties, the project will implement a condition to develop alternative construction methods to be used in locations next to sensitive historic properties, see Section 4.1. Potential noise impacts from the construction and operation of this project are not anticipated to cause indirect substantial adverse change (Authority and FRA 2012e).

The proposed project results in a finding of an *Indirect Substantial Adverse Change* to this 1330 L Street. See Figure 5-3 for the location map of the historic property

Conditions and Treatments Proposed

1. Prepare Archival Documentation

Prepare photo documentation the building at 1330 L Street prior to construction. Documentation format may follow Historic American Buildings Survey (HABS) guidelines, or other format as stipulated in the Mitigation Monitoring Plan. This documentation will mitigate the indirect adverse change from the construction of the project. Photography should capture views of and from the building to show the existing context of the property in the surrounding area. See Section 5.1.3 for a description of this mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

5.2.7 1326 L Street

Map ID No. 7
APN: 00644025
1326 L Street, Bakersfield



Description

The single-story bungalow was constructed in 1920 and identified in the *City of Bakersfield Cultural Resources Survey, Downtown Area* (Brewer 1985) as eligible for listing in the Bakersfield Register of Historic Places for its bungalow architectural design. For this reason, the Authority considers this property to be an historical resource under CEQA for the purposes of the HST project. The previous evaluation did not specify a period of significance or character-defining features for the property. The appropriate period of significance is 1920, the building's construction date, and character-defining features include the plan, massing, material, and bungalow design elements — the low gabled roof, vented gables, centered porch, and double-hung wood-frame windows. The resource boundary is its legal parcel.

This property was evaluated for the HST project and was found not eligible for listing in the CRHR or NRHP because it does not meet any of the significance criteria and has diminished integrity. SHPO concurred with the NRHP ineligibility finding on February 6, 2012. SHPO does not comment on CEQA findings, but FRA and the Authority consider this property to be an historical resource under CEQA because of its listing on a local register.

Impacts Analysis: Indirect Substantial Adverse Change

The construction and operation of the proposed project would not result in direct substantial adverse changes to this historical resource. The project would include the construction of an elevated rail line that would measure about 45 feet in height. All construction activities for these project components would be more than 140 feet north of this property and would not result in the physical demolition, destruction, relocation, or alteration of this resource (CCR Section 15064.5[b][1][2]).

This project would cause indirect substantial adverse changes to this residence from the introduction of visual elements. The proposed elevated rail line would be sited approximately 140 feet north of this historical resource and would only be separated by a small, one-story residence and 14th Street. The area immediately adjacent to this historical resource has historically been

predominately residential in nature, housing single-family residences and some one-story commercial/industrial buildings. The elevated tracks would be equivalent to a three- to five-story-tall building and would be visible from this historic building's main (west) and secondary (north and east) façades. The introduction of new, elevated transportation infrastructure equivalent to a three- to five-story-tall building in the immediate vicinity of this early twentieth century building would adversely alter the viewshed and setting of this historical resource. The size, scale, and massing of such a structure would not be consistent with the historic design, setting, location, and feeling of this historical resource and would diminish the historic integrity of the building.

The construction and operation of the proposed project would not cause indirect substantial adverse changes to this historical resource from potential vibration elements. Vibration from impact pile driving during construction would be anticipated to reach up to 0.12 in/sec PPV at 135 feet from the project centerline, a level that could potentially cause the physical destruction of, damage to, or alteration of historical resources. However, this historical resource more than 135 feet from project centerline; therefore there would be no indirect substantial adverse change cause from potential vibration impacts (Authority and FRA 2012e). Furthermore, potential noise impacts from the construction and operation of the project are not anticipated to cause indirect substantial adverse change (Authority and FRA 2012e).

The proposed project results in a finding of an *Indirect Substantial Adverse Change* to this 1326 L Street. See Figure 5-3 for the location map of the historic property.

Conditions Proposed/Treatment Measures

1. Prepare Archival Documentation

Prepare photo documentation the building at 1326 L Street prior to construction. Documentation format may follow Historic American Buildings Survey (HABS) guidelines, or other format as stipulated in the Mitigation Monitoring Plan. This documentation will mitigate the indirect adverse change from the construction of the project. Photography should capture views of and from the building to show the existing context of the property in the surrounding area. See Section 5.1.3 for a description of this mitigation measure. The fieldwork necessary for this mitigation measure (e.g., photography, as-built drawings, cartography, or digital recordation) would be implemented before construction begins. Details of the specifications and implementation of this mitigation measure will be presented in the BETP.

Section 6.0

References

6.0 References

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- URS/HMM/Arup Joint Venture. 2013. Memorandum, Sal3n Ju3rez Section 4(f) Analysis for Bakersfield Hybrid Alternative, September 16, 2013.

Appendix A

SHPO Correspondence

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



February 6, 2012

Reply in Reference To: **FRA100524C**

Dan Leavitt - Deputy Director
CALIFORNIA High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Re: Section 106 Consultation for the Fresno to Bakersfield Section High Speed Train Project

Dear Mr. Leavitt:

Thank you for consulting pursuant to the, *Programmatic Agreement Among the Federal Railroad Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California High-Speed Rail Authority regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the California High-Speed Train Project (PA)*.

The California High-Speed Rail Authority (Authority) has determined that the five sites listed on page 7-1 of the Historic Property Survey Report (HPSR) and page 2-2 of the Archeological Survey Report (ASR) is not eligible for the National Register of Historic Places (NRHP). Based on review of the submitted documentation, I concur that CA-TUR-2950H, HST-TUL-A-1/-2 and HST-A-TUL-3 are not eligible for the NRHP. As CA-KER-2507 and -3072 were restricted from field survey I am not comfortable making an eligibility determination at this time. I recommend further identification and evaluation efforts be pursued once a preferred alternative is chosen or the plan for the identification efforts for these sites be included as part of a Memorandum of Agreement for the project.

The Authority has also determined that the 25 historic resources, as detailed on page 7-1 of the HPSR, are either listed in or eligible for the listing in the NRHP. I concur that all of the properties with the exception of 901 Flory Avenue are eligible for the NRHP. I do not have enough information at this time to either agree or disagree with eligibility on 901 Flory Avenue at this time. I recommend in the interest of timeliness that the authority assume that 901 Flory Avenue is eligible for the NRHP for the purposes of this project.

The Authority has also found that the 27 properties listed in section 6.6 of the HPSR and the 176 properties listed in section 7 of the Historic Architectural Survey Report are not eligible for listing in the NRHP. I concur.

In your letter of October 31, 2011, the Authority found that the project would have an adverse effect on historic properties. In our meeting with the Federal Railroad Administration and the Authority on January 26, 2012, it was agreed that the SHPO

Mr. Leavitt
February 6, 2012
Page 2 of 2

would not review the Finding of Effect for this project until a preferred alternative is chosen.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or email at nlindquist@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
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April 2, 2013

Reply in Reference To: FRA100524C

John Sharp
California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814

Re: Supplemental Archaeological Survey Report (SASR), Supplemental Historic Property Survey Report (SHPSR), and Supplemental Historic Architectural Survey Report (SHASR), Fresno to Bakersfield Section, High-Speed Train Project

Dear Mr. Sharp:

Thank you for your letter of February 15, 2013, continuing consultation regarding the Fresno to Bakersfield section of the High Speed Train (HST) System. You are consulting pursuant to the *Programmatic Agreement Among the Federal Railroad Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California High-Speed Rail Authority regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the California High-Speed Train Project (PA)*. The California High-Speed Rail Authority (Authority) is requesting review of the above-mentioned supplemental documents and concurrence with the eligibility determinations for the additional properties.

As I understand it, the purpose of the present consultation is to document changes in the APE for the Fresno to Bakersfield Section; document the Authority's supplemental historic property identification efforts for areas which have been added to the APE; and seek concurrence regarding the Authority's eligibility determinations for the resources identified within those areas.

The APE has been revised to account for minor design changes throughout the Fresno-Bakersfield Section, the additions of the Hanford West Alternative and the Bakersfield Hybrid Alternative, and the reduction of the northern terminus of the APEs resulting from the revision of the Merced-Fresno Section APE. Revisions to the archaeological and built-environment APEs have been made in accordance with PA Attachment B ("Area of Potential Effects Delineation"), and are fully documented in Appendix A of each of the three documents listed above. I do not object to these revisions.

The Authority has requested my review and comment with regards to the content and approach of the SASR, SHPSR and SHASR. I offer the following comments on those documents:

Mr. John Sharp—High-Speed Rail Authority
April 2, 2013
Page 2 of 4

FRA100524C

SASR

The Authority and FRA have requested concurrence that archaeological sites CA-TUL-473 and HW-JR-1 are not eligible for listing in the National Register of Historic Places (NRHP). I offer the following comments on the evaluations of these sites:

CA-TUL-473

CA-TUL-473 was recorded in 1977 as a “sparse scatter of lithic debitage and artifacts spread over a plowed field that was once near the shore of Tulare Lake.” As stated in the site record, the site area is “at least 1 mile x ½ mile,” which is approximately 1,016,570.0-m². The record also states the “boundaries are difficult to determine and the site may be much larger than the area designated on the sketch map.” As recorded, the site contains at least five manos; one chert projectile point; seven-plus chert scrapers; basalt and chert debitage; and, a wide-spread scatter of mollusk shell fragments and bones (mostly sheep). Based on this record, in a brief statement lacking substantive content, the Authority determined the site ineligible as it had been “destroyed” by past activities. Due to the age of the site record (36-years) used to assess eligibility, the lack of current empirical information, and a discussion that does not include the Criteria for Evaluation found at 36 CFR Part 60.4, I **cannot concur** with the proposed determination of ineligibility. Please update the existing site record to current surface and subsurface conditions, and prepare a study substantiating the determination pursuant to individual criteria and integrity expressed in 36 CFR Part 60.4.

HW-JR-1

HW-JR-1 is a historic archaeological site containing a variety of structural remains such as a raised concrete perimeter foundation with a possible cellar, cement steps, a raised brick pad, a well, a sparse scatter of domestic debris, and three fruit trees. The site contains additional features such as a concrete pad with redwood framing, a concrete irrigation pipe and a sealed well head. A discussion of potential site function was not provided, beyond stating the 1926 and 1954 topographic quadrangles depict a building at the site location. The Authority determined the site ineligible but provided no substantive discussion on how it does or does not meet the criteria for significance and integrity expressed in 36 CFR Part 60.4. Based on a review of submitted information, I **concur** with the proposed ineligibility determination as the site does not appear to retain sufficient integrity to convey historical significance. However, it is imperative for future evaluations to provide a full discussion of your application of National Register evaluation criteria and analysis of integrity.

CA-KIN-69H (P-16-68)

CA-KIN-69H (P-16-68) is a sparse scatter of historic-era refuse mostly containing fragments of glass in a linear ditch. The Authority determined the site exempt from evaluation under Attachment D of the PA for “isolated refuse dumps and scatters over 50 years old that lack specific associations.” Based on a review of the site record, I agree with this analysis as the site is immediately adjacent railroad tracks and the materials likely constitute random event(s) of discard and do not appear to represent a meaningful archaeological context. However, the site map shows the ditch intersecting with another ditch to the east. Please update the site form and clarify whether these

Mr. John Sharp—High-Speed Rail Authority
April 2, 2013
Page 3 of 4

FRA100524C

ditches are isolated features or part of a larger water conveyance system, including a full discussion of the significance, eligibility criteria and integrity, if warranted.

SHPSR

The Authority has requested concurrence with their determinations of eligibility in the SHPSR, including:

- Concurrence with the determination that the entire property at 7887 S. Maple Avenue, Fresno, California (APN# 335-110-42) is not individually eligible to the NRHP;
- Concurrence with the determination that the house at 7887 S. Maple Avenue, Fresno, California (APN# 335-110-42) is eligible as a contributor under criteria A and C to the existing NRHP-eligible "Washington Irrigated Colony Rural Historic Landscape;" and
- Concurrence with the determination that the nine properties listed in Table 6.5-3 of the SHPSR (attached) are eligible to the NRHP under the criteria, themes and periods of significance shown in that table.

Based on the information provided in the SHPSR, I concur with these determinations.

SHASR

The Authority has also requested concurrence with the determination that the 149 properties listed in Table 7-1 of the SHASR (attached) are not eligible to the NRHP. Based on this information provided in this document, I concur with these determinations with the exception of 815 East 18th Street in Bakersfield (APN 017-280-04).

The evaluation of 815 East 18th Street states that it has "potential significance as a traditional cultural property for its association with the early development and social structure of Bakersfield's Mexican community," but concludes that the property is not eligible because the "integrity of design, materials, workmanship, and feeling has been diminished from its potential period of significance." National Register Bulletin 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties* states that "A property may retain its traditional cultural significance even though it has been substantially modified, however. Cultural values are dynamic, and can sometimes accommodate a good deal of change...the integrity of a possible traditional cultural property must be considered with reference to the views of traditional practitioners; if its integrity has not been lost in their eyes, it probably has sufficient integrity to justify further evaluation."

The integrity analysis provided is a very traditional approach, focusing on the relocation of the building (on the same property) and fairly minor physical changes, rather than whether or not the community continues to use the building for the traditional purposes and maintain the connection with the structures.

The evaluation also states that the building continues to be used as a community hall, a use that its significance is derived from. The text and references do not indicate that the research included interviews, oral histories, or other means of determining whether the current community maintains the association with the building. Bulletin 38 states that "The means of research normally employed with respect to traditional cultural properties

Mr. John Sharp—High-Speed Rail Authority
April 2, 2013
Page 4 of 4

FRA100524C

include ethnographic, ethnohistorical, and folklore studies, as well as historical and archeological research.”

I recommend that further research, including ethnographic research and interviews/oral histories be conducted to determine whether or not the Mexican community in East Bakersfield continues to maintain the association with the Salon Juarez/Sociedad Juarez Mutualista Mexicana and whether it continues to play a significant social role in the community. Please update the evaluation with this information and resubmit it for review and concurrence.

I would be happy to further discuss the comments above with you and provide any clarification necessary. Thank you for considering historic properties during project planning, and I look forward to continuing this consultation. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or email at kathleen.forrest@parks.ca.gov.

Sincerely,



Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

Table 6.5-3

Historic Properties (Historic Architectural Resources) That Appear Eligible for the NRHP and for Which SHPO Concurrence Is Requested

Map ID#	APN	Address/Resource Name	City	County	Year Built	Applicable NRHP Criteria	Level, Period, and Theme of Significance
2	n/a	Last Chance Ditch	n/a	Kings	1873-1874	A	State; 1874-1880; early settlement
3	009100020000	13148 Grangeville Blvd, Pickerill House	n/a	Kings	c1914-1919	C	Local; 1914-1919; architecture
4	009070049000	9860 13 th Avenue	n/a	Kings	c1881	A, C	Local; c1881-1900 (A), c1881 (C); settlement patterns, architecture
5	018102111000	12501 Lacey Blvd, Johnstone Adobe	n/a	Kings	1935	C	Local; 1935; architecture
7	028220067000	11029 Kent Avenue, Walter Burr Ranch	n/a	Kings	1908	C	Local; 1908-1942; agricultural architecture
8	028220018000	17780 10 th Avenue	n/a	Kings	1920	C	Local; 1920; residential construction methods
10	01726007	1031 East 18 th Street	Bakersfield	Kern	c1900	C	Local, 1900, architecture
11	01749014	1660 East California Avenue	Bakersfield	Kern	1924-1929	A	Local, 1924-1929, agriculture - cotton
12	14113025	2509 East California Avenue	Bakersfield	Kern	c1898	C	Local, 1898, architecture

Acronyms and Abbreviations:
 APN = Assessor's Parcel Number
 c = circa
 ID = Identification
 n/a = not available
 NRHP = National Register of Historic Places
 SHPO = State Historic Preservation Officer

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

small concrete-brick control building with Mission-style parapets, coping, and vents. The circa-1955 Southern California Edison Grangeville Substation features a similar graveled switching yard with a small, prefabricated metal control building lacking distinct elements of a specific architectural style. A third miscellaneous resource is a small wood-frame shed with corrugated metal siding built circa 1950s in Bakersfield, but the function of this resource remains unknown. Finally, the survey population includes a row of 50 fan palms planted on both sides of Otis Avenue in Corcoran during the establishment and initial promotion of the newly platted town. This modest aesthetic improvement to the town is not important within the context of the initial settlement of Corcoran. None of this group of miscellaneous resources is eligible for listing in the NHRP or CRHR.

Table 7-1 presents the 149 historic architectural resources that were subject to intensive survey for this Supplemental HASR. The DPR 523 forms for these resources are provided in Appendix B.

The revised APE contains eight properties that were previously determined ineligible for the NRHP (California Historical Resource Status [CHRS] codes 6Y and/or 6Z), and therefore do not require further study. These properties are listed in Table 7-2. Review of the Caltrans "Historical Significance—State Agency Bridges" (Caltrans Structure Maintenance and Investigations 2012a, 2012b) identified two state-owned highway and local agency bridges built in or before 1961 within the project limits. All of these bridges are listed as Category 5 and are therefore not eligible for listing in the NRHP or CRHR, as shown in Table 7-3. In addition to these resources, the streamlined documentation properties (per the HST Section 106 PA) are presented in Appendix C.

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref. #	Address		City	County	Year Built	CHRS Code	Map Sheet
1	38511058	14905	S Peach Avenue	—	Fresno	1950, 1973-77	6Z	39
2	38520004		Conejo Avenue	—	Fresno	ca. 1888	6Z	40
3	05703002s	20047	S Sunnyside Avenue	—	Fresno	1931, 1950-57	6Z	90
4	5703053		E Mount Whitney Avenue	—	Fresno	ca. 1912	6Z	91
6	5708030	5325	E Mount Whitney Avenue	—	Fresno	1930	6Z	92
5	5708019		Mount Whitney Avenue	—	Fresno	ca. 1930	6Z	92
7	'A' Canal	NA		—	Fresno	late 1880s	6Z	
8	Grant Canal	NA		—	Fresno	1873	6Z	
9	2230004000	13250	Douglas Avenue	—	Kings	1957	6Z	92
10	2230003000	3500	13 1/4 Avenue	—	Kings	1952	6Z	93
11	2230046000	3567	13 1/4 Avenue	—	Kings	1950-57	6Z	93
12	2230007000	3948	13 1/4 Avenue	—	Kings	ca. 1930, 1940s, 1952	6Z	93
13	2220067000	4620	13 1/4 Avenue	—	Kings	ca. 1954	6Z	95
14	2220007000	13380	Excelsior Avenue	—	Kings	ca. 1910s	6Z	95

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref #	Address		City	County	Year Built	GHS Code	Map Sheet	
15	6020003000	13301	Excelsior Avenue	—	Kings	ca. 1920	6Z	95	
16	6020004000	13235	Excelsior Avenue	—	Kings	ca. 1910s	6Z	95	
17	6020095000	13422	Elder Avenue	—	Kings	1908	6Z	97	
18	6050020000	13510	Elder Avenue	—	Kings	ca. 1910-20s	6Z	98	
19	6050005000	13942	Flint Avenue	—	Kings	ca. 1913	6Z	99	
20	9010033000	7955	14th Avenue	—	Kings	ca. 1910s-30, 1952	6Z	101	
21	9010031000	13940	Fargo Avenue	—	Kings	ca. 1910s-30	6Z	101	
22	9100022000	13360	Grangeville Boulevard	—	Kings	1952	6Z	103	
23	9070008000	13285	Grangeville Boulevard	—	Kings	1937	6Z	103	
24	9070016000	9534	13th Avenue	—	Kings	ca. 1887	6Z	104	
25	9070047000	9700	13th Avenue	—	Kings	1954	6Z	104	
26	9050041000	9783	13th Avenue	—	Kings	1960	6Z	104	
27	9050038000	9885	13th Avenue	—	Kings	ca. 1960	6Z	104	
28	9050035000	12846	Lacey Boulevard	—	Kings	ca. 1961	6Z	104	
29	9050032000	12782	Lacey Boulevard	—	Kings	1952	6Z	104	
30	18102002000	12773	Lacey Boulevard	—	Kings	1952	6Z	104	
31	18102054000	10041	13th Avenue	—	Kings	ca. 1905	6Z	106	
32	18101020000	10282	13th Avenue	—	Kings	ca. 1879-92	6Z	105	
33	18270039000	NA	13th Avenue	—	Kings	ca. 1955	6Z	107	
34	Lakeside Ditch	NA	NA	—	Kings	1875	6Z	69, 76, 77, 78, 80, 82, 126, 127, 128, 129	
35	18102023000	12458	Hanford- Armona Road	—	Kings	1922	6Z	111	
36	18490060000	13101	13th Road West	NA	—	Kings	1940	6Z	110
37	18490014000	13170	Hood Avenue	—	Kings	1926-37, 1961	6Z	112	
38	18172063000	11301	13th Avenue	—	Kings	1920	6Z	113	
39	18172049000	12633	Hanford- Armona Road	—	Kings	1958	6Z	114	

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref. #	Address	City	County	Year Built	CHRS Code	Map Sheet
40	Lone Oak Canal	NA	—	Kings	ca. 1890	6Z	114, 115, 116, 117, 118
41	18172052000	12758 Houston Avenue	—	Kings	1920	6Z	115
42	18222023000	12135 Houston Avenue	—	Kings	1952	6Z	115
43	18231013000	12903 12th Avenue	—	Kings	1952	6Z	117
44	Guernsey Substation; 028150003000	NA 11th Avenue	—	Kings	1930-31	6Z	124
45	28201012000	17459 10th Avenue	—	Kings	1938	6Z	126
46	28210005000	17656 10th Avenue	—	Kings	1957	6Z	127
47	28220085000	10370 Kansas Avenue	—	Kings	1961	6Z	127
48	28220027000	18026 10th Avenue	—	Kings	ca. 1925, ca. 1930s	6Z	127
49	28220028000	18470-18488 10th Avenue	—	Kings	ca. 1913, 1950	6Z	128
50	28206005000	9846 Lansing Avenue	—	Kings	ca. 1910-20s	6Z	129
51	28260029000	20910 Central Valley Highway	—	Kings	1937	6Z	133
52	28290023000	21512 8th Avenue	—	Kings	1952	6Z	135
53	34230042000	NA Pickerell Avenue	—	Kings	ca. 1950	6Z	153
54	7218022	17045 Central Valley Highway	—	Kern	1956	6Z	281
55	Otis Avenue Palm Trees	NA Otis Avenue	Corcoran	Kings	ca. 1905	6Z	149
56	7221035	30718 Merced Avenue	—	Kern	1946	6Z	264
57	02601013 02601014	535, 655 N Shafter Avenue	Shafter	Kern	1945, 1952-56, 1988, 2002	6Z	287
58	46305082	4801 Renfro Road	Bakersfield	Kern	1959	6Z	315
59	11018109	2125 Verdugo Lane	—	Kern	1961	6Z	320
60	11015004	10220-10222 Shellabarger Road	—	Kern	1926, 1938	6Z	323
61	11006202	10015 Glenn Street	—	Kern	1942	6Z	323
62	11006203	10005 Glenn Street	—	Kern	1939, 1965	6Z	323
63	11006205	9931 Glenn Street	—	Kern	1926	6Z	323
64	11006207	9915 Glenn Street	—	Kern	1944	6Z	323
65	11006208	9817 Glenn Street	—	Kern	1931	6Z	323

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref. #	Address	City	County	Year Built	CHRS Code	Map Sheet
66	36819045	1430 Calloway Drive	—	Kern	1951	6Z	324
67	33250014	3419 Truxtun Avenue	Bakersfield	Kern	1949-56	6Z	330
68	613212	208 Truxtun Avenue	Bakersfield	Kern	1922	6Z	334
69	613211	200 Truxtun Avenue	Bakersfield	Kern	1953	6Z	334
70	613210	114 Truxtun Avenue	Bakersfield	Kern	1915	6Z	334
71	1627001	1622 Union Avenue	Bakersfield	Kern	1959	6Z	334
72	1627010	NA Truxtun Avenue	Bakersfield	Kern	ca. 1950s	6Z	336
73	1621210	716 Eureka Street	Bakersfield	Kern	1911	6Z	336
74	1621209	720 Eureka Street	Bakersfield	Kern	1925	6Z	336
75	1630005	725 Eureka Street	Bakersfield	Kern	ca. 1910	6Z	336
76	1630007	404 King Street	Bakersfield	Kern	1956	6Z	336
77	1630009	720 Dolores Street	Bakersfield	Kern	1956	6Z	336
78	1630008	400 King Street	Bakersfield	Kern	1956	6Z	336
79	1742014	810 Butte Street	Bakersfield	Kern	1950	6Z	337
80	1801004	999 E California Avenue	Bakersfield	Kern	1950-52	6Z	337
81	1742009	830 Butte Street	Bakersfield	Kern	1954	6Z	337
82	1742007	827 Chlco Street	Bakersfield	Kern	1948	6Z	337
83	1741001	815 Eureka Street	Bakersfield	Kern	1954	6Z	336
84	1728004	815 E 18th Street	Bakersfield	Kern	1912-18, 1947-48	6Z	336
85	1740010	926 Chico Street	Bakersfield	Kern	1954	6Z	337
86	1729002	921 Eureka Street	Bakersfield	Kern	1961	6Z	336
87	1727011	920 Eureka Street	Bakersfield	Kern	1949	6Z	336
88	1727009	926 Eureka Street	Bakersfield	Kern	1953	6Z	336
89	1727008	930 Eureka Street	Bakersfield	Kern	1953	6Z	336
90	1713010	900 E 19th Street	Bakersfield	Kern	ca. 1946	6Z	336
91	1716005	920 E Truxtun Avenue	Bakersfield	Kern	ca. 1946	6Z	336
92	1739013	1010 Chico Street	Bakersfield	Kern	1946	6Z	337
93	1739016	1022 Chico Street	Bakersfield	Kern	1955	6Z	339
94	1739009	1026 Chico Street	Bakersfield	Kern	1954	6Z	339
95	1745001	1116 E California Avenue	Bakersfield	Kern	1947, 1952	6Z	339
96	1717006	1019 E Truxtun Avenue	Bakersfield	Kern	1917	6Z	338
97	1717007	1020-1022 E 18th Street	Bakersfield	Kern	1920-40s, moved 1956-65	6Z	338

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref #		Address	City	County	Year Built	CHRS Code	Map Sheet
98	1726006	1027	E 18th Street	Bakersfield	Kern	1957	6Z	338
99	1725001	1101	E 18th Street	Bakersfield	Kern	1910	6Z	338
100	1718017	1100	E 18th Street	Bakersfield	Kern	1956	6Z	338
102	1718003	1107	E 19th Street	Bakersfield	Kern	1919	6Z	338
101	1718013	1118	E 18th Street	Bakersfield	Kern	1915	6Z	338
103	1711011	1104	E Truxtun Avenue	Bakersfield	Kern	1915	6Z	338
104	1718009	610	Robinson Street	Bakersfield	Kern	1938, 1955	6Z	338
105	1732018	1200	Dolores Street	Bakersfield	Kern	1921	6Z	339
106	1732019	1220	Dolores Street	Bakersfield	Kern	1941	6Z	339
107	1719011	1220	E 18th Street	Bakersfield	Kern	1952	6Z	338
108	1710003	1201	E Truxtun Avenue	Bakersfield	Kern	ca. 1925-60	6Z	338
109	1709010	1314	E 19th Street	Bakersfield	Kern	1920	6Z	338
110	1720004	1315	E 19th Street	Bakersfield	Kern	1955	6Z	338
111	1720005	1319	E 19th Street	Bakersfield	Kern	1954	6Z	338
112	1721002	1405	E 19th Street	Bakersfield	Kern	1953	6Z	338
113	1721006	1423	E 19th Street	Bakersfield	Kern	1954	6Z	338
114	1708007	1414	E 19th Street	Bakersfield	Kern	1954	6Z	338
115	1708006	1420	E 19th Street	Bakersfield	Kern	1922	6Z	338
116	1708005	1424	E 19th Street	Bakersfield	Kern	1924	6Z	338
117	1708012	1428	E 19th Street	Bakersfield	Kern	1961-62	6Z	338
118	1747011	1500	E 19th Street	Bakersfield	Kern	1949-51	6Z	338
119	1707212 1707213	1400- 1404	Sumner Street	Bakersfield	Kern	ca. 1949-53	6Z	338
120	1748008	600	Williams Street	Bakersfield	Kern	1952	6Z	339
121	13832010	1325	Ogden Avenue	—	Kern	1950	6Z	340
122	13835013	1818	E California Avenue	—	Kern	1930	6Z	341
123	14012104	1104	Bates Avenue	—	Kern	1961	6Z	341
124	14012203	1109	Bates Avenue	—	Kern	1961	6Z	341
125	14013004	1903	E California Avenue	—	Kern	ca. 1905, moved 1931	6Z	341
126	13836030	1916- 1918	E California Avenue	—	Kern	1938-40	6Z	341
127	13837014	1205- 1207½	Chamberlain Avenue	—	Kern	1940-1955	6Z	341
128	14030007	2115	E California Avenue	—	Kern	1938, post 1975	6Z	341

CALIFORNIA HIGH-SPEED TRAIN PROJECT EIR/EIS
 FRESNO TO BAKERSFIELD SECTION

HISTORIC ARCHITECTURAL SURVEY REPORT
 (SUPPLEMENTAL)

Table 7-1
 Survey Population (Intensive) for the Historic Architectural Survey Report
 (arranged north to south by county)

Map ID #	APN/Ref. #	Address	City	County	Year Built	CHRS Code	Map Sheet
129	14029110	943 Mt. Vernon Avenue	—	Kern	1950	6Z	341
130	13734016	2222 E California Avenue	—	Kern	ca. 1930	6Z	341
131	13732006	2301 Edison Highway	—	Kern	1952-54	6Z	340
132	14102007 14102008 14102009 14102010 14102011 14102012	2231-2301 E California Avenue	—	Kern	ca. 1937- 47	6Z	341
133	14113001	2501 E California Avenue	—	Kern	ca. 1957	6Z	342
134	14113003	2503 E California Avenue	—	Kern	1910	6Z	342
135	13725020	2610 Trust Avenue	—	Kern	1946	6Z	342
136	14112002	2552 Potomac Avenue	—	Kern	1956	6Z	343
137	14112003	2556 Potomac Avenue	—	Kern	1920	6Z	343
138	14118203	2613 Potomac Avenue	—	Kern	1947	6Z	343
139	14118208	2643 Potomac Avenue	—	Kern	1947, 1951	6Z	343
140	14118209	2649 Potomac Avenue	—	Kern	1947	6Z	343
141	14118211	2661 Potomac Avenue	—	Kern	1947	6Z	343
142	14118212	2665 Potomac Avenue	—	Kern	1947	6Z	343
143	14116005	1000 Quantico Avenue	—	Kern	1952	6Z	343
144	14116002	1008 Quantico Avenue	—	Kern	ca. 1926-37	6Z	343
145	14116010	1020 Quantico Avenue	—	Kern	1905	6Z	343
146	14202007	2800 Citrus Drive	—	Kern	1960	6Z	343
147	14216012 14216013 14216014	3003 Edison Highway	—	Kern	1935, ca. 1950s	6Z	344
148	14217008	3032 Potomac Avenue	—	Kern	1947	6Z	344
149	East Side Canal	NA	—	Kern	1893, 1928, 1936, 1957, 1962, 1977	6Z	342, 343, 344

*"—" in a cell indicates that the resource is in an unincorporated area.
 APN = Assessor's parcel number
 CHRS = California Historical Resource Status
 CRHR = California Register of Historical Resources
 NA = not applicable or not available
 6Z = found ineligible for NRHP, CRHR, or local designation through survey evaluation

Table 7-2
 Previously Evaluated Properties (CHRS Codes 6Y, and/or 6Z)
 (sorted by county)

APN/Resource Name	Address	City	County	Year Built	Previous Status (CHRS Code)
BNSF culverts and bridge	NA	Hanford and vicinity	Kings	1918, 1924	6Z
San Joaquin Valley Railroad culverts and bridges	NA	—	Kings	1904-1955	6Y
Stine Canal	NA	Bakersfield	Kern	1873	6Y
01630003	719 Eureka St	Bakersfield	Kern	1937	6Y
01719002	1207 E. 19 th Street	Bakersfield	Kern	1945	6Y
01719013	1212 E. 18 th Street	Bakersfield	Kern	1959	6Y
01719015	1200 E. 18 th Street	Bakersfield	Kern	1916	6Y
14113012	1111 Vansite Street	Bakersfield	Kern	1939	6Y

^a An "—" in a cell indicates that the resource is in an unincorporated area.
 CHRS = California Historical Resource Status
 NA = not applicable or not available
 6Y = determined ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local listing
 6Z = found ineligible for NRHP, CRHR, or local designation through survey evaluation

Table 7-3
 Bridges Built in or before 1961 That Are Not
 Eligible for the NRHP (Caltrans Category 5)

Bridge No.	City ^a	County	Year Built	Comments	Previous Status (CHRS Code)
45C0102	—	Kings	1955	Fargo Avenue over Last Chance Ditch	6Z
50C0297	Bakersfield	Kern	1955	Edison Highway over East Side Canal	6Z

^a An "—" in a cell indicates that the resource is in an unincorporated area.
 CHRS = California Historical Resource Status
 NA = not applicable or not available
 NRHP = National Register of Historic Places
 6Z = found ineligible for NRHP, CRHR, or local designation through survey evaluation

Appendix B
California Historical Resource Status
Codes

California Historical Resource Status Codes

- 1 Properties listed in the National Register (NR) or the California Register (CR)**
- 1D Contributor to a district or multiple resource property listed in NR by the Keeper. Listed in the CR.
 - 1S Individual property listed in NR by the Keeper. Listed in the CR.
 - 1CD Listed in the CR as a contributor to a district or multiple resource property by the SHRC
 - 1CS Listed in the CR as individual property by the SHRC.
 - 1CL Automatically listed in the California Register – Includes State Historical Landmarks 770 and above and Points of Historical Interest nominated after December 1997 and recommended for listing by the SHRC.
- 2 Properties determined eligible for listing in the National Register (NR) or the California Register (CR)**
- 2B Determined eligible for NR as an individual property and as a contributor to an eligible district in a federal regulatory process. Listed in the CR.
 - 2D Contributor to a district determined eligible for NR by the Keeper. Listed in the CR.
 - 2D2 Contributor to a district determined eligible for NR by consensus through Section 106 process. Listed in the CR.
 - 2D3 Contributor to a district determined eligible for NR by Part I Tax Certification. Listed in the CR.
 - 2D4 Contributor to a district determined eligible for NR pursuant to Section 106 without review by SHPO. Listed in the CR.
 - 2S Individual property determined eligible for NR by the Keeper. Listed in the CR.
 - 2S2 Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR.
 - 2S3 Individual property determined eligible for NR by Part I Tax Certification. Listed in the CR.
 - 2S4 Individual property determined eligible for NR pursuant to Section 106 without review by SHPO. Listed in the CR.
 - 2CB Determined eligible for CR as an individual property and as a contributor to an eligible district by the SHRC.
 - 2CD Contributor to a district determined eligible for listing in the CR by the SHRC.
 - 2CS Individual property determined eligible for listing in the CR by the SHRC.
- 3 Appears eligible for National Register (NR) or California Register (CR) through Survey Evaluation**
- 3B Appears eligible for NR both individually and as a contributor to a NR eligible district through survey evaluation.
 - 3D Appears eligible for NR as a contributor to a NR eligible district through survey evaluation.
 - 3S Appears eligible for NR as an individual property through survey evaluation.
 - 3CB Appears eligible for CR both individually and as a contributor to a CR eligible district through a survey evaluation.
 - 3CD Appears eligible for CR as a contributor to a CR eligible district through a survey evaluation.
 - 3CS Appears eligible for CR as an individual property through survey evaluation.
- 4 Appears eligible for National Register (NR) or California Register (CR) through other evaluation**
- 4CM Master List - State Owned Properties – PRC §5024.
- 5 Properties Recognized as Historically Significant by Local Government**
- 5D1 Contributor to a district that is listed or designated locally.
 - 5D2 Contributor to a district that is eligible for local listing or designation.
 - 5D3 Appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation.
 - 5S1 Individual property that is listed or designated locally.
 - 5S2 Individual property that is eligible for local listing or designation.
 - 5S3 Appears to be individually eligible for local listing or designation through survey evaluation.
 - 5B Locally significant both individually (listed, eligible, or appears eligible) and as a contributor to a district that is locally listed, designated, determined eligible or appears eligible through survey evaluation.
- 6 Not Eligible for Listing or Designation as specified**
- 6C Determined ineligible for or removed from California Register by SHRC.
 - 6J Landmarks or Points of Interest found ineligible for designation by SHRC.
 - 6L Determined ineligible for local listing or designation through local government review process; may warrant special consideration in local planning.
 - 6T Determined ineligible for NR through Part I Tax Certification process.
 - 6U Determined ineligible for NR pursuant to Section 106 without review by SHPO.
 - 6W Removed from NR by the Keeper.
 - 6X Determined ineligible for the NR by SHRC or Keeper.
 - 6Y Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing.
 - 6Z Found ineligible for NR, CR or Local designation through survey evaluation.
- 7 Not Evaluated for National Register (NR) or California Register (CR) or Needs Reevaluation**
- 7J Received by OHP for evaluation or action but not yet evaluated.
 - 7K Resubmitted to OHP for action but not reevaluated.
 - 7L State Historical Landmarks 1-769 and Points of Historical Interest designated prior to January 1998 – Needs to be reevaluated using current standards.
 - 7M Submitted to OHP but not evaluated - referred to NPS.
 - 7N Needs to be reevaluated (Formerly NR Status Code 4)
 - 7N1 Needs to be reevaluated (Formerly NR SC4) – may become eligible for NR w/restoration or when meets other specific conditions.
 - 7R Identified in Reconnaissance Level Survey: Not evaluated.
 - 7W Submitted to OHP for action – withdrawn.

12/8/2003

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