

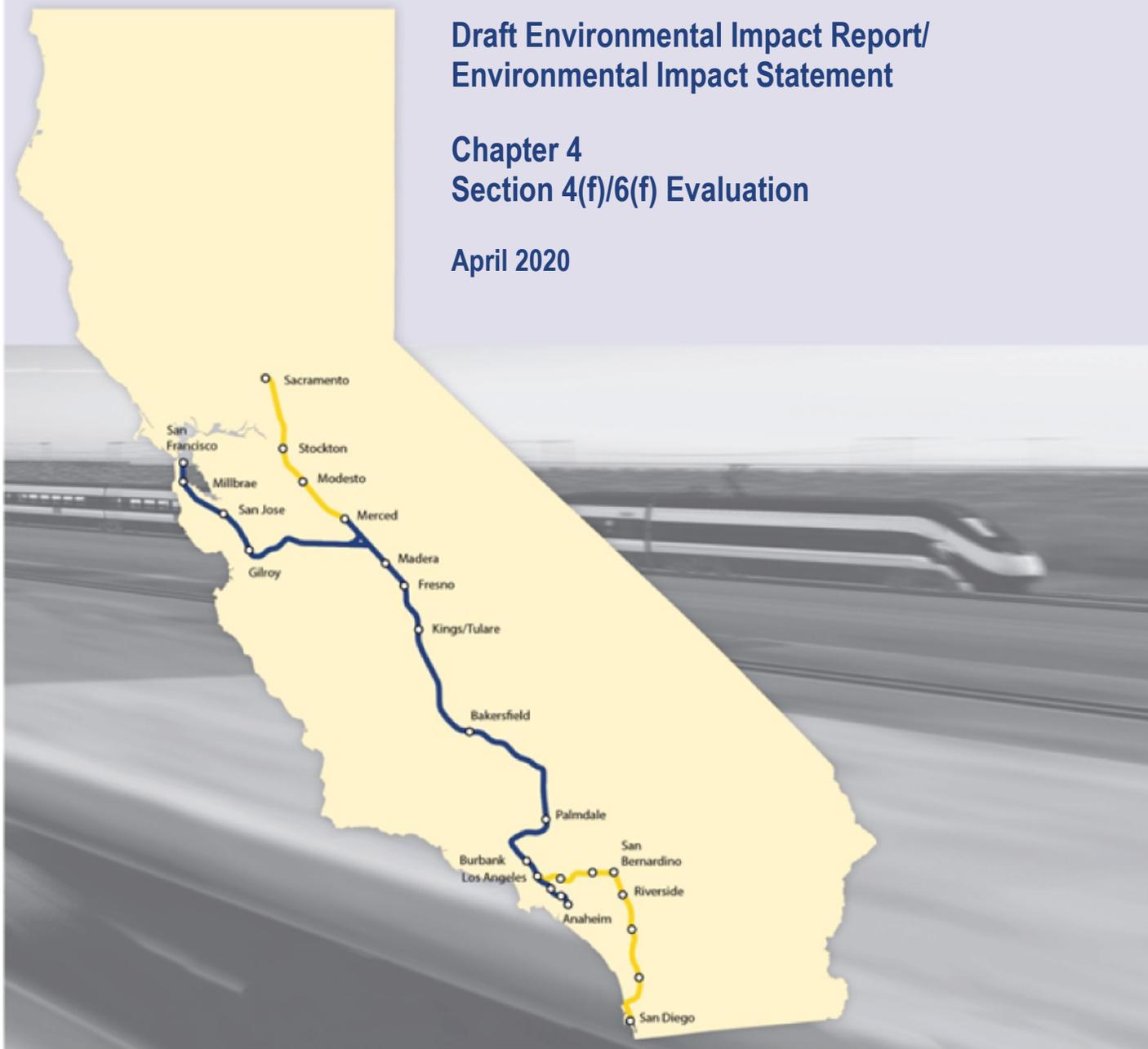
California High-Speed Rail Authority

San Jose to Merced *Project Section*

Draft Environmental Impact Report/
Environmental Impact Statement

Chapter 4
Section 4(f)/6(f) Evaluation

April 2020



The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
APE	area of potential effect
ATC	automatic train control
ATP	archaeological treatment plan
Authority	California High-Speed Rail Authority
BART	Bay Area Rapid Transit
Bay Area	San Francisco Bay Area
BEMP	built environment monitoring plan
BETP	built environment treatment plan
C.F.R.	Code of Federal Regulations
CDFW	California Department of Fish and Wildlife
CRHR	California Register of Historical Resources
dBA	A-weighted decibel
EIR/EIS	environmental impact statement/environmental impact statement
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
GIS	geographic information system
HSR	high-speed rail
I-	Interstate
IAMF	impact avoidance and minimization features
IOOF	International Order of Odd Fellows
LWCF	Land and Water Conservation Fund
MM	mitigation measures
MOA	memorandum of agreement
MOWS	maintenance of way siding
MOWF	maintenance of way facility
mph	miles per hour
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OCS	overhead contact system
OHP	Office of Historic Preservation
OWJ	official(s) with jurisdiction

PA	Programmatic Agreement
PCJPB	Peninsula Corridor Joint Powers Board
PG&E	Pacific Gas and Electric Company
RFQ	request for qualifications
RSA	resource study area
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SHPO	(California) State Historic Preservation Officer
SOI	Secretary of the Interior
SOQ	statement of qualifications
SR	State Route
TCE	temporary construction easement
U.S.C.	United States Code
UPRR	Union Pacific Railroad
US	U.S. Highway
USACE	United States Army Corps of Engineers
USDOI	U.S. Department of the Interior
USDOT	U.S. Department of Transportation
VTA	(Santa Clara) Valley Transit Authority

4 SECTION 4(F)/6(F) EVALUATION

4.1 Introduction

This chapter provides the analysis to support the California High-Speed Rail Authority's (Authority) preliminary determinations to comply with the provisions of 49 United States Code (U.S.C.) Section 303 (hereinafter referred to as Section 4(f)) and the Land and Water Conservation Fund (LWCF) Act of 1965 (hereinafter referred to as Section 6(f)).

Under Section 4(f), an operating administration of the U.S. Department of Transportation (USDOT) may not approve a project that uses protected properties unless there are no prudent or feasible alternatives to such use and the project includes all possible planning to minimize harm to such properties. Section 4(f) properties are publicly owned lands of a park, recreation area, or wildlife and waterfowl refuge; or a historical site, publicly or privately owned, that is listed or determined eligible for listing in the National Register of Historic Places (NRHP). To demonstrate compliance with Section 4(f), this chapter:

- Describes the statutory requirements associated with Section 4(f)
- Identifies the properties protected by Section 4(f) in the resource study area (RSA)
- Preliminarily determines whether the San Jose to Central Valley Wye Project Extent (project) would result in the use of those properties
- Identifies feasible and prudent alternatives, to the extent any exist, that would avoid or minimize use of the properties
- Identifies measures to minimize harm
- Provides a preliminary least-harm analysis for project alternatives that would result in the use of Section 4(f) properties

Section 6(f) properties are recreation resources created or improved with funds from the LWCF Act. Land purchased with these funds cannot be converted to a non-recreational use without coordination with the U.S. Department of the Interior (USDOI) National Park Service (NPS) and mitigation that includes replacement of the quality and quantity of land used. This chapter describes the statutory requirements associated with Section 6(f) and the methodology for identifying Section 6(f) properties and makes a preliminary assessment of impacts on resources protected under Section 6(f).

Additional information on publicly owned parks, recreation lands, wildlife and waterfowl refuges; historic sites; and Section 6(f) properties is provided in Section 3.7, Biological and Aquatic Resources; Section 3.15, Parks, Recreation, and Open Space; Section 3.17, Cultural Resources; and the *San Jose to Merced Project Section Historic Architectural Survey Report* (Historic Architectural Survey Report) (Authority 2019a).

4.1.1 Laws, Regulations and Orders

4.1.1.1 ***U.S. Department of Transportation Act (23 U.S.C. § 138 and 49 U.S.C. § 303(c))***

Projects undertaken by an operating administration of the USDOT or that may receive federal funding or discretionary approvals from an operating administration of USDOT must demonstrate compliance with Section 4(f). Section 4(f) protects publicly owned parks, recreational areas, and wildlife and waterfowl refuges. Section 4(f) also protects historic sites of national, state, or local significance on public or private land that are listed on or eligible for listing on the NRHP. As of November 28, 2018, the FRA adopted the regulations in 23 Code of Federal Regulations (C.F.R.) Part 774 as FRA's Section 4(f) implementing regulations. The FRA also considers the interpretations provided in the Federal Highway Administration's (FHWA) Section 4(f) Policy Paper (FHWA 2012) when implementing these regulations. Pursuant to U.S. Code (U.S.C.) Title 23 Section 237, under the National Environmental Policy Act (NEPA) Assignment Memorandum

of Understanding (MOU) between FRA and the State of California, effective July 23, 2019, the Authority is the federal lead agency and is responsible for compliance with NEPA and other federal environmental laws, including Section 4(f) (49 U.S.C. 303) and related U.S. Department of Transportation orders and guidance. The Authority is releasing this draft Section 4(f) statement for comment pursuant to 23 U.S.C. 237, 23 C.F.R. Part 774, and the NEPA Assignment MOU¹.

The Authority may not approve the use of a Section 4(f) property, as described in 49 U.S.C. Section 303(c), unless it determines that there is no feasible and prudent alternative to avoid the use of the property and the action includes all possible planning to minimize harm resulting from such use, or the project has a *de minimis* impact consistent with the requirements of 49 U.S.C. Section 303(d).

An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. In determining whether an alternative is prudent, the Authority may consider if the alternative would result in any of the following:

- The alternative does not meet the Project's stated Purpose and Need
- The alternative would entail unacceptable safety or operational problems
- After reasonable mitigation, the alternative would result in severe social, economic, or environmental impacts; severe disruption to established communities; severe disproportionate impacts on minority or low-income populations; or severe impacts on environmental resources protected under other federal statutes
- The alternative would require additional construction, maintenance, or operational costs of an extraordinary magnitude.
- The alternative would pose other unique problems or unusual factors.
- The project would entail multiple factors that, while individually minor, would cumulatively cause unique problems or impacts of extraordinary magnitude.

If the Authority determines both that there is the use of a Section 4(f) property and that there is no prudent and feasible alternative to the use of the resource, the Authority must require that the project employ all possible planning (including coordination and concurrence of the officials with jurisdiction (OWJ) over the property) to minimize harm to the property, including all reasonable measures to minimize harm or mitigate impacts (49 U.S.C. § 303(c)(2)). OWJ are defined in 23 C.F.R. Section 774.17.

After making a Section 4(f) determination and identifying the reasonable measures to minimize harm, if there is more than one alternative that results in the use of a Section 4(f) property, the Authority must also compare the project alternatives to determine which project alternative has the potential to cause the least overall harm in light of the purpose of the statute. The least overall harm may be determined by balancing the following factors:

- The ability to mitigate adverse impacts on each Section 4(f) property (including any measures that result in benefits to the property)
- The relative severity of the remaining harm—after mitigation—to the protected activities, attributes, or features that qualify each Section 4(f) property for protection
- The relative significance of each Section 4(f) property
- The views of the official(s) with jurisdiction over each Section 4(f) property
- The degree to which each alternative meets the project Purpose and Need

¹ The Authority cannot make any determination that an action constitutes a constructive use of a publicly owned park, public recreation area, wildlife refuge, waterfowl refuge, or historic site under Section 4(f) without first consulting with FRA and obtaining FRA's views on such determination. The Authority will provide FRA written notice of any proposed constructive use determination, and FRA will have thirty (30) calendar days to review and provide comment. If FRA objects to the constructive use determination, the Authority will not proceed with the determination.

- After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)
- Substantial differences in costs among the project alternatives

4.1.1.2 Section 6(f) of the Land and Water Conservation Fund Act (16 U.S.C. § 460I-8(f) and 36 C.F.R. § 59.1)

State and local governments often obtain grants through the LWCF Act to acquire or make improvements to parks and recreation areas. Section 6(f) of the act prohibits the conversion of property acquired or developed with these grants to a nonrecreational purpose without the approval of the NPS. Section 6(f) directs the NPS to make certain that replacement lands of comparable value and function, or monetary compensation (used to enhance the remaining land), location, and usefulness are provided as conditions to such conversions.

Section 6(f) Applicability

The purpose of the LWCF is to assist in preserving, developing, and providing accessibility to outdoor recreation resources and to strengthen the health and vitality of the citizens of the U.S. by providing funds, planning, acquisition, and development of facilities. Recreational facilities awarded such funds are subject to the provisions of the act. The LWCF's most important tool for supporting long-term stewardship is its "conversion protection" requirement. Section 6(f)(3) strongly discourages conversions of state and local park and recreation facilities to other uses.

Section 6(f)(3) of the LWCF Act requires that no property acquired or developed with LWCF assistance will be converted to other than public outdoor recreation uses without the approval of the Secretary of the Interior (SOI) (NPS is a service of the USDIO), and only if the secretary finds it to be in accord with the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and only upon such conditions as the secretary deems necessary to ensure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location (36 C.F.R. § 59).

Prerequisites for conversion approval as provided in 36 C.F.R. Section 59.3 are as follows:

- All practical alternatives to the proposed conversion have been evaluated.
- The fair market value of the property to be converted has been established, and the property proposed for substitution is of at least equal fair market value as established by an approved appraisal.
- The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted.
- The property proposed for substitution meets the eligibility requirements for LWCF-assisted acquisition.
- In the case of assisted sites that are partially rather than wholly converted, the impact of the converted portion on the remainder will be considered. If such a conversion is approved, the unconverted area must remain recreationally viable or must also be replaced.
- All necessary coordination with other federal agencies has been satisfactorily accomplished.
- The guidelines for environmental evaluation have been satisfactorily completed and considered by the NPS during its review of the proposed Section 6(f)(3) action. In cases where the proposed conversion arises from another federal action, final review of the proposal will not occur until the NPS regional office is assured that all environmental review requirements related to the other action have been met.
- State intergovernmental clearinghouse review procedures have been adhered to if the proposed conversion and substitution constitute significant changes to the original LWCF project.
- The proposed conversion and substitution are in accord with the SCORP or equivalent recreation plans.

Section 6(f) conversion requires additional coordination with the agency of jurisdiction and California State Parks, which oversees the LWCF program for the NPS, and the NPS regarding the project effects and conversion area and replacement property.

4.1.2 Resource Study Area

The RSA was established, as defined below, to identify the Section 4(f) and Section 6(f) properties to be considered for evaluation. Figure 4-1 in Section 4.4 illustrates the alignments, stations, and any associated high-speed rail (HSR) system facilities site alternatives for the project.

4.1.2.1 Public Park and Recreation Lands, and Wildlife and Waterfowl Refuges

The boundaries of the RSA for parks, recreation facilities, and wildlife and waterfowl refuges generally extend beyond the project footprint. For parks, recreation, and wildlife and waterfowl refuges, the RSA is the project footprint, as described in Chapter 2, Alternatives, plus at least 1,000 feet from the edge of the project footprint, including stations, maintenance facilities, and any road construction. For temporary laydown areas, utility relocations, or any other land used temporarily to implement the HSR system that would be returned to its original condition, the RSA for 4(f) use is the area of direct impact unless the temporary use prevents access to a potential 4(f) protected property. Figure 4-2 through Figure 4-9 in Section 4.5.1 illustrate the parks, recreation, and open-space resources within the RSA.

4.1.2.2 Historic Properties

As described in Section 4.1.3, Section 4(f) Applicability, historic properties listed or eligible for listing in the NRHP may qualify for protections under Section 4(f). Because the HSR project is a federal undertaking, it must comply with the National Historic Preservation Act (NHPA). A Programmatic Agreement (PA) among the California State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), the Surface Transportation Board, the Authority, and the FRA outlines an approach for compliance with Section 106 of the NHPA for the HSR program. The Section 106 implementing regulations at 36 C.F.R. Section 800.4(a)(1) require the establishment of an area of potential effect (APE). For Section 106 compliance, the APE is used for the technical reports that document the identification of historic properties and the assessment of effects. The APE is the geographic area or areas within which an undertaking may directly or indirectly alter the character or use of historic properties, if any such properties exist. Therefore, the APE serves as the RSA for Section 4(f) historic properties that are listed or eligible for listing in the NRHP. See Appendix B, Area of Potential Effects Map, of the *San Jose to Merced Project Section Historic Architectural Survey Report* (Authority 2019a), and Appendix A of the *San Jose to Merced Project Section Archaeological Survey Report* (Authority 2019b) for maps showing the APE.

The APEs for archaeological and architectural resources are described in the following subsections.

Archaeological APE

The archaeological APE includes the area of ground to be disturbed before, during, and after project construction as well as during operations. This includes excavation for the vertical and horizontal profiles of the alignment, station location footprints, geotechnical drilling, grading, cut and fill, easements, staging/laydown areas, utility relocation, borrow sites, spoils areas, temporary or permanent road construction, grade separations features, infrastructure demolition, biological mitigation areas, and all permanent rights-of-way (i.e., the project footprint). The archaeological APE also includes a vertical component in the area of Tunnel 1 and Tunnel 2, with the APE extending to the ground surface above the area where project activities would take place below grade.

Built Resources APE

The methodology for establishing the historic built resources APE follows standard practices for the discipline, Attachment B of the Section 106 PA, and the Authority's *Cultural Resources Technical Guidance Memorandum #1* (Authority 2013), and is detailed in the project Historic Architectural Survey Report (Authority 2019a). The historic built resources APE includes all legal

parcels² intersected by the HSR right-of-way for all project alternatives, including ancillary features such as grade separations, stations, maintenance facilities, utilities, and construction staging areas. The APE includes properties where historic materials or associated landscape features would be demolished, moved, or altered by construction. The types of resources encountered in the project vicinity and the project construction activities guided the delineation of the APE.

The historic built resources APE is larger than the project footprint. It is delineated to take into consideration indirect effects, such as visual, audible, or atmospheric intrusions onto a property, the potential for vibration-induced damage, demolition of resources located on the surface above tunnels, or isolation of a property from its setting. Visual and audible changes have the potential to affect character-defining features of some historic built resources.

4.1.3 Section 4(f) Applicability

A park or recreational area qualifies for protection under Section 4(f) if it is:

- Publicly owned at the time at which the use occurs
- Open to the general public
- Being used for recreation
- Considered significant by the OWJ
- A publicly owned recreation property designated in a formal plan
- A public school with a joint use agreement for public recreation use of the school grounds/recreation facilities
- Private schools with a joint use agreement for public recreation use of the school grounds/recreation facilities

Section 4(f) does not apply in the following circumstances:

1. Publicly owned facilities whose major purpose is for commercial reasons, such as professional sport or music venues, rather than for park or recreation purposes
2. Land that is privately owned, even if it is designated in a formal plan
3. Where no joint use agreement for use of public or private school recreational facilities exists
4. Publicly owned facilities, where park, recreational, or refuge activities would be incidental, secondary, occasional, or dispersed
5. Publicly owned land or facilities whose major purpose, as described by the agency with jurisdiction, is transportation, even when recreational activities may occur within the facility
6. Privately owned golf course
7. Planned facilities that are not publicly owned by the entity

A wildlife or waterfowl refuge qualifies for protection under Section 4(f) if it (1) is publicly owned at the time at which the use occurs, (2) the land has been officially designated as a wildlife and/or waterfowl refuge by a federal, state, or local agency, (3) its primary designated purpose is consistent with its primary function and how it is intended to be managed, and (4) is considered significant by the OWJ. Coordination with the OWJ and examination of the land management plan for the area will be necessary to determine if Section 4(f) should apply to an area that would be used by a transportation project.

² A *legal parcel* is a parcel that was created in accordance with state and local subdivision laws in effect at the time of its creation. Determination of the legal status of a parcel created prior to the California Subdivision Map Act is made by the city or county in which the parcel in question is located under authority granted by the Subdivision Map Act. Assignment of an Assessor's Parcel Number does not create a legal parcel, nor does recordation of a deed that fails to comply with the California Subdivision Map Act.

For publicly owned multiuse land holdings, Section 4(f) applies only to those portions of a property that are designated by statute or identified in an official management plan of the administering agency as being primarily for public park, recreation, or wildlife and waterfowl refuge purposes, and are determined to be significant for such purposes.

Historic sites listed or eligible for listing in the NRHP are protected under Section 4(f). Although the statutory requirements of Section 106 and Section 4(f) are similar, if a proposed action results in an “adverse effect” under Section 106, there is not automatically a Section 4(f) use. To determine whether a use of an NRHP-protected property would occur, the Authority completes a separate Section 4(f) analysis and determination, in addition to those completed in compliance with the Section 106 process.

For a property to be eligible for listing in the NRHP, it must meet at least one of the four NRHP criteria (i.e., Criteria A–D) described in this section. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- Criterion A—Properties that are associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B—Properties that are associated with the lives of persons significant in our past
- Criterion C—Properties that embody distinctive characteristics of a type, period, or method of construction; or that represent the work of a master; or that possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D—Properties that have yielded, or may be likely to yield, information important in prehistory or history

An archaeological resource that is eligible only under NRHP Criterion D is considered valuable primarily in terms of the data that can be recovered from it. For such resources (such as pottery scatters and refuse deposits), it is generally assumed that there is minimal value attributed to preserving such resources in place. Conversely, resources eligible under Criterion A, B, or C are considered to have value intrinsic to the resource’s location. In other words, Section 4(f) does not apply to a site if it is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place.

4.1.4 Section 4(f) Use Definition

4.1.4.1 Permanent Use

A permanent use of a Section 4(f) resource occurs when land is permanently incorporated into a proposed transportation facility. This might result from partial or full acquisition, permanent easements, or temporary easements that exceed limits for temporary occupancy as defined in the next section.

4.1.4.2 Temporary Occupancy/Temporary Use

A temporary construction use of a Section 4(f) property results in a “temporary occupancy” of a Section 4(f) resource when a Section 4(f) property is required for construction-related activities and meets specific conditions of use. If the activity does not meet the temporary occupancy conditions, even if the property is not permanently incorporated into a transportation facility, the temporary construction use would be considered a Section 4(f) use. Such use may be found to be *de minimis*. Temporary occupancy of property does not constitute a use of a Section 4(f) resource when the following conditions are satisfied:

- The occupancy must be of temporary duration (e.g., shorter than the period of construction) and must not involve a change in ownership of the property.
- The scope of use must be minor, with only minimal changes to the protected resource.

- There must be no permanent adverse physical impacts to the protected resource or temporary or permanent interference with activities or purpose of the resource.
- The property being used must be fully restored to a condition that is at least as good as existed before project construction.
- There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the foregoing requirements.

4.1.4.3 Constructive Use

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate or temporarily use a protected resource, but the proximity of the project results in impacts after incorporation of mitigation (e.g., noise, vibration, visual, access, ecological) that are so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished. This determination is made after taking the following steps:

- Identifying the current activities, features, or attributes of the resource that may be sensitive to proximity impacts
- Analyzing the potential proximity impacts on the resource
- Consulting with the appropriate officials having jurisdiction over the resource

It is important to note that erecting a structure over a Section 4(f) property, and thus requiring an air lease, does not, by itself, constitute a use, unless the effect constitutes a constructive use. Further, an adverse effect under Section 106 of the NHPA to a historic property does not in and of itself result in a constructive use. Pursuant to 23 U.S.C. Section 327, under the NEPA Assignment Memorandum of Understanding between the FRA and the State of California, effective July 23, 2019, the Authority can make the determination that there is no constructive use. The Authority cannot make any determination that an action constitutes a constructive use of a publicly owned park, public recreation area, wildlife refuge, waterfowl refuge, or historic site under Section 4(f) without first consulting with FRA and obtaining FRA’s views on such determination. The Authority will provide FRA written notice of any proposed constructive use determination, and FRA will have thirty (30) calendar days to review and provide comment. If FRA objects to the constructive use determination, the Authority will not proceed with the determination.

4.1.4.4 De minimis Impact

According to 49 U.S.C. Section 303(d), the following criteria must be met to reach a *de minimis* impact determination:

- For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact determination may be made if the Authority concludes that the transportation project would not adversely affect the activities, features, and attributes qualifying the property for protection under Section 4(f) after mitigation. In addition, to make a *de minimis* impact determination:
 - The OWJ over the property must be informed regarding the intent to make a *de minimis* impact determination, after which, public notice and opportunity for public review and comment must be provided.
 - After consideration of comments, if the OWJ over the property concurs in writing that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection, then the Authority may finalize the finding of a *de minimis* impact.
- For a historic site, a *de minimis* impact determination may be made only if, in accordance with the Section 106 process, the Authority determines that the transportation program or

project would have no effect or no adverse effect on historic properties, has received written concurrence from the OWJ over the property (e.g., the SHPO), and has taken into account the views of consulting parties to the Section 106 process as required by 36 C.F.R. Part 800.

While *de minimis* is generally applied where there is a permanent conversion of land, if a temporary use of a 4(f)-protected property during construction does not meet the conditions required for the temporary occupancy exception under Section 774.13(d), it may be possible to make a *de minimis* impact determination.

Prior to making *de minimis* impact determinations, the following coordination must be undertaken:

1. For parks, recreation areas, and wildlife and waterfowl refuges:
 - i. Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document.
 - ii. The Administration shall inform the official(s) with jurisdiction of its intent to make a *de minimis* impact finding. Following an opportunity for public review and comment as described in paragraph (b)(2)(i) of this section, the official(s) with jurisdiction over the Section 4(f) resource must concur in writing that the project would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).
2. For historic properties:
 - i. The Administration must receive written concurrence from the pertinent SHPO or Tribal Historic Preservation Officer and from the ACHP if participating in the consultation process, in a finding of “no adverse effect” in accordance with 36 C.F.R. Part 800. The Administration shall inform these officials of its intent to make a *de minimis* impact determination based on their concurrence in the finding of “no adverse effect”.
 - ii. Public notice and comment, beyond that required by 36 C.F.R. Part 800, is not required.

4.2 Coordination

Title 49 U.S.C. Section 303(b) requires cooperation and consultation with the SOI (and the Secretaries of Housing and Urban Development and Agriculture, if appropriate) and with the state in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities. Throughout the environmental impact report (EIR)/environmental impact statement (EIS) process, the Authority consulted with the SHPO, local jurisdictions, the California Department of Fish and Wildlife (CDFW), the Native American Heritage Commission (NAHC) and interested tribes, and NPS. Section 4(f) requires consultation with the SHPO, pursuant to 36 C.F.R. Part 800, and agencies of jurisdiction in identifying Section 4(f) properties and assessing impacts on the properties. In addition, Section 6(f) properties within the RSA were identified by using the NPS LWCF Project List by County and Summary Reports website and through communication with the California Department of Parks and Recreation Office of Grants and Local Services. Letters of initial consultation and requests for additional information were sent to the agencies and jurisdictions that have potential Section 4(f) resources within the study area. Table 4-1 shows the coordination to date with these agencies. A sample letter is included in Volume 2, Appendix 4-A.

Related activities, such as Section 106 consultation under the NHPA, are summarized in Section 3.17, Cultural Resources, of this Draft EIR/EIS. The Authority and the FRA consulted, and the Authority continues to consult, with the SHPO, the Surface Transportation Board, the U.S. Army Corps of Engineers (USACE), the USDOJ Bureau of Reclamation, local agencies, interested parties, the NAHC, and interested tribes to identify and assess impacts on cultural resources in compliance with Section 106.

The Authority has continued to consult with these agencies and the CDFW regarding the effects of the project on the features and attributes of Section 4(f) and 6(f) properties. The Authority's preliminary Section 4(f) determinations are presented in this Chapter and the public is invited to comment on those preliminary determinations. Final Section 4(f) determinations will be made as part of the Final EIS for this project.

Table 4-1 Section 4(f) and 6(f) Evaluation Consultation Summary

Date	Form	Participants	General Topic(s)
January 31, 2017	Letter	Alview-Dairyland Union School District	Initiating consultation, providing project background, and requesting information confirmation
		Atwater Elementary School District	
		Chowchilla Union High School District	
		Chowchilla Elementary School District	
		City of Chowchilla Recreation Department	
		City of Gilroy Recreation Department	
		City of Los Banos Recreation Department	
		City of Merced Public Works Department	
		City of Morgan Hill Parks & Recreation Administration	
		City of San Jose Parks, Recreation, & Neighborhood Services	
		El Nido Elementary School District	
		Gilroy Unified School District	
		Los Banos Unified School District	
		Madera County Public Works Department	
		McSwain Union Elementary School District	
		Merced City School District	
		Merced County Office of Education	
		Merced County Parks & Recreation	
		Merced Union High School District	
		Morgan Hill Unified School District	
Plainsburg Elementary School District			
San Benito County Office of Education			
San Benito County Parks and Recreation Department			
San Jose Unified School District			

Date	Form	Participants	General Topic(s)
		Santa Clara County Parks and Recreation Department	
		Santa Clara Unified School District	
		Weaver Union School District	
November 16, 2010	Letter	City San Jose Department of Transportation	Establishing applicability of Section 4(f) to Class I Bikeway in San Jose
October 29, 2010	Letter	City of Morgan Hill Recreation and Community Services Department	City of Morgan Hill parks and recreational resources
October 1, 2010	Email Response	City of San Jose Department of Parks, Recreation and Neighborhood Services	Guadalupe River Trail, Reach 6 and planned Phase II extension
September 30, 2010	Telephone	Gilroy Unified School District	Section 4(f) status of schools in Gilroy
September 9, 2010	Meeting	Santa Clara County Parks and Recreation Department	Coyote Creek Parkway and Trail Section 4(f) impacts
August 30, 2010	Letter	California Department of Fish and Game	Initiating consultation, providing project background, and describing study area
		City of Gilroy Community Services Department, Parks and Landscape Section	
		City of Morgan Hill Recreation and Community Services Department	
		City of San Jose Department of Transportation	
		Franklin McKinley School District	
		Gilroy Unified School District	
		Los Banos Unified School District	
		Merced County Department of Parks and Recreation	
		Morgan Hill Unified School District	
		Oak Grove School District	
		San Jose Department of Parks and Recreation	
		San Jose Unified School District	
		Santa Clara County Department of Parks and Recreation	
		Santa Clara County Open Space Authority	
July 27, 2010	Letter	California Department of Parks and Recreation	Initiating consultation, providing project background, and describing study area

Date	Form	Participants	General Topic(s)
January 29, 2009	Telephone	Santa Clara County Parks and Recreation Department	Coyote Creek Parkway and Trail and County plans and policies
July 29, 2009	Letter	California Department of Fish and Game	Initiating consultation, providing project background, and describing study area

4.3 Purpose and Need

The purpose of the California HSR system is to provide a reliable electric-powered HSR system that links the major metropolitan areas of the state and delivers predictable and consistent travel times. An additional objective is to provide an interface with commercial airports, mass transit, and the highway network, and to relieve capacity constraints of the existing transportation system as California intercity travel demand increases, in a manner sensitive to and protective of California’s unique natural resources (Authority and FRA 2005).

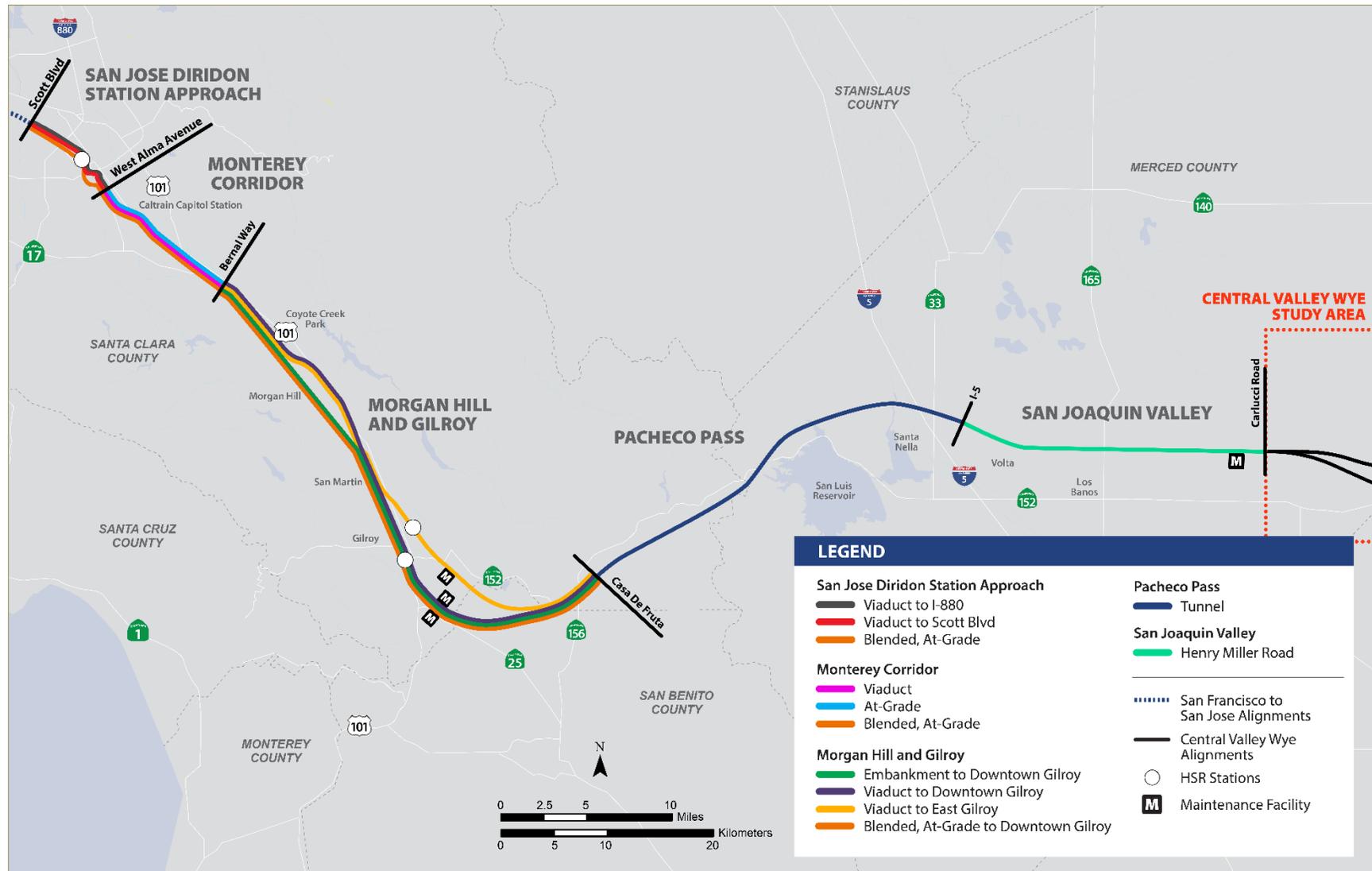
The purpose of this project is to implement the San Jose to Merced section of the California HST system: to provide the public with electric-powered high-speed rail service that provides predictable and consistent travel times between major urban centers and connectivity to airports, mass transit systems, and the highway network in the south San Francisco Bay Area and Central Valley; and to connect the Northern and Southern portions of the statewide HST system.

For more information on the project objectives and the need for the HSR system in California and in the San Jose to Merced region, refer to Chapter 1, Project Purpose, Need, and Objectives.

4.4 Alternatives

This section summarizes the No Project Alternative and the project alternatives, which are described in detail in Chapter 2. The San Jose to Central Valley Wye Project Extent (project or project extent) extends from Scott Boulevard in Santa Clara County to Carlucci Road in Merced County. The project alternatives most closely follow the preferred alignment identified in the Record of Decision for the *Final Program EIR/ EIS for the Proposed California High-Speed Train System* (Authority and FRA 2005). Stations would be built in the San Jose, Gilroy, and Merced areas; station alternatives related to the corresponding project alternatives are discussed in this section. Additionally, a maintenance of way facility (MOWF) in the Gilroy area and a maintenance of way siding (MOWS) west of Turner Springs Road in the San Joaquin Valley Subsection are proposed. The project alternatives are described in more detail in Chapter 2, are briefly summarized in this section, and are illustrated on Figure 4-1. The project comprises the following five subsections:

- San Jose Diridon Station Approach**—Extends approximately 6 miles north of San Jose Diridon Station at Scott Boulevard in Santa Clara to West Alma Avenue in San Jose. This subsection includes the San Jose Diridon Station and overlaps the southern portion of the San Francisco to San Jose Project Section.
- Monterey Corridor**—Extends approximately 9 miles from West Alma Avenue to Bernal Way in the community of South San Jose. This subsection is entirely within the city of San Jose.
- Morgan Hill and Gilroy**—Extends approximately 30–32 miles from Bernal Way in the community of South San Jose to Casa de Fruta Parkway/State Route (SR) 152 in the community of Casa de Fruta in Santa Clara County.
- Pacheco Pass**—Extends approximately 25 miles from Casa de Fruta Parkway/SR 152 to Interstate (I-) 5 in Merced County.
- San Joaquin Valley**: Extends approximately 18 miles from I-5 to Carlucci Road (the western limit of the Central Valley Wye) in unincorporated Merced County.



Note: The San Jose to Merced Alternatives are described in Chapter 2, Alternatives.
 Source: Authority 2019c

NOVEMBER 2018

Figure 4-1 HSR Alternatives by Subsection

The Authority has developed four end-to-end alternatives for the project: Alternative 1, Alternative 2, Alternative 3, and Alternative 4. Table 4-2 shows the design options for each alternative by subsection.

Table 4-2 San Jose to Central Valley Wye Design Options by Subsection

Subsection/Design Options	Alternative 1	Alternative 2	Alternative 3	Alternative 4
San Jose Diridon Station Approach				
Viaduct to Scott Blvd	–	X	X	–
Viaduct to I-880	X	–	–	–
Blended, at grade	–	–	–	X
Monterey Corridor				
Viaduct	X	–	X	–
At grade	–	X	–	–
Blended, at grade	–	–	–	X
Morgan Hill and Gilroy				
Embankment to Downtown Gilroy	–	X	–	–
Viaduct to Downtown Gilroy	X	–	–	–
Viaduct to East Gilroy	–	–	X	
Blended, at grade to downtown Gilroy	–	–	–	X
Pacheco Pass				
Tunnel	X	X	X	X
San Joaquin Valley				
Henry Miller Road	X	X	X	X

Source: Authority 2019c
 X = present; – = absent
 I-880 = Interstate 880

4.4.1 No Project Alternative

Evaluation of the No Project Alternative considers the effects of growth planned for the region as well as existing and planned improvements to the highway, aviation, conventional passenger rail, and freight rail systems in the project extent study area through 2040 for the environmental analysis. It does not include construction of the HSR or any associated facilities, and would thus have no impact on any Section 4(f) or Section 6(f) resources. Also, the No Project Alternative would not address the Purpose and Need for the project. This alternative is insufficient to meet existing and future travel demand; current and projected future congestion of the transportation system would continue to result in deteriorating air quality, reduced reliability, and increased travel times. Because the No Project Alternative does not meet the project Purpose and Need, it is neither feasible nor prudent as an avoidance alternative for any Section 4(f) or Section 6(f) resources.

4.4.2 Alternative 1

Development of Alternative 1 was intended to minimize the project footprint, minimize ground disturbance, minimize continuous surface features, and decrease necessary right-of-way acquisition through extensive use of viaduct structures. It would minimize land use displacements and conversion by staying predominantly within the existing transportation corridor right-of-way, thereby minimizing impacts of the HSR infrastructure footprint on local communities and

environmental resources. The vertical footprint would be increased to minimize ground intrusion. Alternative 1 would include the short viaduct option, operating in blended service between Scott Boulevard and I-880 before transitioning to viaduct through most of the San Jose Diridon Station Approach Subsection. Alternative 1 would continue predominantly on viaduct through the Monterey Corridor and Morgan Hill and Gilroy Subsections. This alternative is distinguished by an alignment around downtown Morgan Hill and a low viaduct approach to an aerial downtown Gilroy station. Alternative 1 would include a MOWF south of Gilroy. The alignment would continue predominantly on viaduct and embankment across the Soap Lake floodplain before entering a short tunnel west of Casa de Fruta. The alignment and guideway in the Pacheco Pass Subsection would be the same for all four project alternatives, entailing a long tunnel around the northern arm of the San Luis Reservoir and viaducts over the California Aqueduct, Delta-Mendota Canal, and I-5. The alignment and guideway in the San Joaquin Valley Subsection would similarly be common to all four project alternatives. East of the I-5 overcrossing, the guideway would be predominantly on embankment along the south side of Henry Miller Road to Carlucci Road, traveling on viaduct over major watercourses and through the Grasslands Ecological Area. Several local roadways would be relocated on bridges over the HSR embankment. An MOWS would be located along the south side of Henry Miller Road near Turner Island Road.

Overall, the HSR guideway under this project alternative would comprise two tunnels totaling 15 miles, 45.4 miles of viaduct, 21.9 miles of embankment, and 2.3 miles at grade in an excavated hillside cut.

4.4.3 Alternative 2

Alternative 2 is the alternative that most closely approximates the alignment and structure types identified in the prior program-level documents. The alignment closely follows the existing Union Pacific Railroad (UPRR) and Monterey Road transportation corridor. The San Jose Diridon Station Approach Subsection under Alternative 2 would be on a viaduct, ascending to aerial structure near Scott Boulevard. Blended service with Caltrain would occur north of Scott Boulevard. The alignment would be at grade through the Monterey Corridor Subsection and through Morgan Hill, and on embankment on approach to and through Gilroy, maintaining a lower profile than the viaduct structures under Alternatives 1 and 3 through these areas.

Alternative 2 would operate on a dedicated viaduct from Scott Boulevard through the San Jose Diridon Station Approach Subsection. The alternative would be predominantly at grade east of the UPRR alignment through the Monterey Corridor Subsection, continuing at grade east of UPRR through Morgan Hill to an embankment approach to the Downtown Gilroy Station through the Morgan Hill and Gilroy Subsection. Like Alternative 1, Alternative 2 would include a South Gilroy MOWF, continuing on predominantly viaduct and embankment across the Soap Lake floodplain before entering a short tunnel west of Casa de Fruta. The alignment and guideway in the Pacheco Pass Subsection are the same for all four project alternatives, including a long tunnel around the northern arm of the San Luis Reservoir and viaducts over the California Aqueduct, Delta-Mendota Canal, and I-5. The alignment and guideway in the San Joaquin Valley Subsection are also common to all four project alternatives. Eastward from the I-5 overcrossing, the guideway would be predominantly on embankment along the south side of Henry Miller Road to Carlucci Road and on viaduct over major watercourses and across the Grasslands Ecological Area. Several local roadways are relocated on bridges over the HSR embankment. An MOWS would be located along the south side of Henry Miller Road near Turner Island Road.

Overall, this project alternative would comprise two tunnels with a combined length of 15 miles, 20.9 miles on viaduct, 41 miles on embankment, and 3.2 miles at grade in excavated hillside cut.

4.4.4 Alternative 3

Alternative 3 was designed to minimize the project footprint through the use of viaduct and by circumventing downtown Morgan Hill, as is proposed in Alternative 1. Alternative 3 would bypass downtown Gilroy to an East Gilroy Station, further minimizing interface with the UPRR corridor in comparison to Alternative 1. Like Alternative 2, Alternative 3 would include a viaduct to Scott Boulevard. Alternative 3 would incorporate the same alignment and profile as Alternative 1 in the

Monterey Corridor, Pacheco Pass, and San Joaquin Valley Subsections, and the same alignment and profile as Alternative 2 in the San Jose Diridon Station Approach Subsection. The MOWS near Carlucci Road would be the same as under Alternatives 1 and 2.

Alternative 3 would operate in a dedicated viaduct from Scott Boulevard through the San Jose Diridon Station Approach Subsection. The alternative would continue predominantly on viaduct through the Monterey Corridor and Morgan Hill and Gilroy Subsections on an alignment around downtown Morgan Hill to an embankment approach to the East Gilroy Station. Alternative 3 would include an MOWF and would continue predominantly on viaduct and embankment across the Soap Lake floodplain before entering a short tunnel west of Casa de Fruta. The alignment and guideway in the Pacheco Pass Subsection would be the same for all four project alternatives, entailing a long tunnel around the northern arm of the San Luis Reservoir and viaducts over the California Aqueduct, Delta-Mendota Canal, and I-5. The alignment and guideway in the San Joaquin Valley Subsection would also be common to all four project alternatives. East from the I-5 overcrossing, the guideway would be predominantly on embankment along the south side of Henry Miller Road to Carlucci Road, and on viaduct over major watercourses and across the Grasslands Ecological Area. Several local roadways would be relocated on bridges over the HSR embankment. An MOWS would be located along the south side of Henry Miller Road near Turner Island Road.

Overall, this project alternative would comprise two tunnels with a combined length of 15 miles, 43.2 miles of the alignment on viaduct, and 24.9 miles on embankment.

4.4.5 Alternative 4

Development of Alternative 4 was intended to minimize the project footprint and decrease non-transportation right-of-way acquisition by staying at grade within the existing Caltrain and UPRR right-of-way between Scott Boulevard in Santa Clara and Gilroy. It would minimize land use displacements and conversion by staying predominantly within the existing transportation corridor right-of-way, thereby minimizing impacts of the HSR footprint on local communities and environmental resources. The project alternative is distinguished by a blended at-grade alignment with Caltrain at a 110-miles per hour (mph) maximum operating speed.

Alternative 4 would begin at Scott Boulevard in blended service with Caltrain on an at-grade profile. The blended at-grade alignment would continue to enter new dedicated HSR platforms at grade at the center of San Jose Diridon Station. Continuing south, the blended at-grade three-track alignment remains in the Caltrain right-of-way through the Gardner neighborhood. In the Monterey Corridor Subsection, unlike Alternatives 1, 2, and 3, Alternative 4 would be in blended service with Caltrain on an at-grade profile within the Peninsula Corridor Joint Powers Board (PCJPB) and UPRR right-of-way. In the Morgan Hill and Gilroy Subsection, Alternative 4 would be blended service with Caltrain on an at-grade profile within the PCJPB and UPRR right-of-way with an at-grade Downtown Gilroy Station. Past the Gilroy station, HSR would enter the fully grade-separated, dedicated track needed to operate HSR trains at speeds above 125 mph. The alignment and guideway in the Pacheco Pass Subsection would be the same for all four project alternatives, entailing a long tunnel around the northern arm of the San Luis Reservoir and viaducts over the California Aqueduct, Delta-Mendota Canal, and I-5. The alignment and guideway in the San Joaquin Valley Subsection would also be common to all four project alternatives. East from the I-5 overcrossing, the guideway would be predominantly on embankment along the south side of Henry Miller Road to Carlucci Road, and on viaduct over major watercourses and across the Grasslands Ecological Area. Several local roadways would be relocated on bridges over the HSR embankment. An MOWS would be located along the south side of Henry Miller Road near Turner Island Road.

Overall, this project alternative would comprise 15.2 miles on viaduct, 30.3 miles at grade, 25.9 miles on embankment, 2.3 miles in trench, and 2 tunnels with a combined length of 15 miles.

4.5 Section 4(f) Applicability Analysis

Section 4.6.1, Parks, Recreation, and Wildlife and Waterfowl Refuges, identifies the park, recreation, and wildlife and waterfowl refuge properties that meet the criteria for protection as

Section 4(f) resources. Section 4.6.2, Cultural Resources, identifies cultural resources that meet the criteria for protection as Section 4(f) resources. The locations of all Section 4(f) resources are shown on figures in both sections, respectively.

4.5.1 Parks, Recreation, and Wildlife and Waterfowl Refuges

Data collection to identify potential Section 4(f) resources consisted of a review of the plans and policies shown in Volume 2, Appendix 2-J, Regional and Local Plans and Policies, consultation with OWJs over resources, field reviews, public input, and the use of geographic information system (GIS) data layers. The cities and counties provided the boundaries for parks and recreation resources located within the RSA in GIS data format.

Section 4.6.1 provides a description of each park, recreation, and open-space area in the RSA; however, not all of these facilities meet the requirements to qualify for protection under Section 4(f) (see Section 4.1.3).

The Authority evaluated the following resources for qualification under Section 4(f), but determined them not to be Section 4(f) resources based on the criteria listed in Section 4.1.3 the criteria that form the basis for why these resources are not Section 4(f) resources appear in parentheses:

- **San Jose Diridon Station Approach Subsection**
 - Bellarmine College Preparatory School and Sports Fields, San Jose (3)
 - HP Pavilion, San Jose (1)
 - Gardner Elementary School, San Jose (3)
 - Gardner Community Center, San Jose (4)
 - Community Park, San Jose (7)
 - Highway 87 Bikeway North, San Jose (5)
- **Monterey Corridor Subsection**
 - Three Creeks Trail, San Jose (7)
 - Southside Community Center, San Jose (4)
- **Morgan Hill and Gilroy Subsection**
 - Fisher Creek Trail (7)
 - Charter School of Morgan Hill, Morgan Hill (3)
 - Ann Sobrato High School, Morgan Hill (3)
 - Central High School, Morgan Hill (3)
 - El Toro Elementary School, Morgan Hill (3)
 - Lewis H. Britton Middle School, Morgan Hill (3)
 - Barrett Elementary School, Morgan Hill (3)
 - San Martin Gwinn Elementary School, San Martin (3)
 - Rucker Elementary School, Gilroy (3)
 - Soney Bae Golf Center, Gilroy (6)
 - South Valley Middle School, Gilroy (3)
 - Gilroy Prep School, Gilroy (3)
 - Eliot Elementary School, Gilroy (3)
 - Glen View Elementary School, Gilroy (3)
 - Anchorpoint Christian School, Gilroy (3)

The locations of parks, recreation, and wildlife and waterfowl refuges in the RSA that qualify for protection under Section 4(f) are illustrated on Figure 4-2 through Figure 4-9. The Map ID number for each resource illustrated on the figures is shown in Table 4-3.

Table 4-3 Parks, Recreation Areas, Open-Space, and Wildlife and Waterfowl Refuge Resources Evaluated for Potential Section 4(f) Use

Map ID	Name	Description	Distance to Nearest Project Feature ¹
San Jose Diridon Station Approach Subsection			
1	Guadalupe River Park	<p>Location: 438 Coleman Ave, San Jose</p> <p>Size: 120 acres</p> <p>Features: Guadalupe Community Garden, Columbus Park, Taylor Street Rock Garden, Heritage Rose Garden, Guadalupe Gardens, Arena Green East, Visitor and Education Center, a playground</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park; also a Section 6(f) resource</p>	<p>Alternatives 1–3: 0 feet (adjacent)</p> <p>Alternative 4: 298.3 feet</p>
2	Reed Street Dog Park	<p>Location: 888 Reed St, Santa Clara</p> <p>Size: 1.5 acres</p> <p>Features: Picnic area, BBQs, play area</p> <p>Agency with Jurisdiction: City of Santa Clara Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 4: 13.9 feet</p> <p>Alternatives 2 and 3: 0 feet (within footprint)</p>
3	Larry J. Marsalli Park	<p>Location: 1425 Lafayette St, Santa Clara</p> <p>Size: 4.5 acres</p> <p>Features: Open space, restrooms, lighted softball field, children's playground</p> <p>Agency with Jurisdiction: City of Santa Clara Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 4: 292.1 feet</p> <p>Alternatives 2 and 3: 0 feet (within TCE)</p>
4	Newhall Park	<p>Location: 972 Newhall St, San Jose</p> <p>Size: 1.4 acres</p> <p>Features: Lawn areas, gazebo, picnic area</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 4: 191.3 feet</p> <p>Alternatives 2 and 3: 188.7 feet</p>
5	College Park	<p>Location: Elm and Hedding Streets, San Jose</p> <p>Size: 0.1 acre</p> <p>Features: Open space, bench</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 0 feet (within TCE)</p> <p>Alternative 4: 527.8 feet</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
6	Theodore Lenzen Park	<p>Location: Stockton Ave & Lenzen St, San Jose</p> <p>Size: 0.5 acre</p> <p>Features: One playground</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 36.4 feet</p> <p>Alternative 4: 292.3 feet</p>
7	Cahill Park	<p>Location: San Fernando St, San Jose</p> <p>Size: 3.7 acres</p> <p>Features: 1/2 size basketball court, playground</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 114.7 feet</p> <p>Alternative 4: 116.4 feet</p>
8	Los Gatos Creek Trail	<p>Location: East Main St at College Ave, San Jose</p> <p>Size: 9.7 miles</p> <p>Features: Pedestrian and bicycle trail</p> <p>Agency with Jurisdiction: Santa Clara County Parks and Los Gatos Parks and Public Works Department</p> <p>Section 4(f) Applicability: Publicly owned trail</p>	<p>Alternatives 1–4: 0 feet (within footprint)</p>
9	Discovery Dog Park	<p>Location: Park Avenue and Delmas Ave, San Jose</p> <p>Size: 0.4 acre</p> <p>Features: Decomposed granite walking path, bark-mulch dog area, tables and benches</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 764.5 feet</p> <p>Alternative 4: 970.0 feet</p>
10	Guadalupe River Trail, Reach 6	<p>Location: Woz Way to Virginia St, San Jose</p> <p>Size: 9 miles (full trail)</p> <p>Features: Hiking and bicycle trail</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned trail</p>	<p>Alternatives 1–3: 0 feet (within footprint)</p> <p>Alternative 4: 0 feet (adjacent)</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
11	Biebrach Park	<p>Location: Delmas St & Virginia St, San Jose</p> <p>Size: 5 acres</p> <p>Features: Two basketball courts, children's play areas, barbeque facilities, handball court, swimming pool</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 395.3 feet</p> <p>Alternative 4: 10.1 feet</p>
12	Fuller Park	<p>Location: Fuller Ave and Park Ave, San Jose</p> <p>Size: 1.14 acres</p> <p>Features: Bocce ball court, two checker/chess tables, horseshoe pit</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 443.4 feet</p> <p>Alternative 4: 0 feet (within footprint)</p>
13	Palm Haven Plaza	<p>Location: Palm Haven Ave and Clintonia St, San Jose</p> <p>Size: 0.7 acre</p> <p>Features: Grassy open space, bench</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 1,979.1 feet</p> <p>Alternative 4: 854.5 feet</p>
14	Hummingbird Park	<p>Location: Bird Ave and Fisk Ave, San Jose</p> <p>Size: 0.38 acre</p> <p>Features: Children's play area, picnic tables, and benches</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 2,355.1 feet</p> <p>Alternative 4: 893.4 feet</p>
15	Jesse Frey Community Garden	<p>Location: W Alma Ave and Belmont Way, San Jose</p> <p>Size: 0.5 acre</p> <p>Features: Organic community garden</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 284 feet</p> <p>Alternative 4: 406.3</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
16	Tamien Park (Phase II Planned)	<p>Location: 1197 Lick Avenue, San Jose</p> <p>Size: 3.5 acres</p> <p>Features: Picnic tables, shade structures, ping pong tables, restroom, children’s playground with play equipment, multi-use turf area, and a lighted basketball court. Planned multi-use turf/soccer field, stage, and outdoor gym.</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 0 feet (within footprint)</p> <p>Alternative 4: 0 feet (within TCE)</p>
Monterey Corridor Subsection			
17	Communications Hill Trail	<p>Location: Grassina St to Communications Hill Blvd, San Jose</p> <p>Size: 7.4 miles (0.6 mile existing/6.8 miles planned)</p> <p>Features: Views of the valley, link neighborhood parks and extend to City’s existing trail network with connection to Highway 87 Bikeway; pedestrian bridge</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned trail</p>	<p>Alternatives 1–4: 0 feet (adjacent)</p>
18	Danna Rock Park	<p>Location: Valleyhaven Way, San Jose</p> <p>Size: 11 acres</p> <p>Feature: Barbeque facilities, children’s play area, small basketball court</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 3: 581.2 feet</p> <p>Alternative 2: 379.3 feet</p> <p>Alternative 4: 712.9 feet</p>
19	Caroline Davis Intermediate School	<p>Location: 5035 Edenvue Dr, San Jose</p> <p>Size: 12.7 acres</p> <p>Features: Large athletic field with baseball diamond, track and field, large blacktop play area with basketball courts</p> <p>Agency with Jurisdiction: Oak Grove School District</p> <p>Section 4(f) Applicability: Joint use agreement for public use of recreational facilities</p>	<p>Alternatives 1–3: 565.7 feet</p> <p>Alternative 4: 938.1 feet</p>
20	Edenvale Gardens Regional Park	<p>Location: 200 Edenvale Ave, San Jose</p> <p>Size: 19.5 acres</p> <p>Features: Site of former Frontier Village amusement park; three tennis courts, sand volleyball court, small basketball court, children’s play areas, restroom facilities, barbeque facilities, picnic sites, walking trail</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 3: 97.1 feet</p> <p>Alternative 2: 14.3 feet</p> <p>Alternative 4: 27.1 feet</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
21	Ramac Park	<p>Location: Charlotte Dr, Edenvale, San Jose</p> <p>Size: 10.64 acres</p> <p>Features: Barbeque facilities, picnic sites, restroom facilities, small basketball court, unlighted tennis court, lighted softball field, soccer use allowed with permit only</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 3: 548.1 feet</p> <p>Alternative 2: 445.8 feet</p> <p>Alternative 4: 395.4 feet</p>
22	Silver Leaf Park	<p>Location: Southpine Dr, San Jose</p> <p>Size: 5.8 acres</p> <p>Features: Neighborhood park featuring barbeque facilities, children's play areas, and a small basketball court</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation and Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 507.5 feet</p> <p>Alternative 4: 757.6 feet</p>
23	Metcalf Park	<p>Location: Forsum Rd, San Jose</p> <p>Size: 6.2 acres</p> <p>Features: Barbeque facilities, picnic site, restroom facilities, children's play area, two basketball courts, sand volleyball court</p> <p>Agency with Jurisdiction: City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 3: 368.1 feet</p> <p>Alternative 2: 330.2 feet</p> <p>Alternative 4: 469.6 feet</p>
24	Coyote Creek Parkway	<p>Location: Coyote Ranch Rd, San Jose</p> <p>Size: 1,414 acres/15 miles</p> <p>Features: Biking, equestrian, hiking, fishing, historic site, picnic areas, trails</p> <p>Agency with Jurisdiction: Santa Clara County Department of Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–4: 0 feet (within footprint)</p>
24	Coyote Creek Trail	<p>Location: Hellyer Ave to Metcalf Rd, San Jose</p> <p>Size: 19.7 miles</p> <p>Features: Paved hiking and bicycle trail</p> <p>Agency with Jurisdiction: Santa Clara County Department of Parks and Recreation/City of San Jose Department of Parks, Recreation & Neighborhood Services</p> <p>Section 4(f) Applicability: Publicly owned trail</p>	<p>Alternatives 1–3: 0 feet (within footprint)</p> <p>Alternative 4: 19.4 feet</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
Morgan Hill and Gilroy Subsection			
25	Tulare Hill	<p>Location: Santa Clara County</p> <p>Size: 118 acres</p> <p>Features: Property planned for future park use</p> <p>Agency with Jurisdiction: Santa Clara County Department of Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–3: 0 feet (adjacent)</p> <p>Alternative 4: 360.5 feet</p>
26	Field Sports Park	<p>Location: 9580 Malech Rd, San Jose</p> <p>Size: 102 acres</p> <p>Features: Firing range, picnicking, league activities, and special events</p> <p>Agency with Jurisdiction: Santa Clara County Department of Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–4: 0 feet (within TCE)</p>
27	Anderson Lake County Park	<p>Location: 19245 Malaguerra Ave, Morgan Hill</p> <p>Size: 3,144 acres</p> <p>Features: Anderson Lake, multiple use trails from the Coyote Creek Pkwy, Jackson Ranch historic park site, Moses L. Rosendin Park, and Burnett Park; motorized and nonmotorized boating and fishing opportunities, shoreline picnic and barbecue facilities</p> <p>Agency with Jurisdiction: Santa Clara County Department of Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park and recreation area</p>	<p>Alternatives 1 and 3: 25.6 feet</p> <p>Alternative 2: 3,812.2 feet</p> <p>Alternative 4: 4,812.1</p>
28	Sanchez Park	<p>Location: Sanchez Dr, Morgan Hill</p> <p>Size: 0.16 acre</p> <p>Features: Small children's play area, picnic facilities</p> <p>Agency with Jurisdiction: City of Morgan Hill Recreation and Community Services Department</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1 and 3: 1,401.3 feet</p> <p>Alternative 2: 239.5 feet</p> <p>Alternative 4: 199.4 feet</p>
29	Villa Mira Monte	<p>Location: 17860 Monterey Road, Morgan Hill</p> <p>Size: 2.37 acre</p> <p>Features: Community and recreational facility, museum, gardens</p> <p>Agency with Jurisdiction: Morgan Hill Historical Society</p> <p>Section 4(f) Applicability: Publicly accessible recreational facility</p>	<p>Alternatives 1 and 3: 1,607.7 feet</p> <p>Alternative 2: 0 feet (adjacent)</p> <p>Alternative 4: 0 feet (within footprint)</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
30	Morgan Hill Community and Cultural Center	<p>Location: 17000 Monterey Rd, Morgan Hill</p> <p>Size: 8.67 acres</p> <p>Features: Community playhouse, multiuse rooms, outdoor amphitheater</p> <p>Agency with Jurisdiction: City of Morgan Hill Recreation and Community Services Department</p> <p>Section 4(f) Applicability: Publicly owned recreational facility</p>	<p>Alternatives 1 and 3: 1,720.1 feet</p> <p>Alternative 2: 0 feet (within footprint)</p> <p>Alternative 4: 14.6 feet</p>
31	Morgan Hill Outdoor Sports Center	<p>Location: 16500 Condit Rd, Morgan Hill</p> <p>Size: 35 acres</p> <p>Features: 10 natural grass sports fields, 2 fully equipped multiuse synthetic turf fields, landscaped plaza, bleachers, field and parking lighting, barbeque areas</p> <p>Agency with Jurisdiction: City of Morgan Hill Recreation and Community Services Department</p> <p>Section 4(f) Applicability: Publicly owned recreational facility</p>	<p>Alternatives 1 and 3: 378.9 feet</p> <p>Alternative 2: 2,681.2 feet</p> <p>Alternative 4: 4,015.9 feet</p>
32	Morgan Hill Aquatics Center	<p>Location: 16200 Condit Rd, Morgan Hill, CA</p> <p>Size: 8 acres</p> <p>Features: Competition pool (50 meters) with lap lanes and diving boards, warm-water instructional pool, recreation pool with water playground, two water slides, recreational fountain and water play area with interactive recreational water features</p> <p>Agency with Jurisdiction: City of Morgan Hill Recreation and Community Services Department</p> <p>Section 4(f) Applicability: Publicly owned recreational facility</p>	<p>Alternatives 1 and 3: 383.6 feet</p> <p>Alternative 2: 2,394.2 feet</p> <p>Alternative 4: 3,945.5 feet</p>
33	San Ysidro Park	<p>Location: 7700 Murray Ave, Gilroy</p> <p>Size: 9.25 acres</p> <p>Features: Basketball court, handball court, hiking, jogging path, multiuse area, picnic areas, restroom facilities</p> <p>Agency with Jurisdiction: City of Gilroy Public Works Department, Parks and Landscape Division</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1–4: 92.4 feet</p>
34	Forest Street Park	<p>Location: 7325 Forest St, Gilroy</p> <p>Size: 0.25 acre</p> <p>Features: Children's play area, picnic tables, two horseshoe pits</p> <p>Agency with Jurisdiction: City of Gilroy Public Works Department, Parks and Landscape Division</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternative 1: 132.7 feet</p> <p>Alternative 2: 108.1 feet</p> <p>Alternative 3: 279.5 feet</p> <p>Alternative 4: 241.1 feet</p>

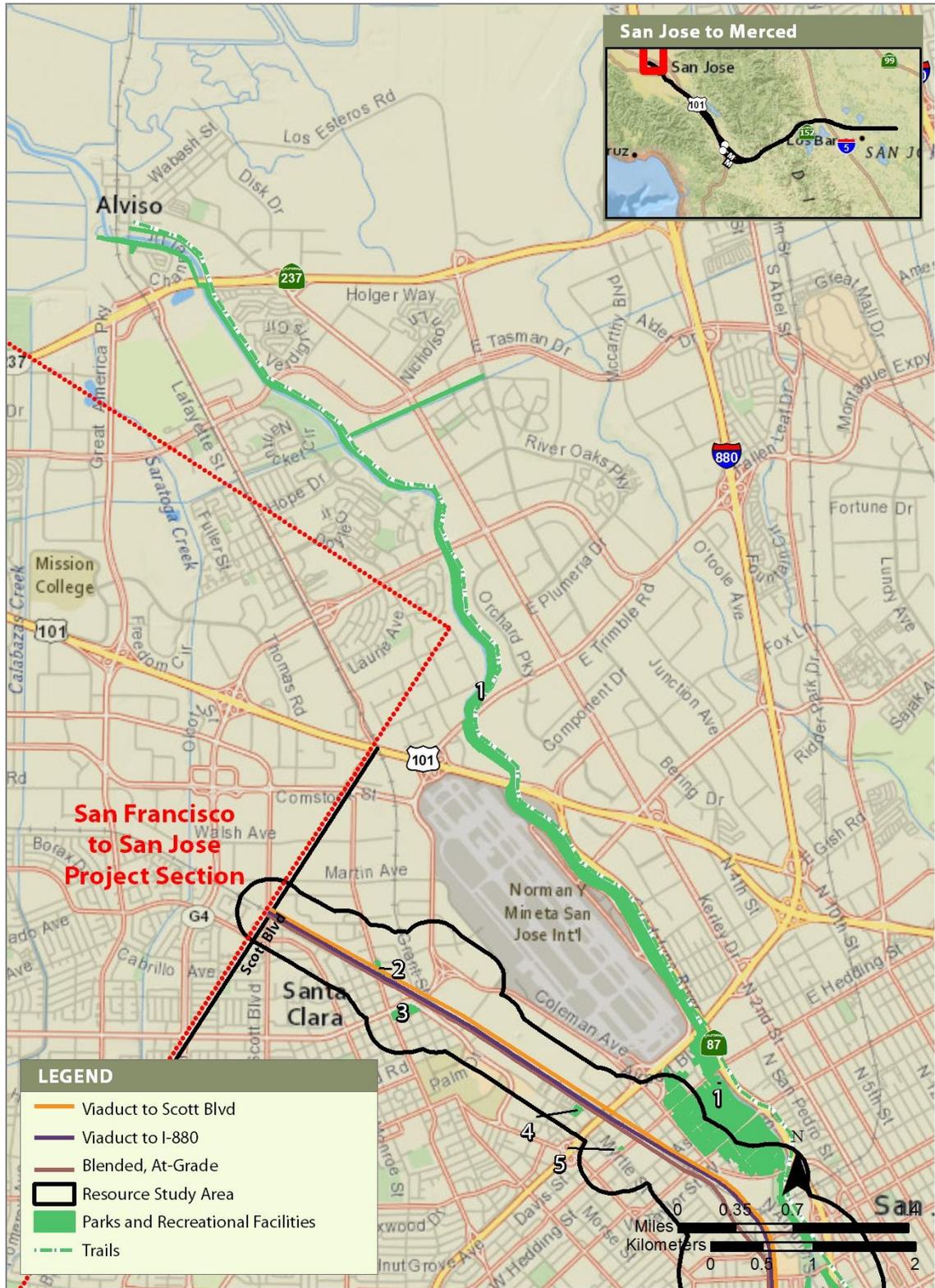
Map ID	Name	Description	Distance to Nearest Project Feature ¹
35	Wheeler Tot Lot	<p>Location: 250 W 6th St, Gilroy</p> <p>Size: 0.2 acre</p> <p>Features: Small child play area</p> <p>Agency with Jurisdiction: City of Gilroy Public Works Department, Parks and Landscape Division</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternative 1: 769.1 feet</p> <p>Alternative 2: 462.0 feet</p> <p>Alternative 3: 1,899.5 feet</p> <p>Alternative 4: 766.5 feet</p>
36	Butcher Park	<p>Location: 602 Old Gilroy St, Gilroy</p> <p>Size: 0.20 acre</p> <p>Features: Picnic area, grassy outdoor space</p> <p>Agency with Jurisdiction: City of Gilroy Public Works Department, Parks and Landscape Section</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternatives 1, 2, and 4: 754.6 feet</p> <p>Alternative 3: 632.2 feet</p>
37	Gilroy Sports Park	<p>Location: 5925 Monterey Frontage Rd, Gilroy</p> <p>Size: 79 acres</p> <p>Features: Rural; baseball/softball, jogging path, picnic tables, playground, restrooms, soccer field, trails</p> <p>Agency with Jurisdiction: City of Gilroy Public Works Department, Parks and Landscape Division</p> <p>Section 4(f) Applicability: Publicly owned park</p>	<p>Alternative 1: 869.8 feet</p> <p>Alternative 2: 98.4 feet</p> <p>Alternative 3: 8,113.9 feet</p> <p>Alternative 4: 754.6 feet</p>
Pacheco Pass Subsection			
38	Cottonwood Creek Wildlife Area	<p>Location: 36 miles east of Gilroy and northeast of SR 152, Merced and Santa Clara Counties</p> <p>Size: 6,300 acres</p> <p>Features: Wildlife management area: steep oak-grassland (upper unit) and steep hilly grassland (lower unit); hunting and wildlife viewing; foot access only</p> <p>Agency with Jurisdiction: California Department of Fish and Wildlife</p> <p>Section 4(f) Applicability: Publicly owned wildlife refuge; Section 6(f) resource</p>	<p>Alternatives 1–4: 0 feet (On top of tunnel easement)</p>
39	San Luis Reservoir Wildlife Management Area	<p>Location: 30 miles east of Gilroy, south side of Pacheco Pass, south of SR 152, Merced and Santa Clara Counties</p> <p>Size: 902 acres</p> <p>Features: Hunting and wildlife viewing; wildflower viewing during spring; foot access only</p> <p>Agency with Jurisdiction: California Department of Fish and Wildlife</p> <p>Section 4(f) Applicability: Publicly owned wildlife refuge and recreation area</p>	<p>Alternatives 1–4: 745.3 feet</p>

Map ID	Name	Description	Distance to Nearest Project Feature ¹
40	San Luis Reservoir State Recreation Area	<p>Location: SR 152, 7 miles west of I-5, or 33 miles east of US 101 from Gilroy, Merced and Santa Clara Counties</p> <p>Size: 27,000 acres</p> <p>Features: San Luis Reservoir, O'Neill Forebay, Los Banos Creek Reservoir; fishing, boating, swimming; four campgrounds; recreational bicycle, hiking, motorcycle trails</p> <p>Agency with Jurisdiction: California Department of Parks and Recreation</p> <p>Section 4(f) Applicability: Publicly owned park and recreation area; also a Section 6(f) resource</p>	Alternatives 1–4: 505.8 feet
San Joaquin Valley Subsection			
41	Volta Wildlife Area	<p>Location: 0.75 mile north of Volta on Ingomar Grade, Merced County</p> <p>Size: 3,800 acres</p> <p>Features: Wildlife refuge; hunting during waterfowl season, wildlife viewing; foot access only</p> <p>Agency with Jurisdiction: California Department of Fish and Wildlife</p> <p>Section 4(f) Applicability: Publicly owned wildlife refuge and recreation area</p>	Alternatives 1–4: 0 feet (adjacent)
42	Los Banos Wildlife Area	<p>Location: 4 miles northeast of Los Banos, Merced County</p> <p>Size: 6,200 acres</p> <p>Features: Permitted hunting, wildlife viewing, boating, fishing; visitors' center</p> <p>Agency with Jurisdiction: California Department of Fish and Wildlife</p> <p>Section 4(f) Applicability: Publicly owned wildlife refuge and recreation area</p>	Alternatives 1–4: 0 feet (within TCE)

Sources: CDFW 2016a-f; City of Gilroy 2016a-e; City of Morgan Hill 2016a-b; City of San Jose 2014; SCVOSA 2014; Franklin-McKinley School District 2016; Gilroy Prep 2016; Gilroy Unified School District 2016; Google Inc. 2017a, 2017b; County of Merced 2016; Morgan Hill Unified School District 2016; Oak Grove School District 2014; San Jose Unified School District 2016; County of Santa Clara 2016

¹ The nearest project feature could be a TCE or part of the project footprint (permanent ROW, easement, etc.)

TCE = temporary construction easement

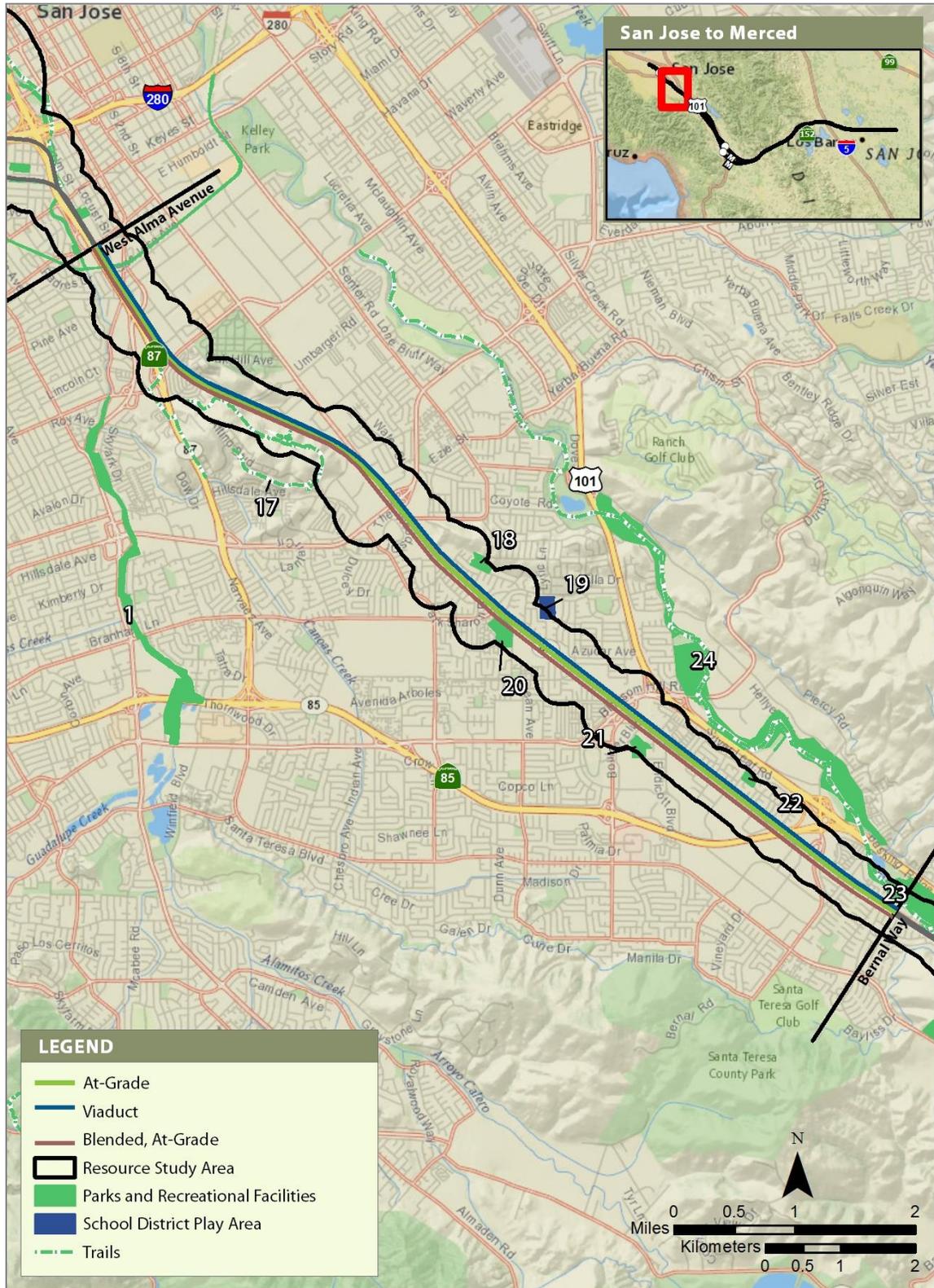


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Figure 4-2 Parks, Recreation, and Wildlife and Waterfowl Refuges—San Jose Diridon Station Approach Subsection (Northern Portion)

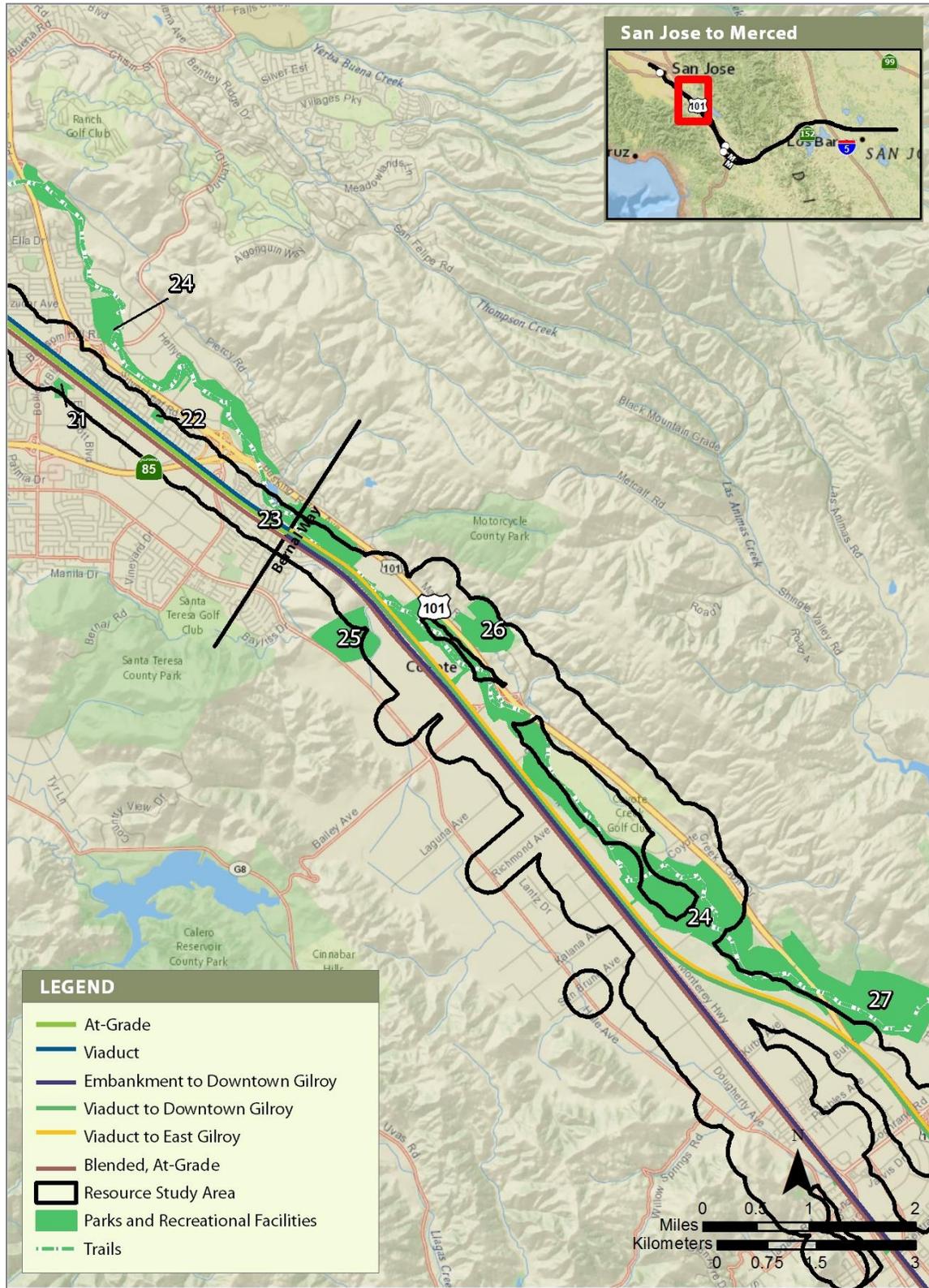


Figure 4-3 Parks, Recreation, and Wildlife and Waterfowl Refuges—San Jose Diridon Station Approach Subsection (Southern Portion)



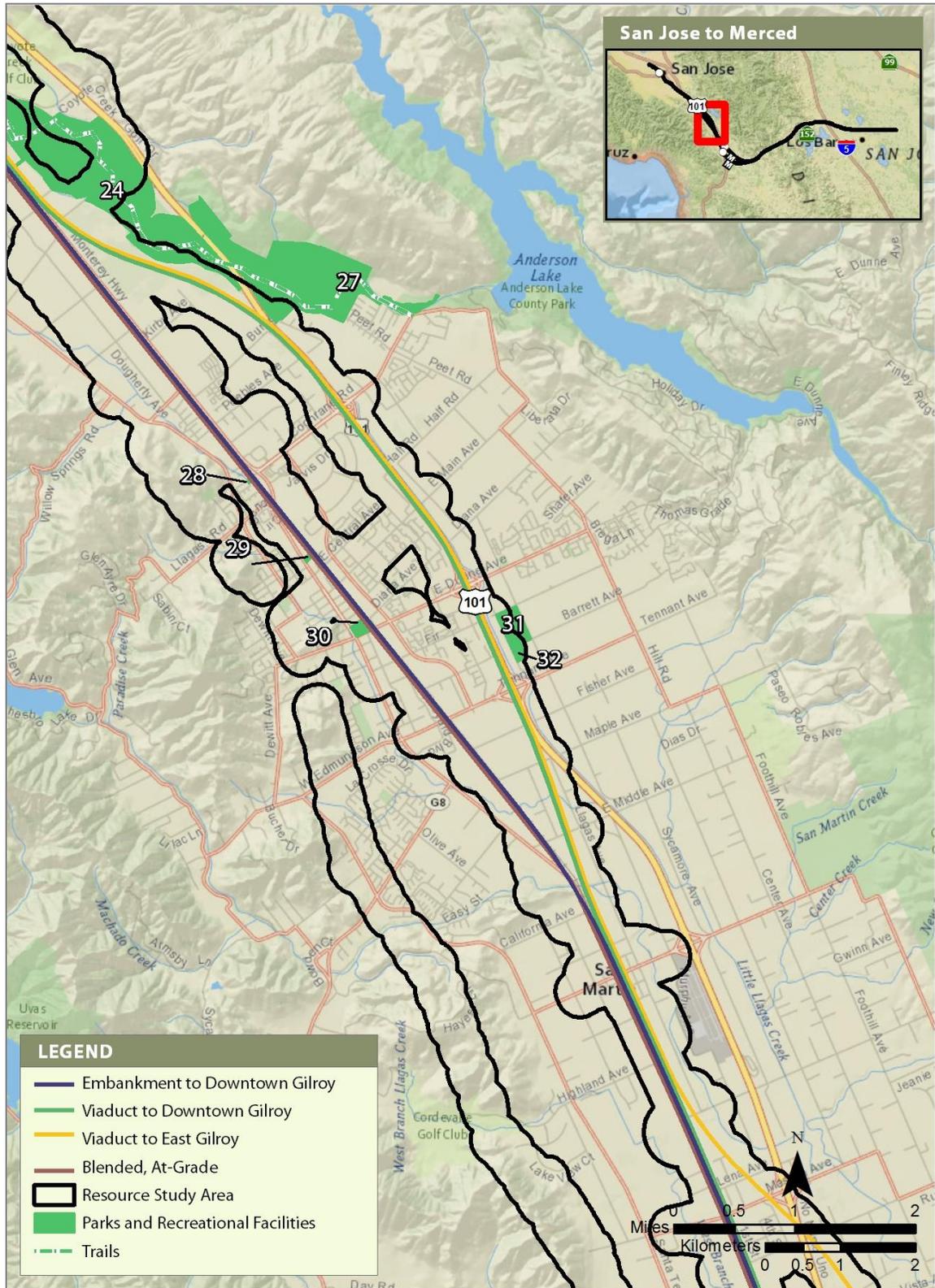
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**Figure 4-4 Parks, Recreation, and Wildlife and Waterfowl Refuges—
Monterey Corridor Subsection**



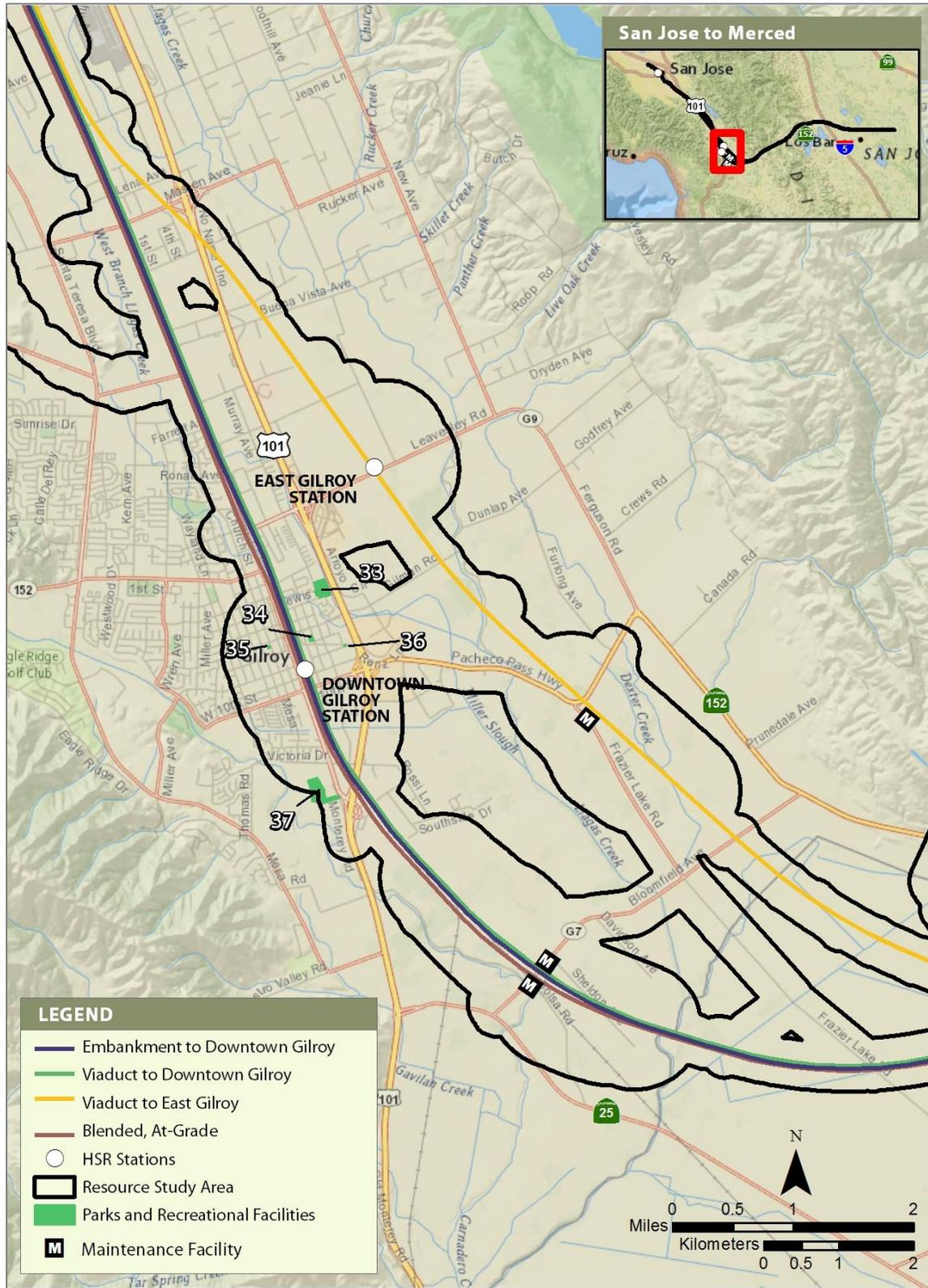
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Figure 4-5 Parks, Recreation, and Wildlife and Waterfowl Refuges—Morgan Hill and Gilroy Subsection (Northern Portion)



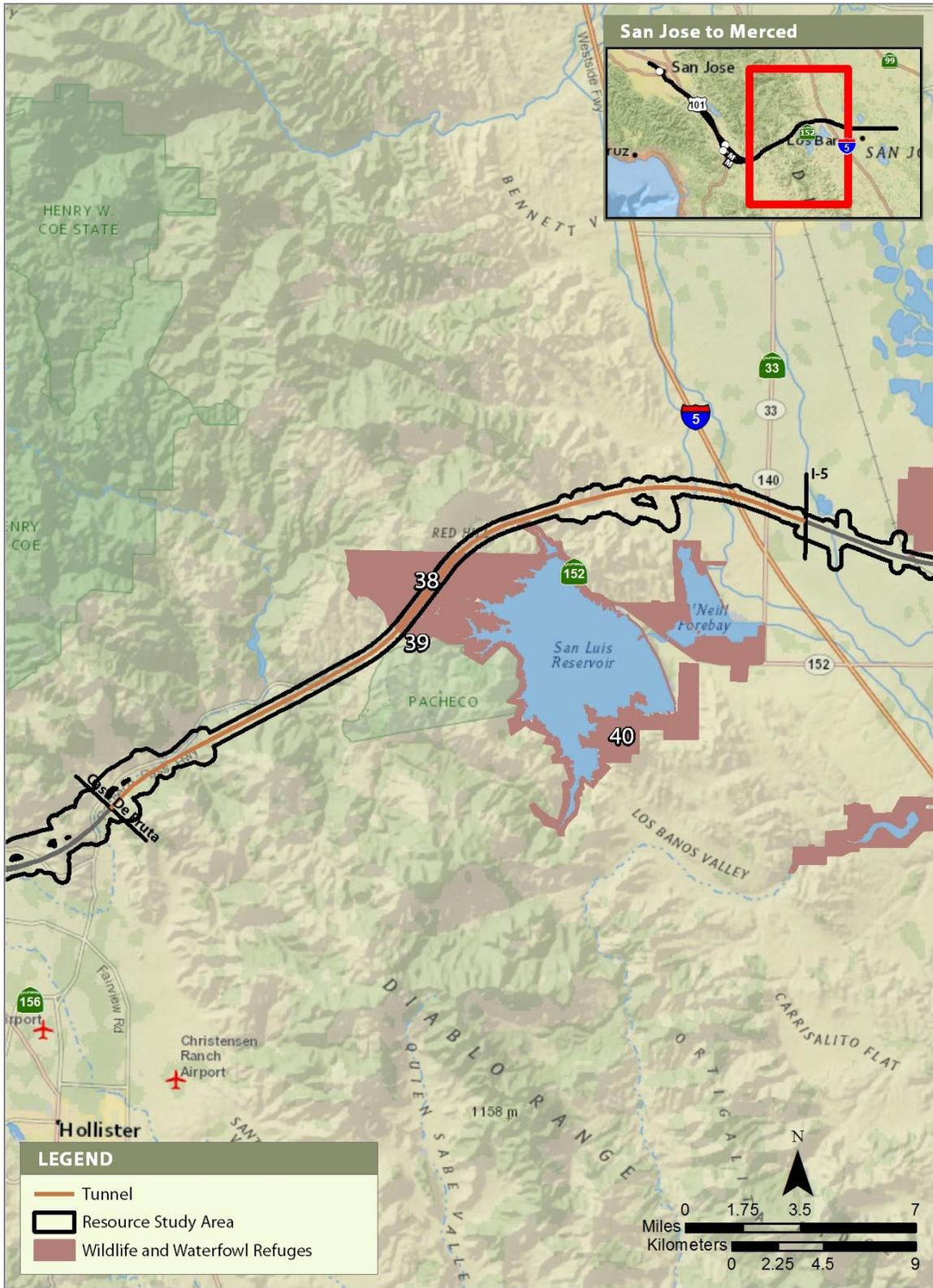
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Figure 4-6 Parks, Recreation, and Wildlife and Waterfowl Refuges—Morgan Hill and Gilroy Subsection (Central Portion)



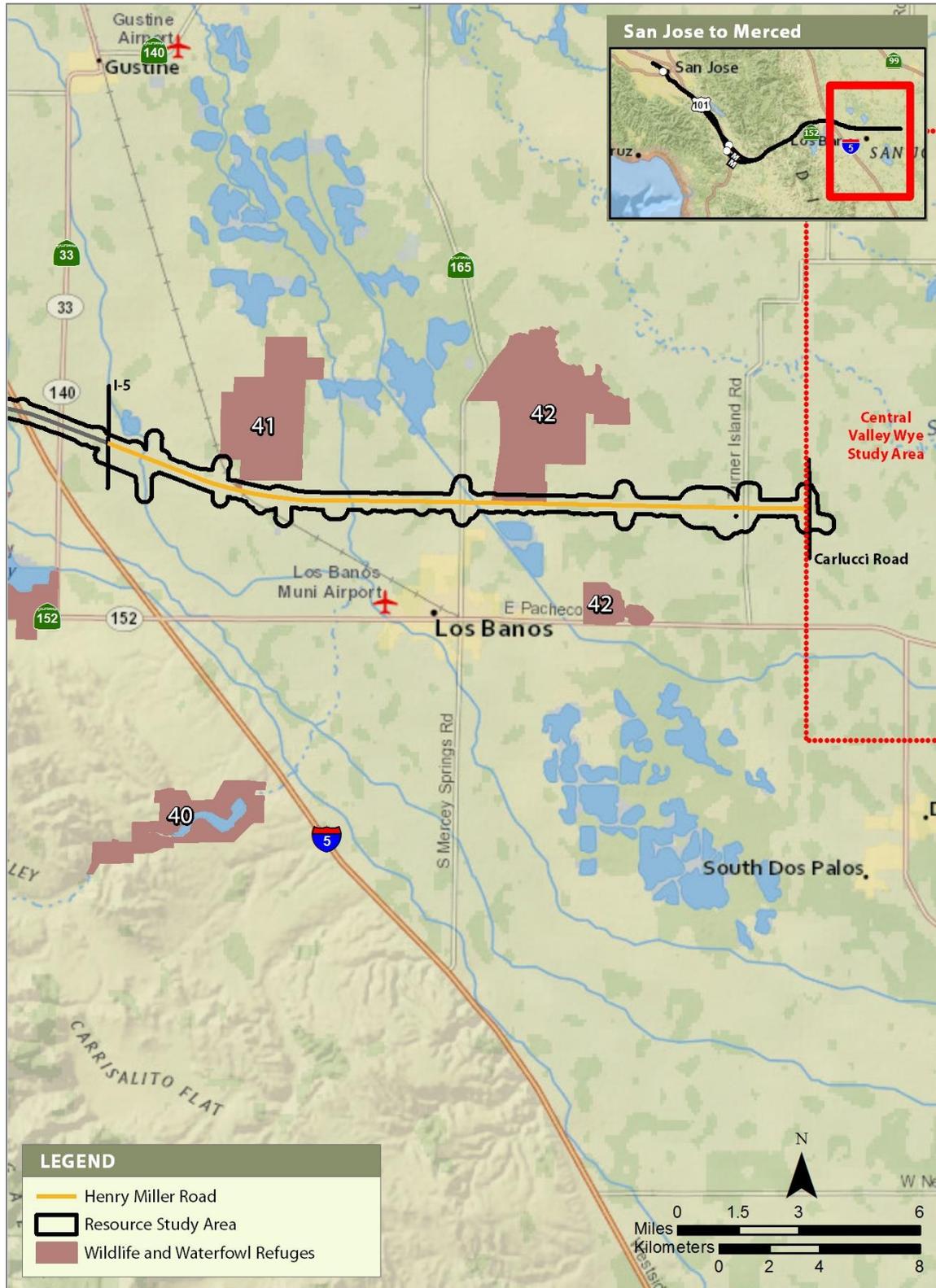
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Figure 4-7 Parks, Recreation, and Wildlife and Waterfowl Refuges—Morgan Hill and Gilroy Subsection (Southern Portion)



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**Figure 4-8 Parks, Recreation, and Wildlife and Waterfowl Refuges—
Pacheco Pass Subsection**



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**Figure 4-9 Parks, Recreation, and Wildlife and Waterfowl Refuges—
San Joaquin Valley Subsection**

4.5.2 Cultural Resources

For purposes of identifying cultural resources potentially protected under Section 4(f), the RSA is the same as the APE as defined in Section 4.1.2.2, Historic Properties. There are no known archaeological resources in the RSA that qualify as Section 4(f) resources. Background research and the field survey revealed 35 historic properties listed or eligible for listing in the NRHP that qualify as Section 4(f) resources.

4.5.2.1 Archaeological Resources

An archaeological resource that is eligible only under Criterion D is generally considered valuable primarily in terms of the data that can be recovered from it. It is generally assumed that there is minimal value attributed to preserving such resources in place. In other words, Section 4(f) does not apply to a site if it is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. One site (P-43-000050)—the third Mission Santa Clara location—has been previously evaluated for NRHP and/or California Register of Historical Resources (CRHR) eligibility under Criterion D and was determined eligible for the data it can provide. No other archaeological resources listed as eligible are present in the RSA. Therefore, there are no known archaeological resources in the APE that qualify for protection under Section 4(f). For more information on archaeological resources present in the APE, refer to Section 3.17.

Stipulation VI.E of the PA states that, in accordance with 36 C.F.R. Section 800.4(b)(2), phased identification may occur in situations where identification of historic properties cannot be completed. This phased identification approach has been applied to this project because 98.3 percent of the project footprint has not been accessible for archaeological pedestrian survey. Records searches have found that 40 archaeological resources have been previously identified within the project footprint. Of these sites, one, the third Mission Santa Clara location, has been evaluated and its significance has been determined to be primarily attributed to the data that can be recovered from it (NRHP Criterion D); therefore it is not a property protected by 4(f) (23 C.F.R. § 774.13(b)(1)). The remaining sites would be subject to phased survey and, if warranted, evaluated. For the purposes of Section 106, these sites are assumed to be eligible under Criterion D (please see Section 3.17 of this Draft EIR/EIS). Additionally, areas determined to be sensitive to archaeological sites through research and geoarchaeological studies have the potential to yield buried resources; these areas would also be subject to phased archaeological survey.

The PA requires that a memorandum of agreement (MOA) be negotiated between the FRA, the SHPO, Authority, other agencies, Native American tribes, and interested parties to document the agreed-upon treatment of historic properties that would be affected by the project. In addition to an MOA, a Built Environment Treatment Plan (BETP) and an Archaeological Treatment Plan (ATP) will be developed and reviewed by the MOA signatories and interested parties. Should an archaeological resource be discovered during the phased identification efforts or construction monitoring and determined to have the potential to be eligible, it will be evaluated to determine if it is valuable for preservation in place (NRHP Criterion A, B, and/or C). If its primary significance is for data that may be collected from the site, appropriate data recovery steps will be taken, in accordance with the ATP. If it is valuable for preservation in place, and SHPO concurs, an expedited Section 4(f) evaluation will be prepared in accordance with 23 C.F.R. Section 774.9(e).

4.5.2.2 Historical Resources

Background research and the field survey revealed five historic properties listed in the NRHP and an additional 30 properties eligible for listing on the NRHP within the RSA. Table 4-4 shows summaries of these properties and Figure 4-10 through Figure 4-17 illustrate their locations using the APE Map ID.

Sixteen properties will use a Phased Identification approach. Section 106 regulations allow phased identification of historic properties when alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted. Evaluation of these properties will occur during a later phase of the project.

Table 4-4 Historic Properties in APE Listed, Previously Determined, or Potentially Eligible for Listing in the NRHP

APE Map ID	Name of Historic Property and Address/City	Year Built and Evaluation Criteria
National Register–Listed Properties		
San Jose Diridon Station Approach Subsection		
0141	Santa Clara Railroad Historical Complex Santa Clara Depot 1 Railroad Ave/Benton St, Santa Clara	Year Built: 1863 Evaluation Criteria: A and C
0497	Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) 65 Cahill St, San Jose	Year Built: 1935 Evaluation Criterion: C
Morgan Hill and Gilroy Subsection		
2194	Villa Mira Monte 17860 Monterey Rd, Morgan Hill	Year Built: 1886 Evaluation Criteria: A, B, and C
3439	Gilroy City Hall 7400 Monterey Rd, Gilroy	Year Built: 1905 Evaluation Criteria: A and C
3458	Live Oak Creamery 88 Martin St, Gilroy	Year Built: 1908 Evaluation Criterion: A
National Register–Eligible Properties		
San Jose Diridon Station Approach Subsection		
0210	Polhemus House 960 W Hedding St, San Jose	Year Built: 1916 Evaluation Criterion: C
0304	Private Residence 623 Stockton Avenue, San Jose	Year Built: 1890 Evaluation Criterion: C
0522	Sunlite Baking Company 145 S Montgomery St, San Jose	Year Built: 1936 Evaluation Criterion: C
0585	415 Illinois Avenue 415 Illinois Ave, San Jose	Year Built: 1900 Evaluation Criterion: C
Morgan Hill and Gilroy Subsection		
1778	Pacific Intertie Santa Clara County	Year Built: 1967-1968 Evaluation Criterion: A and C
1863	Stevens/Fisher House 585 Monterey Rd, Morgan Hill	Year Built: 1892 Evaluation Criterion: A
1909	Barnhart House 9940 Monterey Rd, Morgan Hill	Year Built: 1909 Evaluation Criterion: C
2127	Madrone Underpass Monterey Rd, Morgan Hill	Year Built: 1933 Evaluation Criterion: A
2363	Church of Christ 17098 Monterey Rd, Morgan Hill	Year Built: Circa 1920–1924 Evaluation Criterion: C

APE Map ID	Name of Historic Property and Address/City	Year Built and Evaluation Criteria
3001	San Martin Winery 13000 Depot St, San Martin	Year Built: 1933 Evaluation Criteria: A and C
3210	Hoenck House 9480 Murray Ave, Gilroy	Year Built: 1894 Evaluation Criterion: C
3291	Japanese School (Gilroy Grange) 8191 Swanston Ln, Gilroy	Year Built: 1929 Evaluation Criterion: A
3402	IOOF Orphanage Home 290 IOOF Ave, Gilroy	Year Built: 1921 Evaluation Criteria: A and C
3610	Southern Pacific Train Station 7250 Monterey Rd, Gilroy	Year Built: 1918 Evaluation Criteria: A and C
3855	Old Gilroy House 6860 Holsclaw Rd, Gilroy	Year Built: 1900 Evaluation Criteria: A and C
3871	San Ysidro Valley Presbyterian Church (Ricketts House) 6780 Holsclaw Rd, Gilroy	Year Built: 1859 Evaluation Criteria: A and C
3882	Edwin Willson House and Barn 6650 Holsclaw Rd, Gilroy	Year Built: 1893 Evaluation Criteria: A and C
3903	White/Sturla Ranch 1855 Pacheco Pass Hwy, Gilroy	Year Built: 1850 Evaluation Criterion: C
3906	Horace Willson House 1980 Pacheco Pass Hwy, Gilroy	Year Built: 1861 Evaluation Criteria: A, B, and C
3925	Phegley House 2080 Pacheco Pass Hwy, Gilroy	Year Built: 1862 Evaluation Criterion: A
3997	Ellis Ranch 4945 Frazier Lake Rd, Gilroy	Year Built: 1875 Evaluation Criteria: A and B
4024	Millers Canal Gilroy	Year Built: 1873 Evaluation Criterion: A
4652	Saint Louise Regional Hospital and 705 Las Animas Ave Home Site	Year Built: 1890 Evaluation Criterion: C
Pacheco Pass Subsection		
4140	Pacheco CDF 12280 Pacheco Pass Hwy, Hollister	Year Built: 1942 Evaluation Criterion: C
4214	California Aqueduct Volta/Los Banos	Year Built: 1960 - 1974 Evaluation Criteria: A and C, Criterion Consideration G

APE Map ID	Name of Historic Property and Address/City	Year Built and Evaluation Criteria
San Joaquin Valley Subsection		
4231	Delta-Mendota Canal Los Banos	Year Built: 1946-1952 Evaluation Criteria: A and C
4272	San Joaquin and Kings River—Main Canal Los Banos	Year Built: 1871–1874 Evaluation Criterion: A
4302	Cottani Family Property 23109 Henry Miller Rd, Los Banos	Year Built: 1908 Evaluation Criterion: C
4310	Negra Ranch 21810 W Henry Miller Rd, Los Banos	Year Built: 1910 Evaluation Criterion: A
4317	Cozzi Family Property 21391 Henry Miller Rd, Los Banos	Year Built: 1906 Evaluation Criterion: C

A = Association with “events that have made a significant contribution to the broad patterns of our history.”

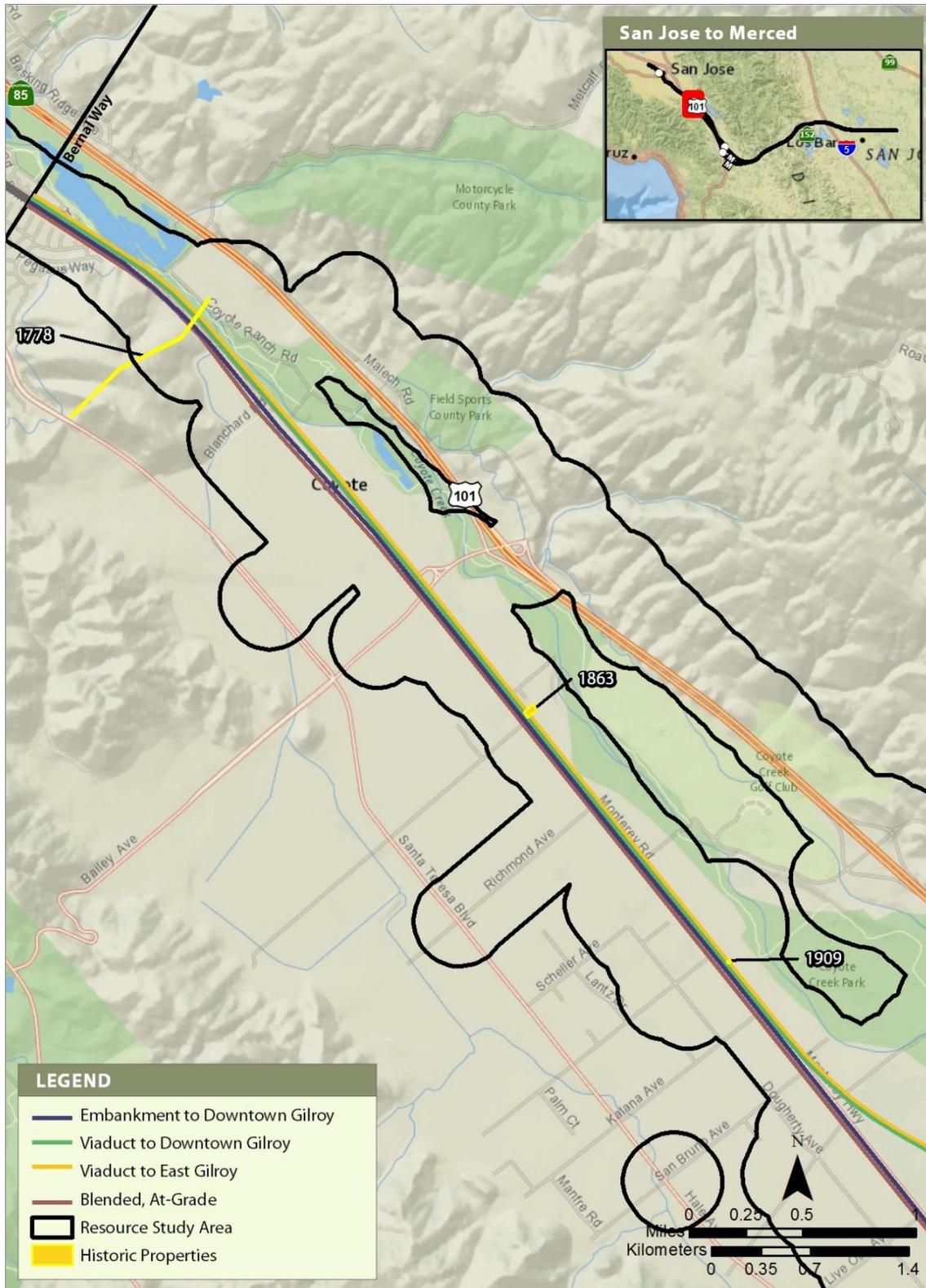
B = Association with “the lives of persons significant in our past.”

C = Resources “that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.”

D = Resources “that have yielded, or may be likely to yield, information important to history or prehistory.”

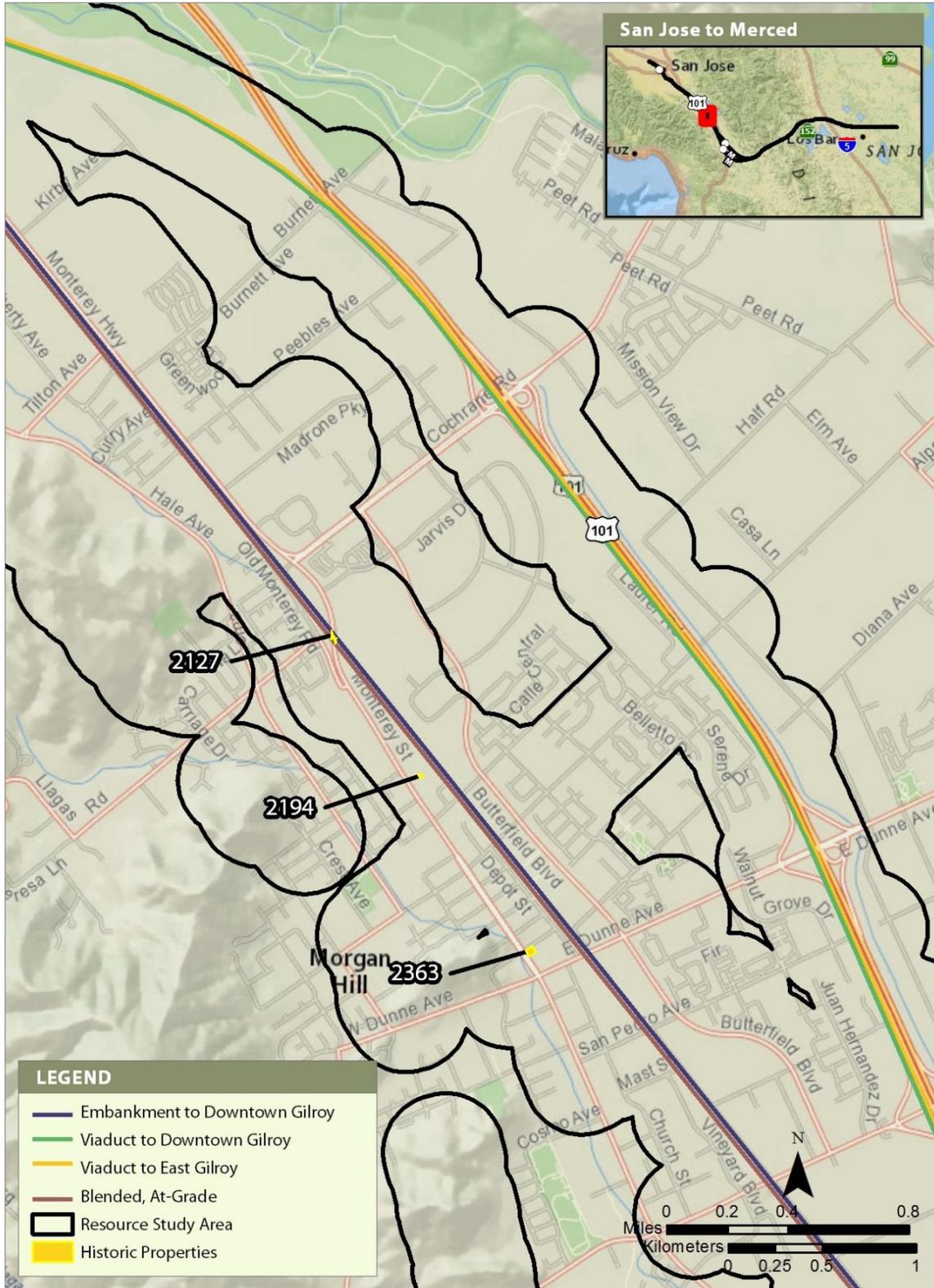


Figure 4-10 Built Historic Resources—San Jose Diridon Station Approach Subsection



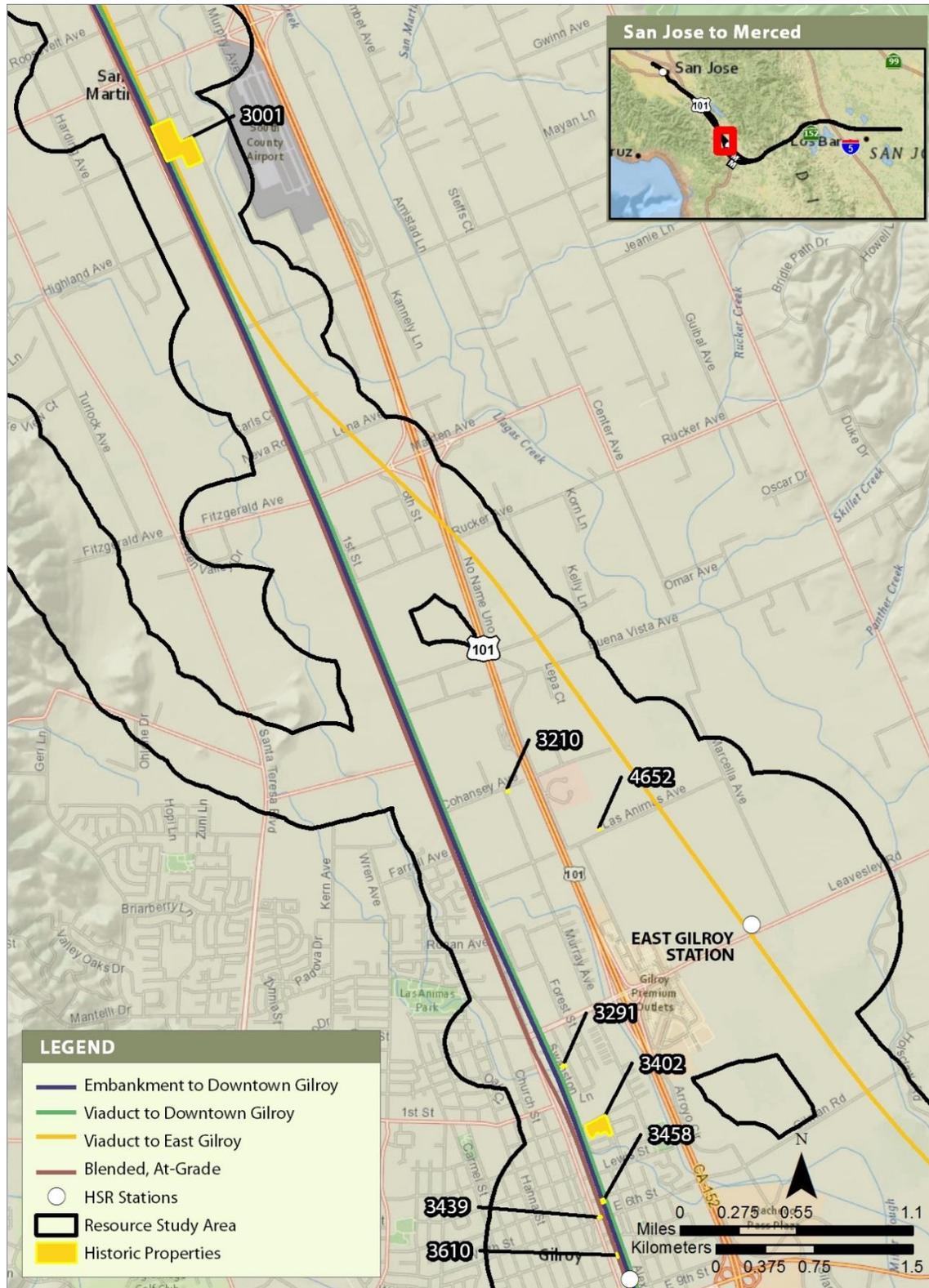
JANUARY 2019

Figure 4-11 Built Historic Resources—Morgan Hill and Gilroy Subsection (Northern Portion)



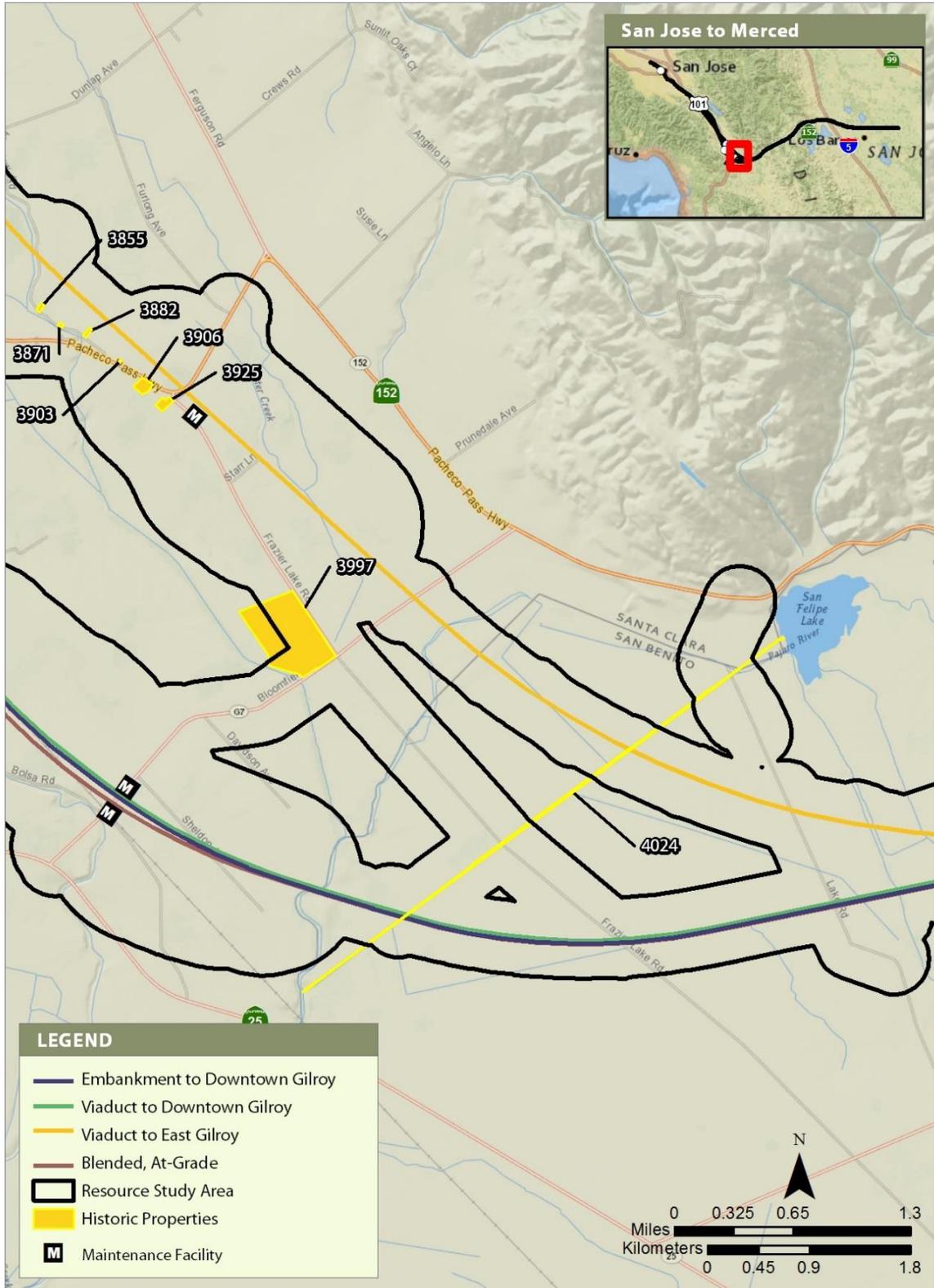
JANUARY 2019

Figure 4-12 Built Historic Resources—Morgan Hill and Gilroy Subsection (North-Central Portion)



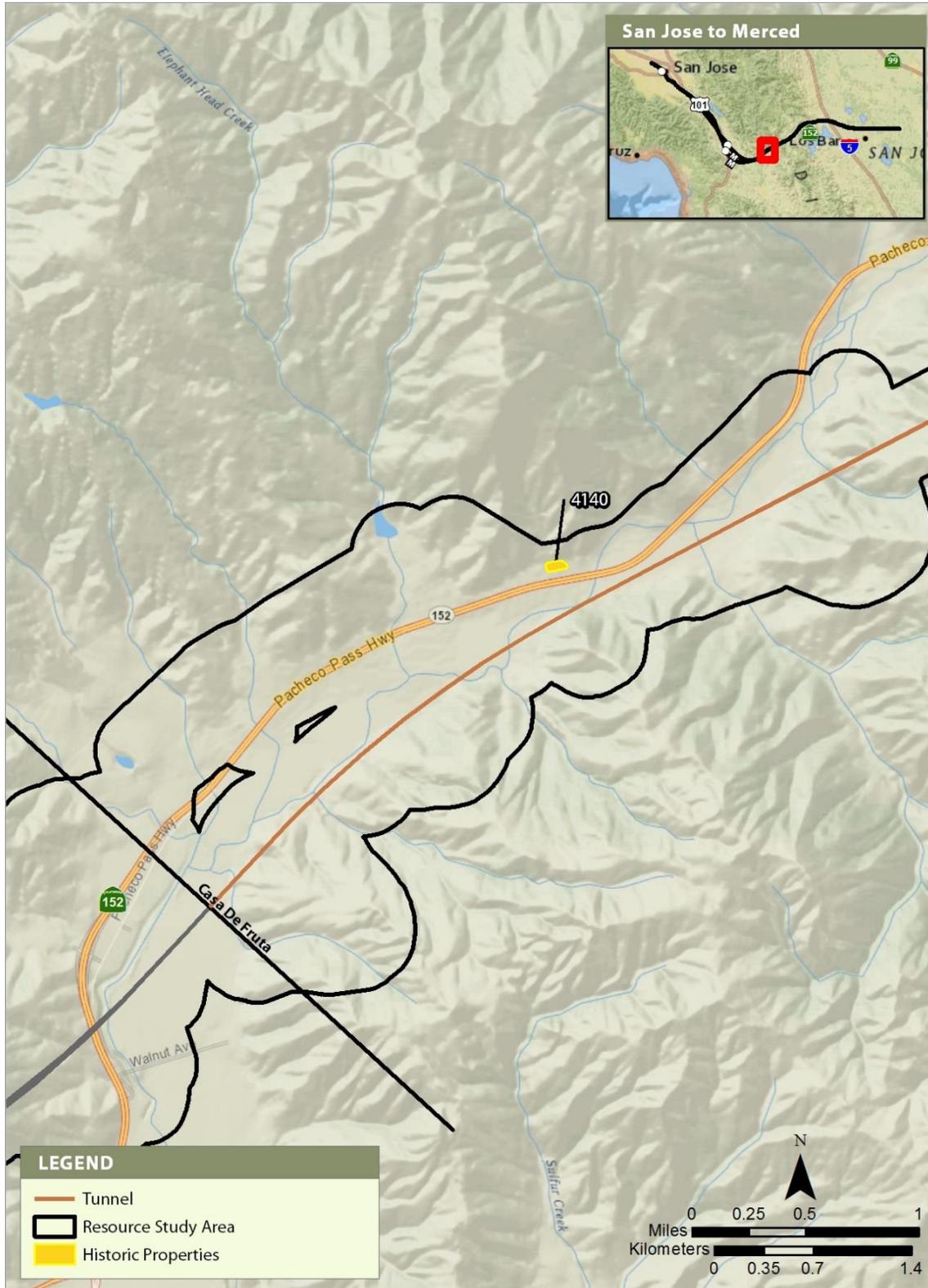
JANUARY 2019

Figure 4-13 Built Historic Resources—Morgan Hill and Gilroy Subsection (Central Portion)



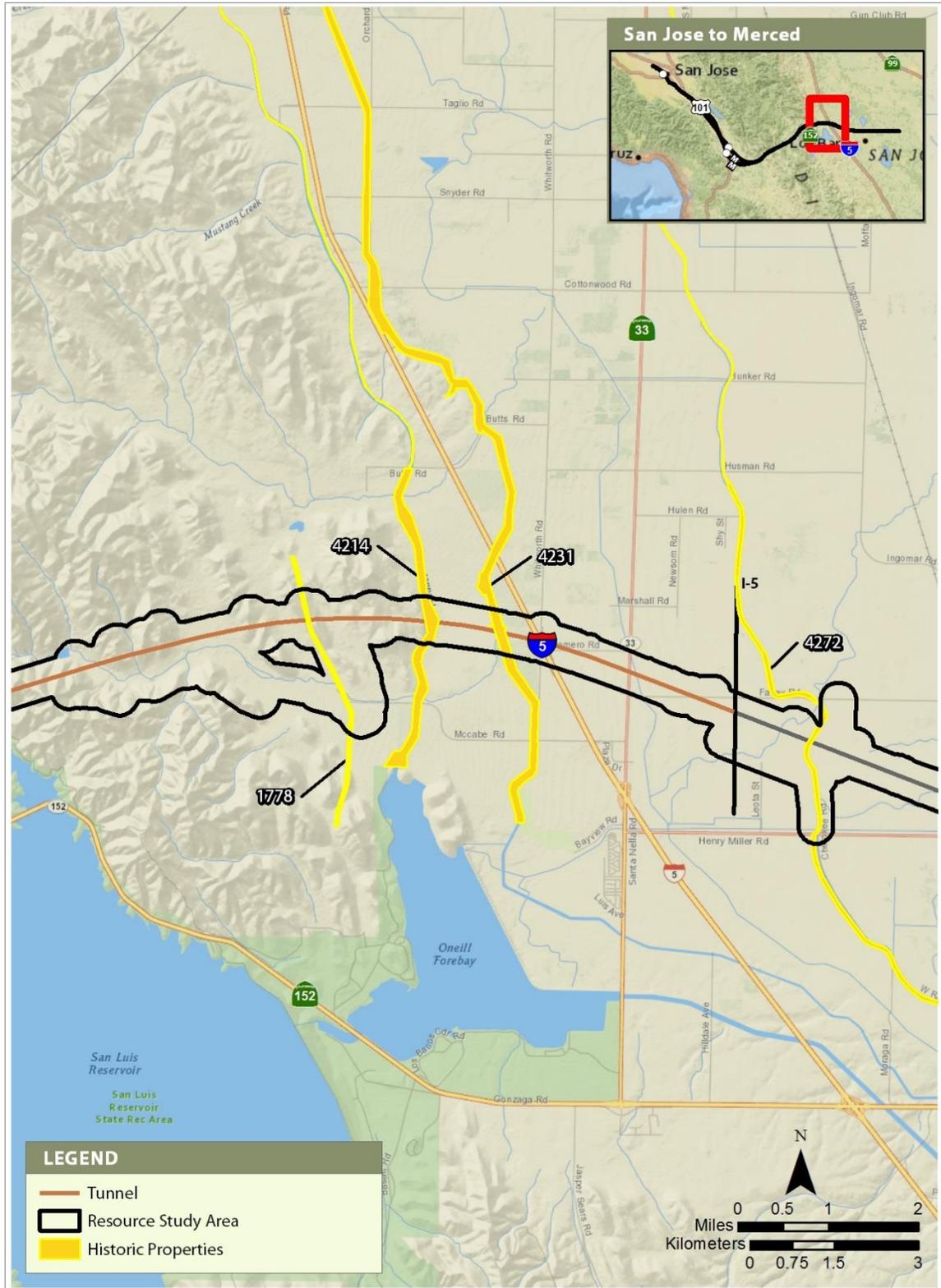
JANUARY 2019

Figure 4-14 Built Historic Resources—Morgan Hill and Gilroy Subsection (Central-Southern Portion)



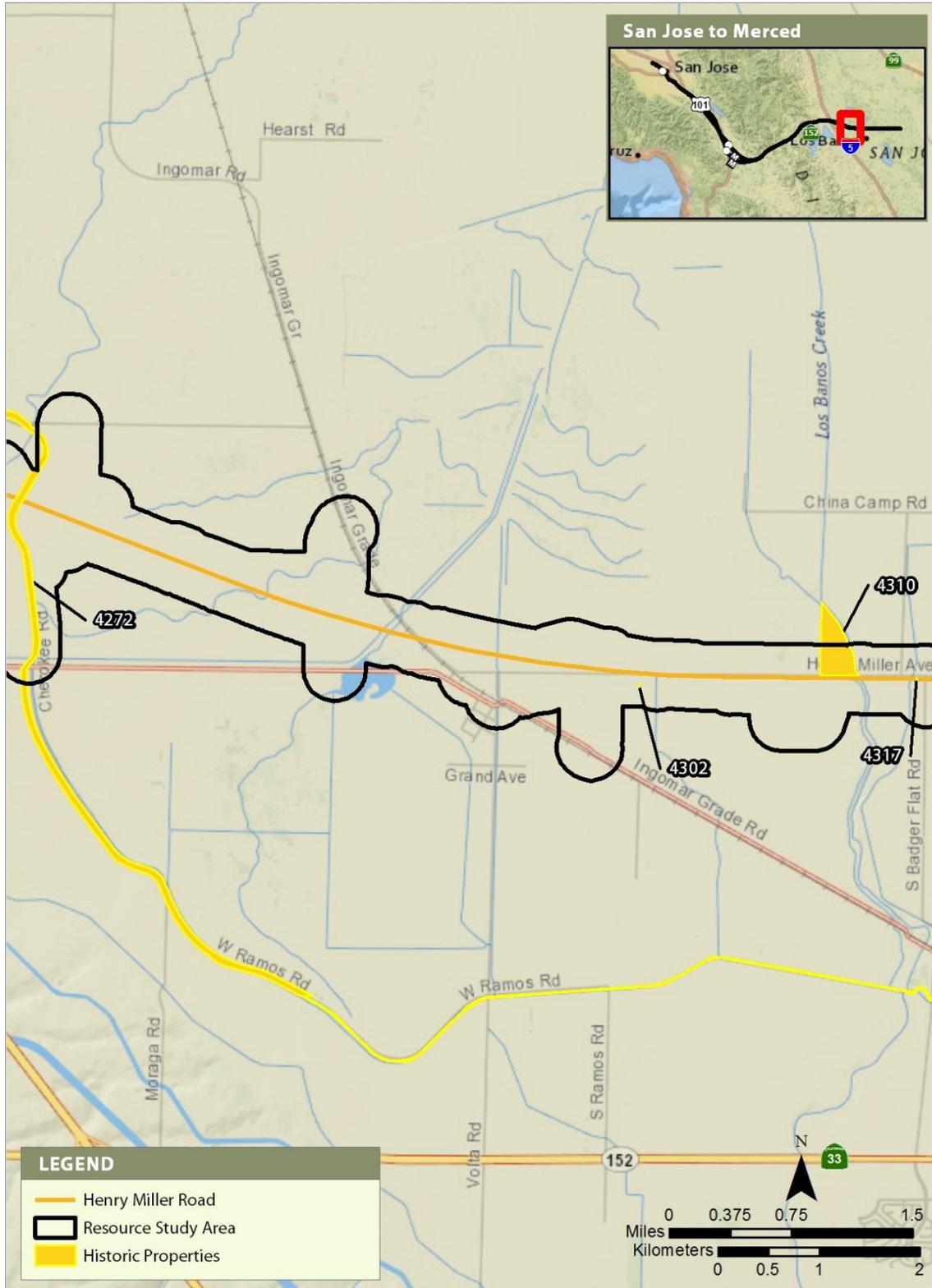
JANUARY 2019

Figure 4-15 Built Historic Resources—Pacheco Pass Subsection (Western Portion)



APRIL 2019

Figure 4-16 Built Historic Resources—Pacheco Pass Subsection (Eastern Portion)



JANUARY 2019

Figure 4-17 Built Historic Resources—San Joaquin Valley Subsection

4.6 Preliminary Section 4(f) Use Assessment

4.6.1 Parks, Recreation, and Wildlife and Waterfowl Refuges

This section presents the preliminary use assessments for the park, recreation, and wildlife refuge resources in the RSA, as illustrated on Figure 4-2 through Figure 4-9. Impacts and preliminary use assessments for all Section 4(f) resources are shown in Table 4-5. Detailed use assessments for Section 4(f) resources that are subject to a permanent use, *de minimis* impact, or temporary occupancy, or for resources that could incur a constructive use, immediately follow Table 4-5. Temporary and permanent changes to these resources from the project alternatives are illustrated on Figure 4-18 through Figure 4-51.

Construction impacts on Section 4(f) resources could include permanent use, temporary use/occupancy, or temporary or permanent changes in access. Operations impacts could include proximity impacts, such as increases in noise or visual changes, that would result in a constructive use. A full constructive use assessment is provided following Table 4-5 for Section 4(f) resources adjacent to or within 200 feet of the project footprint, where the most severe visual and noise impacts would be experienced, which is different from the RSA identified in Section 4.1.2. At 200 feet and beyond, potential visual and noise impacts are exponentially reduced due to the structures and landscaping that occur between the noise or visual source, and the resource. Section 4(f) resources that are greater than 200 feet from a project feature are only discussed in Table 4-5 and are not given further detailed discussion in Section 4.6. The RSA described in Section 4.1.2 was selected to consider resources that might have exceptional sensitivity to noise or visual impacts, although none were identified.

When a permanent use has been established for a Section 4(f) resource, constructive use is not discussed because each resource can only have one Section 4(f) determination. Additionally, when a resource is within 200 feet of the project footprint, but the features and activities that occur within the resource are located 300 feet from the footprint, constructive use is not fully evaluated.

Table 4-5 Potential Impacts on Parks, Recreation Areas, and Wildlife and Waterfowl Refuge Resources Evaluated for Potential Section 4(f) Use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
San Jose Diridon Station Approach Subsection					
1	Guadalupe River Park	Alternatives 1–3: 0 feet (adjacent)	Alternatives 1–3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1–3: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Guadalupe River Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.1 and Figure 4-18
		Alternative 4: 298.3 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Guadalupe River Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-18
2	Reed St Dog Park	Alternatives 1 and 4: 13.9 feet	Alternatives 1 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 4: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Reed Street Dog park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.2 and Figure 4-19
		Alternatives 2 and 3: 0 feet (within footprint)	Alternatives 2 and 3: Permanent use of 0.18 acre (12%) and temporary use of 0.12 acre; construction activities would temporarily block one of two access points to the park along Lafayette St (at the existing track crossing) north of Warburton Ave, diminishing but not eliminating access. Incorporation of project features and mitigation measures would maintain access to the park.	Alternatives 2 and 3: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.2 and Figure 4-19

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
3	Larry J. Marsalli Park	Alternatives 1 and 4: 292.1 feet	Alternatives 1 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Larry J. Marsalli Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-20
		Alternatives 2 and 3: 0 feet (within TCE)	Alternatives 2 and 3: No permanent use; temporary occupancy of 0.51 acre; construction activities would temporarily block two of three access points to the park, the access point along Alviso St and Lewis St, and The Alameda, diminishing but not eliminating access. Incorporation of project features and mitigation measures would maintain access to the park.	Alternatives 2 and 3: Minor proximity impacts from changes in noise and in the visual environment. However, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Larry J. Marsalli Park for protection under Section 4(f) are substantially impaired, and no constructive use would result.	Temporary Occupancy See Section 4.6.1.3 and Figure 4-20
4	Newhall Park	Alternatives 1 and 4: 191.3 feet Alternatives 2 and 3: 188.7 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. However, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Newhall Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.4 and Figure 4-21
5	College Park	Alternative 1: 0 feet (within TCE)	Alternative 1: No permanent use; temporary occupancy of 0.04 acres; construction activities would temporarily block two access points along Elm St and W Hedding St, diminishing but not eliminating access. Incorporation of project features and mitigation measures would maintain access to the park along W Hedding St.	Alternative 1: Because of the distance of the park from the centerline (660 feet), which is where the project alternatives would operate, proximity impacts would not result.	Temporary Occupancy See Section 4.6.1.5 and Figure 4-22
		Alternatives 2 and 3: 0 feet (within TCE)	Alternatives 2 and 3: No permanent use; temporary occupancy of 0.02 acre; same access changes as Alternative 1.	Alternatives 2 and 3: Same as Alternative 1.	

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 527.8 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify College Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-22
6	Theodore Lenzen Park	Alternatives 1–3: 36.4 feet	Alternatives 1–3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1–3: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Theodore Lenzen Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.6 and Figure 4-23
		Alternative 4: 292.3 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Theodore Lenzen Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-23
7	Cahill Park	Alternatives 1–3: 114.7 feet Alternative 4: 116.4 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Cahill Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.7 and Figure 4-24
8	Los Gatos Creek Trail	Alternatives 1–4: 0 feet (within footprint)	Alternatives 1–3: Permanent use of 0.55 acre/0.02 mile (0.21%) of the trail and temporary use of 1.31 acres. TCE at one of three access points on W San Carlos St would diminish but not eliminate access. Incorporation of project features and mitigation measures would maintain access to the trail.	Alternatives 1–3: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.8 and Figure 4-25

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
			Alternative 4: Permanent use of 1.03 acres/0.13 mile (1.34%) of parkland. No changes in access would occur.	Alternative 4: Same as Alternatives 1–3.	
9	Discovery Dog Park	Alternatives 1–3: 764.5 feet Alternative 4: 970.0 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Discovery Dog Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
10	Guadalupe River Trail, Reach 6	Alternatives 1–3: 0 feet (within footprint)	Alternatives 1–3: Permanent use of 0.8 acre/0.17 mile (1.89%) and temporary use of 0.7 acre. Incorporation of project features and mitigation measures would maintain access to the trail.	Alternatives 1–3: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.9 and Figure 4-26
		Alternative 4: 0 feet (adjacent)	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Guadalupe River Trail, Reach 6 for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.9 and Figure 4-26
11	Biebrach Park	Alternatives 1–3: 395.3 feet	Alternatives 1–3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1–3: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Biebrach Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-27

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 10.1 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Biebrach Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.10 and Figure 4-27
12	Fuller Park	Alternatives 1–3: 443.4 feet	Alternatives 1–3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1–3: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Fuller Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
		Alternative 4: 0 feet (within footprint)	Alternative 4: Permanent use of 0.03 acre (2.6%) and temporary use of 0.01 acre. No changes in access would occur.	Alternative 4: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.11 and Figure 4-28
13	Palm Haven Plaza	Alternatives 1–3: 1,979.1 feet Alternative 4: 854.5 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Palm Haven Plaza for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
14	Hummingbird Park	Alternatives 1–3: 2,355.1 feet Alternative 4: 893.4 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Hummingbird Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
15	Jesse Frey Community Garden	Alternatives 1–3: 284 feet Alternative 4: 406.3	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Jesse Frey Community Garden Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
16	Tamien Park (Phase II Planned)	Alternatives 1–3: 0 feet (within footprint)	Alternatives 1–3: Permanent use of 0.22 acre (6%) and temporary use of 0.05 acre. However, PR-MM#7 would reposition the aboveground portions of the straddle bent column out of the park and reconfigure the column footing. Therefore, no permanent use would be required. No changes in access would occur.	Alternatives 1–3: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Tamien Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result. Alternative 4: Same as Alternatives 1-3.	Temporary Occupancy See Section 4.6.1.12 and Figure 4-29
		Alternative 4: 0 feet (within TCE)	Alternative 4: No permanent use; temporary occupancy of 0.02 acre. No changes in access would occur.		
Monterey Corridor Subsection					
17	Communications Hill Trail	Alternatives 1–4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Communications Hill Trail for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.13 and Figure 4-30
18	Danna Rock Park	Alternatives 1 and 3: 581.2 feet Alternative 2: 379.3 feet Alternative 4: 712.9 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Danna Rock Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
19	Caroline Davis Intermediate School	Alternatives 1–3: 565.7 feet Alternative 4: 938.1 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Caroline David Intermediate School for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
20	Edenvale Gardens Regional Park	Alternatives 1 and 3: 97.1 feet Alternative 2: 14.3 feet Alternative 4: 27.1 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Edenvale Gardens Regional Park for protection under Section 4(f) are substantially impaired, and no constructive use would result.	No use See Section 4.6.1.14 and Figure 4-31
21	Ramac Park	Alternatives 1 and 3: 548.1 feet Alternative 2: 445.8 feet Alternative 4: 395.4 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Ramac Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
22	Silver Leaf Park	Alternatives 1–3: 507.5 feet Alternative 4: 757.6 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Silver Leaf Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
23	Metcalf Park	Alternatives 1 and 3: 368.1 feet Alternative 2: 330.2 feet Alternative 4: 469.6 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Metcalf Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
24	Coyote Creek Parkway	Alternatives 1 and 3: 0 feet (within footprint)	Alternatives 1 and 3: Permanent use of 2.42 acres (0.17%) of the parkway; temporary use of 9.62 acres of the parkway. TCEs at one of many access points northeast of Monterey Rd would diminish but not eliminate access. Incorporation of project features and mitigation measures would maintain access to the parkway.	Alternatives 1 and 3: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.15 and Figures 4-32 to 4-37
		Alternative 2: 0 feet (within footprint)	Alternative 2: Permanent use of 3.34 acres (0.24%) of the parkway; temporary use of 11.21 acres of the parkway. Access impacts would be slightly less than under Alternative 1.	Alternative 2: Same as Alternatives 1 and 3.	
		Alternative 4: 0 feet (within footprint of parkway); 19.4 feet from trail	Alternative 4: Permanent use of 0.31 acre (0.02%) of the parkway; temporary use of 3.52 acres of the parkway. Access impacts would be slightly less than under Alternative 1.	Alternative 4: Same as Alternatives 1 and 3.	
24	Coyote Creek Trail	Alternatives 1 and 3: 0 feet (within footprint)	Alternatives 1 and 3: Permanent use of 1.03 acres/0.41 mile (2.08%) of the trail; temporary use of 1.04 acres of the trail. TCEs at one of many access points northeast of Monterey Rd would diminish but not eliminate access. Incorporation of project features and mitigation measures would maintain access to the trail.	Alternatives 1 and 3: Discussion of proximity impacts is not required because a permanent use has been established.	<i>de minimis</i> See Section 4.6.1.16 and Figures 4-38 to 4-39
		Alternative 2: 0 feet (within footprint)	Alternative 2: Permanent use of 1.2 acres/0.37 mile (1.87%) of the trail; temporary use of 0.87 acre of the trail. Access impacts would be slightly less than under Alternative 1.	Alternative 2: Same as Alternatives 1 and 3.	

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 19.4 feet from trail	Alternative 4: No permanent use or TCE required from the trail. Access impacts would be slightly less than under Alternative 1.	Alternative 4: Minor proximity impacts from changes in noise and in the visual environment. However, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Coyote Creek Trail for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.16 and Figures 4-38 to 4-39
Morgan Hill and Gilroy Subsection					
25	Tulare Hill	Alternatives 1 and 3: 0 feet (adjacent)	Alternatives 1 and 3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 3: Minor proximity impacts from changes in noise and in the visual environment. However, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Tulare Hill for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.17 and Figure 4-40
		Alternative 2: 0 feet (adjacent)	Alternative 2: No permanent use or TCE required. Permanent access from Monterey Rd and Blanchard Rd, south of the resource would be affected. The HSR track would be on embankment along the Monterey Rd corridor, closing off access from Blanchard Rd to Monterey Rd. Incorporation of project features and mitigation measures would maintain access to the parkway.	Alternative 2: Same as Alternatives 1 and 3.	
		Alternative 4: 360.5 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Tulare Hill for protection under Section 4(f) would be impaired.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
26	Field Sports Park	Alternatives 1-4: 0 feet (within TCE)	All Project Alternatives: No permanent use; temporary occupancy of 2.04 acres. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Field Sports Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	Temporary Occupancy See Section 4.6.1.18 and Figure 4-41
27	Anderson Lake County Park	Alternatives 1 and 3: 25.6 feet	Alternatives 1 and 3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 3: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Anderson Lake County Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.19 and Figure 4-42
		Alternative 2: 3,812.2 feet Alternative 4: 4,812.1	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	
28	Sanchez Park	Alternatives 1 and 3: 1,401.3 feet	Alternatives 1 and 3: This resource is outside the RSA of Alternative 1.	Alternatives 1 and 3: This resource is outside the RSA of Alternative 1.	No use
		Alternative 2: 239.5 feet	Alternative 2: No permanent use or TCE required. No changes in access would occur.	Alternative 2: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Sanchez Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 199.4 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Sanchez Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.20 and Figure 4-43
29	Villa Mira Monte	Alternatives 1 and 3: 1,607.7 feet	Alternatives 1 and 3: This resource is outside the RSA of Alternatives 1 and 3.	Alternatives 1 and 3: This resource is outside the RSA of Alternatives 1 and 3.	No use See Section 4.6.1.21 and Figure 4-44
		Alternative 2: 0 feet (adjacent)	Alternative 2: No permanent use or TCE required. No changes in access would occur. Use of the resource would be impaired during two phases of construction (concrete pour/aerial structure and track installation) for approximately 1 year because construction noise levels would exceed the threshold, even with project features to minimize noise impacts. Because construction would occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Villa Mira Monte.	Alternative 2: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Villa Mira Monte for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.21 and Figure 4-44

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 0 feet (within footprint)	Alternative 4: No permanent use; temporary occupancy of .09 acres in an undeveloped portion of the property. No changes in access would occur. Use of the resource would be reduced during one phase of construction (track installation) for approximately 6 months because construction noise levels would exceed the threshold, even with project features to minimize noise impacts. Because construction would occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Villa Mira Monte.	Alternative 4: Same as Alternative 2.	Temporary Occupancy See Section 4.6.1.21 and Figure 4-44

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
30	Morgan Hill Community and Cultural Center	Alternatives 1 and 3: 1,720.1 feet	Alternatives 1 and 3: This resource is outside the RSA of Alternative 1.	Alternatives 1 and 3: This resource is outside the RSA of Alternative 1.	No use
		Alternative 2: 0 feet (within footprint)	Alternative 2: Permanent use of 1.31 acres (15.1%) and temporary use of 0.77 acre. Access would be diminished but not eliminated at one of four access points because of the placement of a TCE along West Dunne Ave between Church St and Monterey Rd. Incorporation of project features and mitigation measures would maintain access to the center. Use of the outdoor amphitheater would be impaired during two phases of construction (concrete pour/aerial structure and track installation) for approximately 1 year because construction noise levels would exceed the threshold, even with project features to minimize noise impacts. Because construction could occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Morgan Hill Community and Cultural Center.	Alternative 2: Discussion of proximity impacts is not required because a permanent use has been established.	<i>De minimis</i> See Section 4.6.1.22 and Figure 4-45

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
		Alternative 4: 14.6 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur. Use of the outdoor amphitheater would be reduced during one phase of construction (track installation) for approximately 6 months because construction noise levels would exceed the threshold, even with project features to minimize noise impacts. Because construction could occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Morgan Hill Community and Cultural Center.	Alternative 4: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Morgan Hill Community and Cultural Center for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.22 and Figure 4-45
31	Morgan Hill Outdoor Sports Center	Alternatives 1 and 3: 378.9 feet	Alternatives 1 and 3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 3: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Morgan Hill Outdoor Sports Center for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
		Alternative 2: 2,681.2 feet Alternative 4: 4,015.9 feet	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
32	Morgan Hill Aquatics Center	Alternatives 1 and 3: 383.6 feet	Alternatives 1 and 3: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 3: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Morgan Aquatics Center for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
		Alternative 2: 2,394.2 feet Alternative 4: 3,945.5 feet	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	Alternatives 2 and 4: This resource is outside the RSA of Alternatives 2 and 4.	
33	San Ysidro Park	Alternatives 1–4: 92.4 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify San Ysidro Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.23 and Figure 4-46
34	Forest Street Park	Alternative 1: 132.7 feet Alternative 2: 108.1 feet	Alternatives 1 and 2: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 2: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Forest Street Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.24 and Figure 4-47
		Alternative 3: 279.5 feet Alternative 4: 241.1 feet	Alternatives 3 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 3 and 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Forest Street Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Figure 4-47

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
35	Wheeler Tot Lot	Alternative 1: 769.1 feet Alternative 2: 462.0 feet Alternative 4: 766.5 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Wheeler Tot Lot for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
		Alternative 3: 1,899.5 feet	Alternative 3: This resource is outside the RSA of Alternative 3.	Alternative 3: This resource is outside the RSA of Alternative 3.	
36	Butcher Park	Alternatives 1, 2, and 4: 754.6 feet Alternative 3: 632.2 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Butcher Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
37	Gilroy Sports Park	Alternative 1 869.8 feet Alternative 4: 754.6 feet	Alternatives 1 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 4: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Butcher Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
		Alternative 2: 98.4 feet	Alternative 2: No permanent use or TCE required. No changes in access would occur.	Alternative 2: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Gilroy Sports Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.25 and Figure 4-48
		Alternative 3: 8,113.9 feet	Alternative 3: This resource is outside the RSA of Alternative 3.	Alternative 3: This resource is outside the RSA of Alternative 3.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
Pacheco Pass Subsection					
38	Cottonwood Creek Wildlife Area	Alternatives 1–4: 0 feet (tunnel easement)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur. Any hydrologic disruption of streams caused by tunneling would be a de minimis use because mitigation would be implemented that would maintain the hydroperiod of the streams to avoid affecting wildlife function. See Chapters 3.7 and 3.8 for details regarding mitigation.	All Project Alternatives: Because the project alternatives are in a tunnel 1,200 feet beneath the wildlife area, noise, vibration, and visual impacts would not affect the protected activities, features, or attributes that qualify Cottonwood Creek Wildlife Area for protection under Section 4(f), and no constructive use would result.	De minimis See Section 4.6.1.26 and Figure 4-49
39	San Luis Reservoir Wildlife Management Area	Alternatives 1–4: 745.3 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify San Luis Reservoir Wildlife Management Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use
40	San Luis Reservoir State Recreation Area	Alternatives 1–4: 505.8 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: At this distance, noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify San Luis Reservoir State Recreation Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use

Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Use Determination
San Joaquin Valley Subsection					
41	Volta Wildlife Area	Alternatives 1-4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Volta Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No use See Section 4.6.1.27 and Figure 4-50
42	Los Banos Wildlife Area	Alternatives 1-4: 0 feet (within TCE)	All Project Alternatives: No permanent use; temporary occupancy of 0.03 acre. No changes in access would occur.	All Project Alternatives: Minor proximity impacts from changes in noise and in the visual environment. Noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Los Banos Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	Temporary Occupancy See Section 4.6.1.28 and Figure 4-51

¹ The nearest project feature could be a TCE or part of the project footprint (permanent right-of-way, easement, etc.)
 RSA = resource study area
 TCE = temporary construction easement

4.6.1.1 Guadalupe River Park Use Assessment (Resource #1)

The nearest project feature of Alternative 4 is more than 200 feet from Guadalupe River Park; therefore, it is only discussed in Table 4-5.

Alternatives 1, 2, and 3

Guadalupe River Park (resource #1) is located at 438 Coleman Avenue in San Jose. It encompasses 120 acres and is adjacent to the project footprint. Guadalupe River Park is a 3-mile ribbon of parkland that runs along the banks of the Guadalupe River in downtown San Jose from I-880 at the north to I-280 at the south. Its components include Discovery Meadow (Children's Discovery Museum); McEnery Park; Arena Green and Arena Green East (playground, carousel, plazas, tennis courts, walking paths); Guadalupe Gardens (Community Garden, Columbus Park, Taylor Street Rock Garden, Heritage Rose Garden, Visitor Center); and areas for public art.

No land from Guadalupe River Park would be permanently incorporated into the project footprint under Alternatives 1, 2, and 3, as shown on Figure 4-18; therefore, no permanent use would result. Additionally, no land would be temporarily required during project construction.

Proximity impacts on Guadalupe River Park associated with HSR operations under Alternatives 1, 2, and 3 would be limited to minor changes to the visual environment, because the viaduct associated with Alternatives 1, 2, and 3 would be visible from the park. The project would adopt design standards (AVQ-IAMF#1: Aesthetic Options) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2: Aesthetic Review Process). Mitigation measures AVR-MM#3: Incorporate Design Aesthetic Preferences into Final Design and Construction of Non-Station Structures, AVR-MM#4: Provide Vegetation Screening along At-Grade and Elevated Guideways Adjacent to Residential Areas, and AVR-MM#6: Screen Traction Power Distribution Stations and Radio Communication Towers would reduce the visual impact of the viaduct on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, Noise and Vibration. However, operation of Alternatives 1, 2, and 3 on viaduct in the existing transportation corridors would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure. Since the outdoor park is currently adjacent to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Guadalupe River Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Guadalupe River Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under Alternatives 1, 2, and 3.

4.6.1.2 Reed Street Dog Park Use Assessment (Resource #2)

The Reed Street Dog Park is located at 888 Reed Street in Santa Clara. It encompasses 1.5 acres and is located within or adjacent to the project footprint of all four project alternatives. Reed Street Dog Park is a dog park with open spaces for dogs to play. It also includes a picnic area, barbeques, and a play area for children.

Alternatives 1 and 4

No land from Reed Street Dog Park (resource #2) would be permanently incorporated into the project footprint under Alternatives 1 and 4, as illustrated on Figure 4-19; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction. Alternatives 1 and 4 would run at grade adjacent to the southern end of the dog park.

Proximity impacts on Reed Street Dog Park associated with HSR operations under Alternatives 1 and 4 would be limited to minor changes to the visual environment because additional trains and some track facilities associated with the embankment would be visible from the park. However, because Alternatives 1 and 4 would be within the existing Caltrain corridor, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of

the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3: Implement Proposed California High-Speed Rail Project Noise Mitigation Guidelines, NV-MM#4: Support Potential Implementation of Quiet Zones by Local Jurisdictions, NV-MM#5: Vehicle Noise Specification, NV-MM#6: Special Track Work at Crossovers and Turnouts, and NV-MM#7: Additional Noise Analysis during Final Design would require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor dog park is currently adjacent to the Caltrain right-of-way and a quiet environment is not part of the protected activities of the dog park, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Reed Street Dog Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Reed Street Dog Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under Alternatives 1 and 4.

Alternatives 2 and 3

A small portion of Reed Street Dog Park (resource #2) (0.18 acre, 12 percent of the total park area) would be permanently incorporated under Alternatives 2 and 3, resulting in a permanent use of the park, while an additional 0.12 acre would be temporarily used during construction. This portion of the park at its southern and western edges would be used to construct and operate the viaduct to Scott Boulevard, as illustrated on Figure 4-19. Construction staging areas would also be needed to reconstruct the Lafayette Street crossing, which would replace the existing pedestrian overpass with an underpass. Permanent incorporation would be required because the long viaduct under Alternatives 2 and 3 would have a wider footprint than the short viaduct to I-880 design option under Alternative 1. The affected portion of the parkland is currently vegetated and open space and does not contain any recreational facilities or include any of the open space used by dogs for the dog park facility. Alternatives 2 and 3 would leave most of the park intact and contiguous for continued use during construction and operations. Alternatives 2 and 3 would require the existing fencing around the perimeter of the park to be relocated during construction; the fence would be relocated to outside the temporary construction easement (TCE) boundary. In addition, any trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that was removed (LU-IAMF#3: Restoration of Land Used Temporarily during Construction). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

During the construction period, construction activities would temporarily block one of two access points to the park along Lafayette Street (at the existing track crossing) north of Warburton Avenue, diminishing but not eliminating access. Access to the park from the entrance on Reed Street via Grant Street, which is the primary entrance to the park and includes the parking lot would, however, be retained. The closure along Lafayette Street would be shorter than the duration of construction. This street closure would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired because access would be maintained along Reed Street. The project includes project features to maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities (PK-IAMF#1: Parks, Recreation, and Open Space). Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1: Temporary

Restricted Access to Park Facilities during Construction) would provide alternative access via a temporary detour to the dog park using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected park portions or nearby roadways during construction (PR-MM#2: Providing Park Access). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Because access would be maintained during construction, temporary decreases in access would have limited effect on the protected activities of Reed Street Dog Park.

Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would substantially impaired. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

4.6.1.3 Larry J. Marsalli Park Use Assessment (Resource #3)

Larry J. Marsalli Park is located at 1425 Lafayette Street in Santa Clara, just south of SR 82, El Camino Real. It encompasses 7 acres and is located within the project footprint of Alternatives 2 and 3, but it is 292 feet from Alternatives 1 and 4. Therefore, Alternatives 1 and 4 are only discussed in Table 4-5. The park includes open-space areas, restrooms, a lighted softball field, and a children's playground.

Alternatives 2 and 3

No land from Larry J. Marsalli Park (resource #3) would be permanently incorporated into the project under Alternatives 2 or 3; therefore, no permanent use would result. However, 0.51 acre would be used during construction, resulting in temporary occupancy of the park, pending concurrence from the OWJ. This land in the southern portion of the park along De La Cruz Boulevard, as illustrated on Figure 4-20, would be used as a TCE to allow the reconstruction of the existing De La Cruz Boulevard overcrossing, which would be replaced with an undercrossing to enable the HSR aerial structure to cross 30 feet high over De La Cruz Boulevard, the relocated UPRR Mainline Track 1 and two industry tracks, and the Caltrain Santa Clara Station. This portion of the park is currently vegetated and open space. Alternatives 2 and 3 would leave most of the park intact and contiguous for continued use during construction and operations, including all of the park's facilities (softball field, playground, restrooms). However, any trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that was removed (LU-IAMF#3). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

This temporary construction use would not interfere with the protected activity of the park because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions).

Construction activities would temporarily block two of three access points along Alviso Street and Lewis Street and The Alameda, diminishing access under Alternatives 2 and 3. Access to the park from the entrance on Lafayette Street off of El Camino Real, which includes the main

entrance to the park and the parking lot, and accommodates more capacity than Alviso Street and Lewis Street, would be retained. Also, these street closures would be shorter than the duration of construction. The street closure and bridge reconstruction would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired because access would be maintained along Lafayette Street. Project features (PK-IAMF#1) would maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to the park using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected park portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Because access would be maintained during construction, temporary decreases in access would have limited effect on the protected activities of Larry J. Marsalli Park.

Proximity impacts on Larry J. Marsalli Park associated with HSR operations under Alternatives 2 and 3 would be limited to minor changes to the visual environment (i.e., the new viaduct over De La Cruz Boulevard) because trains and some track facilities would be visible from the park. However, because the project alternatives would be within the existing Caltrain corridor, which is approximately 400 feet from the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. However, HSR operations on viaduct under Alternatives 2 and 3 in the existing transportation corridor would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure, which is approximately 400 feet from the park. Since the park is currently adjacent to the Caltrain right-of-way and De La Cruz Boulevard, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Larry J. Marsalli Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Larry J. Marsalli Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under Alternatives 2 and 3.

4.6.1.4 Newhall Park Use Assessment (Resource #4)

Alternatives 1, 2, 3, and 4

Newhall Park (resource #4) is located at 972 Newhall Street in San Jose. It is 1.4 acres and is located 191.3 feet from the footprint of Alternatives 1 and 4 and 188.7 feet from the footprint of Alternatives 2 and 3. The park includes lawn areas, a gazebo, and a picnic area. No land from Newhall Park would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-21; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

Proximity impacts on Newhall Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., the new viaduct or at-grade structures). However, because the project alternatives would be within the existing Caltrain corridor, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. However, operation of the project alternatives on viaduct in these existing transportation corridors would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure. Since the park is currently near the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Newhall Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Newhall Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under any of the project alternatives.

4.6.1.5 College Park Use Assessment (Resource #5)

The nearest project feature of Alternative 4 is more than 200 feet from College Park; therefore, it is only discussed in Table 4-5.

Alternatives 1, 2, and 3

College Park (resource #5) is located at Elm and West Hedding Streets in San Jose. It occupies 0.1 acre and is located within the project footprint but 660 feet from the centerline. The park includes open space and a bench. No land from College Park would be permanently incorporated under any of the project alternatives; therefore, no permanent use would result. However, 0.04 acre under Alternative 1 and 0.02 acre under Alternatives 2 and 3 would be used during construction, resulting in temporary occupancy of the park, pending concurrence from the OWJ. This land in the southern portion of the park along Elm Street and West Hedding Street, as illustrated on Figure 4-22, would be used as a TCE to allow the reconstruction of the existing West Hedding Street overcrossing, which would be replaced by an undercrossing guideway. Alternatives 1, 2, and 3 would leave most of the park intact and contiguous for continued use during construction and operations, including all of the park's facilities (e.g., walking path, bench). However, any trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that was removed (LU-IAMF#3). Before beginning construction use of land, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

This temporary construction use would not interfere with the protected activity of the park because it would meet the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions).

Under Alternatives 1 and 3, TCEs at and along Elm Street and West Hedding Street would temporarily diminish access to the park; under Alternative 2, TCEs at and along Elm Street and bridge reconstruction along West Hedding Street (proposed undercrossing) would diminish access to the park. This decrease of access would be required for the reconstruction of the existing West Hedding Street overcrossing, which would be replaced by an undercrossing under the guideway. Although the park would be surrounded on three sides by a TCE, access from West Hedding Street would be retained during construction and the street closures would be shorter than the duration of construction. The street closure and bridge reconstruction would not be of a severity that the protected activities,

features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired because access would be maintained along West Hedding Street. Project features (PK-IAMF#1) would maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to the park using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected park portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Because access would be maintained during construction, temporary disruption in access would have limited effect on the protected activities of College Park.

Proximity impacts on College Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., the new viaduct). However, because the project alternatives would be within the existing Caltrain corridor, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. However, operation of the project alternatives on viaduct in these existing transportation corridors would not introduce substantial additional sources of train noise because train sounds would be primarily confined within the viaduct structure. Since the park is currently 660 feet from the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of College Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify College Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under any of the project alternatives.

4.6.1.6 Theodore Lenzen Park Use Assessment (Resource #6)

The nearest project feature of Alternative 4 is more than 200 feet from Theodore Lenzen Park; therefore, it is only discussed in Table 4-5.

Alternatives 1, 2, and 3

Theodore Lenzen Park (resource #6) is located at Stockton Avenue and Lenzen Street in San Jose. It is 0.5 acre, includes a playground, and is located 36.4 feet from Alternatives 1, 2, and 3. No land from Theodore Lenzen Park would be permanently incorporated under Alternatives 1, 2, and 3, as illustrated on Figure 4-23; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

Proximity impacts on Theodore Lenzen Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., the new viaduct). However, because the project alternatives would be near the existing Caltrain corridor, visual impacts would be minor. Project features include adoption of design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station

area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. However, operation of the project alternatives on viaduct in these existing transportation corridors would not introduce substantial additional sources of train noise because train sounds would be primarily confined within the viaduct structure. Since the park is currently near the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Theodore Lenzen Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Theodore Lenzen Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under any of the project alternatives.

4.6.1.7 Cahill Park Use Assessment (Resource #7)

Alternatives 1, 2, 3, and 4

Cahill Park (resource #7) is located on San Fernando Street in San Jose. It is 3.7 acres, includes a half-size basketball court, playground, and grassy areas, and is located 114.7 feet from Alternatives 1, 2, and 3 and 116.4 feet from Alternative 4. No land from Cahill Park would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-24; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

Proximity impacts on Cahill Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., the new viaduct and Diridon Station improvements). However, because the project alternatives would be within the existing Caltrain corridor at the existing Diridon Station, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. However, operation of the project alternatives on viaduct in these existing transportation corridors would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure. Since the park is currently near the Caltrain right-of-way and Diridon Station, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Cahill Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Cahill Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under any of the project alternatives.

4.6.1.8 Los Gatos Creek Trail Use Assessment (Resource #8)

Alternatives 1, 2, 3, and 4

The Los Gatos Creek Trail (resource #8) extends for 10 miles from Lexington Reservoir above Los Gatos to South Montgomery Avenue in San Jose, along Los Gatos Creek. Operated by the Santa Clara County Parks and Los Gatos Parks and Public Works Department, the trail can be used by pedestrians and bicyclists.

Under Alternatives 1, 2, and 3, although 1.31 acres would be temporarily used during construction, this would not divide the trail in two or make the trail unusable during construction because the entire width of the trail would not be used, allowing continued use during construction. Temporary realignment of the trail would not be required. Alternatives 1, 2, and 3 would require permanent incorporation of 0.55 acre/0.02 mile (0.21 percent of the total trail area) from the trail, resulting in a permanent use. Alternative 4 would require permanent incorporation of 1.03 acres/0.13 mile (1.34 percent of the total trail area) from the trail, also resulting in a permanent use. Alternatives 1, 2, and 3 would also require temporary use of 1.31 acres of the

trail during construction, while Alternative 4 would not require temporary use of the trail. The area of the trail affected is between South Montgomery Street and just south of San Carlos Street, as illustrated on Figure 4-25. The HSR viaduct would cross over Los Gatos Creek and San Carlos Street at this location, and one of the two footings near the trail would partially stand within Los Gatos Creek Trail. The permanent incorporation would essentially be an easement and would be needed for the new aerial HSR right-of-way, which would cross over Los Gatos Creek Trail. The HSR viaduct structure would be in an aerial guideway elevated above the area of permanent incorporation. Therefore, the physical trail would remain intact and usable, despite the need for this permanent incorporation, and no permanent trail realignment would be necessary.

Temporary utility work would be necessary to protect a stormwater canal in place during construction, and TCEs near San Carlos Street would be necessary to perform utility work and construct the HSR viaduct. These areas of temporary use would be on the ground level and would require temporary use of the edges of the trail during construction. However, the core middle portion of the trail would remain useable during the construction period through incorporation of the project features and mitigation measures discussed in the next paragraph. A TCE on West San Carlos Street would diminish access to the Los Gatos Creek Trail under Alternatives 1, 2, and 3; however, access would remain available from at least eight other access points along the trail. No changes in access would result from Alternative 4. Use of the trail under Alternatives 1, 2, and 3 would not be precluded by temporary changes in access. This change in access would not be of a severity that the protected activities, features, or attributes that qualify the trail for protection under Section 4(f) would be substantially impaired because access would be maintained at eight other access points. Project features (PK-IAMF#1) would maintain access to trail and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on trails, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing trail and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to the trail using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected trail portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Because access would be maintained during construction, temporary decreases in access would have a limited impact on the protected activities of Los Gatos Creek Trail.

This permanent use would not affect the trail because access would be maintained and the trail would remain usable throughout construction and operation. Accordingly, the permanent use of the park would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

4.6.1.9 Guadalupe River Trail, Reach 6 Use Assessment (Resource #10)

The Guadalupe River Trail, Reach 6 (resource #10) expansion is a recently constructed extension of the existing Guadalupe River Trail, a recreational pedestrian and bicycle trail spanning 9 miles along the Guadalupe River through San Jose. Reach 6 extends from the Children’s Discovery Museum at Woz Way, south along the east side of SR 87 to Virginia Street. The trail extension construction was completed in March 2011.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would require permanent incorporation of 0.8 acre/0.17 mile (1.89 percent of the total trail area) from Reach 6, resulting in a permanent use. Although 0.70 acre would be temporarily used during construction, this would not divide the trail in two, or make the trail unusable during construction, because the entire width of the trail would not be used, allowing continued use during construction. Temporary realignment of the trail would not be required. In addition, 0.70 acre would be required during construction under Alternatives 1, 2, and 3. This land in the western portion of the trail (east side of SR 87) would be used to construct the HSR aerial structure, which would cross over West Virginia Street and Reach 6, then over the Caltrain rail bridge, the Guadalupe River, and Willow Street (Figure 4-26). This portion of the trail land is currently vegetated and open space. This permanent incorporation would not affect the overall use of the trail because it is located on the western edge of the trail, allowing most of the trail to remain intact and operational.

Project features (PK-IAMF#1) would also maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on trails and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing trails and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to the trail using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected trail portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Through these project features and mitigation measures, Reach 6 would remain usable during project construction and operations. Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the trail for protection under Section 4(f) would be substantially impaired. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

Alternative 4

No land from Reach 6 would be permanently incorporated, as illustrated on Figure 4-26; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the trail would not be affected by construction or operation of Alternative 4.

Alternative 4 would be at grade to the west of Reach 6. Proximity impacts on Reach 6 associated with operation of Alternative 4 would be limited to minor changes to the visual environment because the rail infrastructure would be slightly visible from the trail. However, because Alternative 4 would be at grade and visible from only a very small portion of the trail, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the trail. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding. The Authority would implement mitigation measures to minimize the impacts of

operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NM-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor Reach 6 is currently adjacent to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Reach 6. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Reach 6 for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.10 Biebrach Park (Resource #11)

The nearest project features of Alternatives 1, 2, and 3 are more than 200 feet from Biebrach Park; therefore, these alternatives are only discussed in Table 4-5.

Alternative 4

Biebrach Park (resource #11) is located at Delmas Street and Virginia Street in San Jose. It is 5 acres and contains basketball courts, a handball court, restrooms, a swimming pool, children's play areas, and barbecue facilities. It is 10.1 feet from Alternative 4.

No land from Biebrach Park would be permanently incorporated, as illustrated on Figure 4-27; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the park would not be affected by construction or operation of Alternative 4.

Alternative 4 would be at grade to the south of Biebrach Park. Proximity impacts on Biebrach Park associated with operation of Alternative 4 would be limited to minor changes to the visual environment because the rail infrastructure would be slightly visible from the park. However, because Alternative 4 would be at grade and visible from only a very small portion of the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor Biebrach Park is currently near the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Biebrach Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Biebrach Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.11 Fuller Park (Resource #12)

The nearest project features of Alternatives 1, 2, and 3 are more than 200 feet from Fuller Park; therefore, they are only discussed in Table 4-5.

Alternative 4

Fuller Park (resource #12) is located at Fuller Avenue and Park Avenue in San Jose. It is a linear park adjacent to the existing UPRR track that is split into two portions by Delmas Avenue. It encompasses 1.14 acres and is located within the project footprint of Alternative 4. Fuller Park contains game tables, a bocce ball court, and a horseshoe pit.

A small portion of Fuller Park (0.03 acre, 2.6 percent of the total park area) would be permanently incorporated under Alternative 4, resulting in a permanent use of the park. In addition, 0.01 acre would be required during construction. In the portion of the park to the west of Delmas Avenue, 0.02 acre would be used for a train control site, as illustrated on Figure 4-28. The affected portion

of the park is currently used as a train control site for UPRR operations and contains the train control site and an unpaved access road from Fuller Avenue. This existing site would be shifted approximately 20 feet west and a new access road from Fuller Avenue would be provided. This portion of this park does not contain any recreational facilities and is already used for train operations, avoiding a change in the use of the park.

In the portion of the park to the east of Delmas Avenue, 0.01 acre of the park adjacent to the current UPRR right-of-way would be used as an access TCE, and another 0.01 acre would be incorporated into the HSR right-of-way. These areas are on the northeastern edge of the park, directly adjacent to the existing right-of-way. This portion of this park does not contain any recreational facilities.

Alternative 4 would leave most of the park intact and contiguous for continued use during construction and operations. Prior to any ground-disturbing activities at the park related to installation of the train control site, access TCE, or other work, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would substantially impaired.

Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

4.6.1.12 Tamien Park (Resource #16)

Tamien Park (resource #16) is a 3.5-acre park located at 1197 Lick Avenue in San Jose next to the Tamien Caltrain and VTA light-rail stations. It provides picnic tables, shade structures, ping pong tables, a restroom, children's playground with play equipment, multi-use turf area, and a lighted basketball court. There are additional planned areas of the park that include a multi-use turf/soccer field, stage, and outdoor gym. Although a portion of this park has not yet been constructed, construction is anticipated to occur in 2020 and thus it is considered part of existing conditions in this analysis. It is operated by the City of San Jose Parks, Recreation, & Neighborhood Services. Tamien Park is an active sports park without noise-sensitive uses, as described in Table 3.4-5 Federal Railroad Administration Land Use Categories for Noise Exposure. Parks are only considered to be noise sensitive if the park is used in a manner that is noise sensitive; active outdoor land uses, for example, such as pedestrian and bike paths, are not considered noise sensitive. The Tamien Park Master Plan states "[T]his area provides the greatest opportunity to create intensive high density residential or mixed use development design to support transit use, since both the Caltrain and VTA Light Rail Tamien stations are located here. This area is currently undergoing a transformation from a mix use area of single family homes with small industrial facilities to the transit-oriented community envisioned in the Tamien Station Area Specific Plan."

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would require permanent incorporation of 0.22 acre (6.3 percent of the total park area) from Tamien Park due to the placement of straddle bent columns and footings on the western edge of the park, which would affect the multi-use turf/soccer field. However, PR-MM#7 would reposition the aboveground portions of the straddle bent column out of the park and reconfigure the column footing. This would result in no aboveground encroachment into the park. Below-ground encroachment into the park may still be required for the footing, but this would not affect any of the uses or facilities in the park because it would be underground. Therefore, no permanent use would be required.

However, 0.05 acre of land would be required during construction under Alternatives 1, 2, and 3, resulting in temporary occupancy of the park, pending concurrence from the OWJ. This portion of the park would be used to construct a straddle bent for the viaduct, as illustrated on Figure 4-29.

The affected portion of the parkland is currently undeveloped and planned for perimeter landscaping and a multi-use turf/soccer field. If completed prior to project implementation, the multi-use turf/soccer field access would be partially disrupted by a TCE along the Caltrain ROW. Because of the proximity of the resource to the Caltrain ROW, portions of the planned multi-use turf/soccer field would need to be temporarily closed for approximately six months during construction. However, this temporary closure would only affect the portions of parkland within the TCE (0.05 acre) and they would be located at the western edge of the park. Alternatives 1, 2, and 3 would leave most of the park intact and contiguous for continued use during construction. In addition, the park would remain accessible from Goodyear Street and Lick Avenue.

Alternatives 1, 2, and 3 would require the existing fencing around the perimeter of the park to be relocated during construction; the fence would be relocated to outside the TCE boundary. In addition, any planned trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

This temporary construction use would not interfere with the protected activity of the park because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions).

Proximity impacts on Tamien Park associated with HSR operations under Alternatives 1, 2, and 3 would be limited to minor changes to the visual environment (i.e., the new viaduct adjacent to the park) because trains and some track facilities would be visible from the park. However, because the project alternatives would be within the existing Caltrain corridor, which is adjacent to the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. However, HSR operations on viaduct under Alternatives 1, 2, and 3 in the existing transportation corridor would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure, which is adjacent to the park. Since the park is an active sports park without noise-sensitive uses, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Tamien Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Tamien Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under Alternatives 1, 2, and 3.

Alternative 4

No land from Tamien Park would be permanently incorporated under Alternative 4, as illustrated on Figure 4-29; therefore, no permanent use would result. However, 0.02 acre of land would be required during construction under Alternative 4, resulting in temporary occupancy of the park, pending concurrence from the OWJ. This portion of the park would be used for utility relocation. The affected portion of the parkland is currently undeveloped and planned for perimeter landscaping and a multi-use turf/soccer field. If completed prior to project implementation, the multi-use turf/soccer field access would be disrupted by a TCE along the Caltrain ROW. Because of the proximity of the resource to the Caltrain ROW, portions of the planned multi-use turf/soccer field would need to be temporarily closed for approximately four months during construction.

However, this temporary closure would only affect the portions of parkland within the TCE (0.02 acre) and they would be located at the western edge of the park.

Alternative 4 would require the existing fencing around the perimeter of the park to be relocated during construction; the fence would be relocated to outside the TCE boundary. In addition, any planned trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

This temporary construction use would not interfere with the protected activity of the park because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions).

Proximity impacts on Tamien Park associated with HSR operations under Alternative 4 would be limited to minor changes to the visual environment (i.e., the new tracks adjacent to the park) because trains and some track facilities would be visible from the park. However, because Alternative 4 would be within the existing Caltrain corridor, which is adjacent to the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. Since the park is an active sports park without noise-sensitive uses, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Tamien Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Tamien Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under Alternative 4.

4.6.1.13 Communications Hill Trail Use Assessment (Resource #17)

Alternatives 1, 2, 3, and 4

Communications Hill Trail (resource #17) extends 7.4 miles (0.6 mile existing/6.8 miles planned) from Grassina Street to Communications Hill Boulevard in San Jose. It provides views of the valley and a link to neighborhood parks, and it connects to San Jose's existing trail network by means of a connection to the Highway 87 Bikeway. It is operated by the City of San Jose Department of Parks, Recreation & Neighborhood Services and can be used by bicyclists, pedestrians, and hikers. No land from Communications Hill Trail would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-30; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the trail would not be affected by construction or operation of any of the project alternatives.

The project alternatives would be at grade to the northeast of Communications Hill Trail. Proximity impacts on Communications Hill Trail associated with operation of the project alternatives would be limited to minor changes to the visual environment because the rail infrastructure would be slightly visible from the trail. However, because the project alternatives would be visible from only a very small portion of the trail, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the trail. Changes

to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NM-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor Communications Hill Trail is currently adjacent to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Communications Hill Trail. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Communications Hill Trail for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.14 Edenvale Gardens Regional Park Use Assessment (Resource #18)

Alternatives 1, 2, 3, and 4

Edenvale Gardens Regional Park (resource #18) is a 19.5-acre park in San Jose. It is the site of former Frontier Village amusement park and includes three tennis courts, a sand volleyball court, a small basketball court, children's play areas, restroom facilities, barbeque facilities, picnic sites, and a walking trail. Edenvale Gardens Regional Park is operated by the City of San Jose Department of Parks, Recreation & Neighborhood Services. The park is located 97.1 feet from Alternatives 1 and 3, 14.3 feet from Alternative 2, and 27.1 feet from Alternative 4.

No land from Edenvale Gardens Regional Park would be permanently incorporated, as illustrated on Figure 4-31; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the park would not be affected by construction or operation of any of the project alternatives.

The project alternatives would be near the northeastern border of Edenvale Gardens Regional Park. Alternatives 1 and 3 would be on viaduct, Alternative 2 would be on embankment, and Alternative 4 would be at grade. Proximity impacts on Edenvale Gardens Regional Park associated with operation of the project alternatives would be limited to minor changes to the visual environment because the viaduct, embankment, or at-grade structures would be visible from the park. However, because the project alternatives would be visible from only a very small portion of the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. There is also an existing row of trees between the park and the project alternatives, which would further screen views. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor northeastern portion of Edenvale Gardens Regional Park is currently adjacent to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Edenvale Gardens Regional Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Edenvale Gardens Regional Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.15 Coyote Creek Parkway Use Assessment (Resource #24)

Alternatives 1, 2, 3, and 4

Coyote Creek Parkway (resource #24) is a 15-mile-long County Park that begins just south of Hellyer Avenue in the north and continues south along Coyote Creek to Cochrane Road, east of U.S. Highway (US) 101. The park features a network of paved walking/bicycle trails and unpaved equestrian trails, providing a popular bicycle route along the scenic Coyote Creek. The park also features several picnic areas and recreation fishing areas. In 2007, the Santa Clara County Board of Supervisors approved the *Integrated Master Plan for the Coyote Creek Parkway County Park*, responding to recent regional changes such as growth, water distribution, riparian resource management, and development in integrated public and private lands. The park is operated by the Santa Clara County Department of Parks and Recreation.

All four project alternatives would require permanent use of land from the parkway. In total, Alternatives 1 and 3 would result in the permanent use of 2.42 acres of the parkway (0.17 percent of the total area of the parkway). Alternative 2 would require the permanent use of 3.34 acres of the parkway (0.24 percent of the total area of the parkway). Alternative 4 would require permanent use of 0.31 acre (0.02 percent of the total area of the parkway). Alternatives 1 and 3 also would temporarily require 9.62 acres of parkland during construction, Alternative 2 would temporarily require 11.21 acres of parkland, and Alternative 4 would temporarily require 3.52 acres of parkland. Impacts on Coyote Creek Parkway are illustrated on Figure 4-32 through Figure 4-37.

The affected parkland—south of Forsum Road, between Monterey Road and the lake within the parkway—is near the western edge of the park. TCEs, staging areas, temporary roadways for construction crews to access construction sites, and utility relocations would be necessary during construction. TCEs northeast of Monterey Road would diminish access at one access point under all project alternatives; however, access would be maintained at many other access points. Permanent use would be required for a possible location of a radio site and conversion of an existing driveway entrance to a parking lot into a roadway for realigning Monterey Road.

The project alternatives would leave most of the park intact and contiguous for continued use of the park during construction and operation, because the areas of permanent incorporation would be around the edges and periphery of the parkway and would not affect any of the primary areas of the parkway that people use. Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired.

Project features (PK-IAMF#1) would maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to park resources using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected park portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement.

These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

4.6.1.16 Coyote Creek Trail Use Assessment (Resource #24)

Coyote Creek Trail (resource #24) is a 19.7-mile-long trail located within Coyote Creek Parkway. It begins just south of Hellyer Avenue in the north and continues south along Coyote Creek to Cochrane Road, east of US Highway 101. It is a paved hiking and bicycle trail and is operated by the Santa Clara County Department of Parks and Recreation/City of San Jose Department of Parks, Recreation & Neighborhood Services.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 would require permanent use of the trail. In total, Alternatives 1 and 3 would result in the permanent use of 1.03 acres/0.41 mile of the trail (2.08 percent of the total area of the trail). Alternative 2 would require the permanent use of 1.2 acres/0.37 mile of the trail (1.87 percent of the total area of the trail). Impacts on Coyote Creek Trail are illustrated on Figure 4-38 and Figure 4-39.

The affected part of the trail—south of Forsum Road, between Monterey Road and the lake within the parkway—is near the western edge of the park. TCEs northeast of Monterey Road would diminish access at one access point; however, access would be maintained at many other access points. Permanent use would be required to accommodate the expanded HSR right-of-way and shifting of Monterey Road.

Project features (PK-IAMF#1) would maintain access to the trail because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on trails, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing trails. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to park resources using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected trails portions or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Through these project features and mitigation measures, the Coyote Creek Trail would be realigned under Alternatives 1 and 3 prior to construction along some sections between Forsum Road and Metcalf Road; the trail would be replaced under Alternative 2 with a multiuse shared path between Forsum Road and Metcalf Road. This would allow the entire trail to remain usable during project construction and operations. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

Alternative 4

No land from Coyote Creek Trail would be permanently incorporated into the project under Alternative 4, as illustrated on Figure 4-38 and Figure 4-39; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the area would not be affected by construction or operation of Alternative 4.

Alternative 4 would be on embankment and at grade to the west of Coyote Creek Trail. Proximity impacts on Coyote Creek Trail associated with operation of Alternative 4 would be limited to

minor changes to the visual environment because the rail infrastructure would be slightly visible from the trail. However, because Alternative 4 would be visible from only a very small portion of the trail, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the trail. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding under Alternative 4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the outdoor Coyote Creek Trail is currently adjacent to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Coyote Creek Trail. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Coyote Creek Trail for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.17 Tulare Hill Use Assessment (Resource #25)

Tulare Hill (resource #25) is a property in Santa Clara County that is planned for future park use. The park will encompass 118 acres and be managed by Santa Clara County Department of Parks and Recreation. The nearest project feature of Alternative 4 is more than 200 feet from Tulare Hill; therefore, it is only discussed in Table 4-5.

Alternatives 1 and 3

No land from Tulare Hill would be permanently incorporated into the project under Alternatives 1 or 3, as illustrated on Figure 4-40; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the area would not be affected by construction or operation of Alternatives 1 or 3.

The only portion of Tulare Hill that would be adjacent to the project is along approximately 150 feet at the northeastern corner of the property. Construction activities at this location would involve electrical utility relocations under Alternatives 1 and 3. This utility work would not cause long-term proximity impacts on Tulare Hill. Visual and noise proximity impacts would not result because Tulare Hill is more than 500 feet from the HSR right-of-way. Accordingly, operational noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Tulare Hill for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

Alternative 2

No land from Tulare Hill would be permanently incorporated into the project under Alternative 2, as illustrated on Figure 4-40; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Permanent access from Monterey Road and Blanchard Road, south of the resource, would be affected. The HSR track would be on embankment along the Monterey Road corridor, closing off access from Blanchard Road to Monterey Road. Project features (PK-IAMF#1) would maintain access to the park because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities. Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to the park using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority

documenting how the contractor would maintain connections to the unaffected portions of the park or nearby roadways during construction (PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Through these project features and mitigation measures, Tulare Hill would remain usable during project construction and operation. Accordingly, this temporary access change would not be of a severity that the protected activities, features, or attributes that qualify the park for protection under Section 4(f) would be substantially impaired.

The only portion of Tulare Hill that would be adjacent to the project is along approximately 150 feet at the northeastern corner of the property. Construction activities at this location involve a protect-in-place TCE for an electrical utility under Alternative 2. This utility work would not cause long-term proximity impacts on Tulare Hill. Visual and noise proximity impacts would not result because Tulare Hill is more than 500 feet from the HSR right-of-way. Accordingly, operational noise and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify Tulare Hill for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.18 Field Sports Park (Resource #26)

Alternatives 1, 2, 3, and 4

Field Sports Park (resource #26) is located at 9580 Malech Road in San Jose. It is 102 acres and contains a firing range, picnicking areas, league activities, and can host special events.

No land from Field Sports Park would be permanently incorporated into the project under any project alternative; therefore, no permanent use would result. However, 2.04 acres would be used during construction, resulting in temporary occupancy of the park, pending concurrence from the OWJ. Land in the southwestern half of the park would be used for Pacific Gas and Electric Company (PG&E) network upgrades to support the project alternatives, as illustrated on Figure 4-41. These portions of the park are currently vegetated and open space. The PG&E network upgrades would not affect any the primary features of the park, such as the buildings, firing range, parking lots, or roadways, leaving the park intact and contiguous for continued use during construction and operations. However, any trees or vegetation located within the PG&E network upgrade boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration of temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction use of land, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

This temporary construction use would not interfere with the protected activity of the park because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with the above conditions).

Proximity impacts on Field Sports Park associated with HSR operations under the project alternatives would not occur because Field Sports Park is located over 2,000 feet from the centerline of any of the project alternatives. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Field

Sports Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result under any alternative.

4.6.1.19 Anderson Lake County Park Use Assessment (Resource #27)

Anderson Lake County Park (resource #27) is located in Morgan Hill, Santa Clara County, and is managed by the Santa Clara County Department of Parks and Recreation. It is a regional park that contains Anderson Lake, multiple-use trails from the Coyote Creek Parkway and Trail, the Jackson Ranch historic park site, the Moses L. Rosendin Park, and Burnett Park. Anderson Lake, at 3,144 acres, is Santa Clara County's largest reservoir and provides both motorized and nonmotorized boating and fishing opportunities as well as shoreline picnic and barbecue facilities at several locations around the lake. Anderson Lake County Park is outside the RSA for Alternatives 2 and 4; accordingly, only Alternatives 1 and 3 are discussed.

Alternatives 1 and 3

Anderson Lake County Park would be located 32 feet from Alternatives 1 and 3 where Coyote Creek crosses US 101. No land from Anderson Lake County Park would be permanently incorporated, as illustrated on Figure 4-42; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the park would not be affected by construction or operation of Alternatives 1 or 3.

Alternatives 1 and 3 would be adjacent to a small portion of western Anderson Lake County Park where Coyote Creek crosses US 101. After crossing the Coyote Valley on viaduct, the alignment would cross over Burnett Avenue in Morgan Hill and parallel US 101 on the west side of the freeway. Proximity impacts on Anderson Lake County Park associated with operation of Alternatives 1 and 3 would be limited to minor changes to the visual environment because the viaduct would be visible from the park. However, because Alternatives 1 and 3 would be visible from only a very small portion of the park, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. However, operation of Alternatives 1 and 3 on viaduct in this area would not introduce substantial additional sources of train noise, because train sounds would be primarily confined within the viaduct structure. Since the outdoor western portion of Anderson Lake County Park is currently adjacent to US 101, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Anderson Lake County Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Anderson Lake County Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.20 Sanchez Park (Resource #28)

The nearest project features of Alternatives 1, 2, and 3 are more than 200 feet from Sanchez Park; therefore, they are only discussed in Table 4-5.

Alternative 4

Sanchez Park (resource #28) is located on Sanchez Drive in Morgan Hill. It is 0.16 acre and contains a small children's play area and picnic facilities. No land from Sanchez Park would be permanently incorporated under Alternative 4, as illustrated on Figure 4-43; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

Proximity impacts on Sanchez Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., embankment). However, because Alternative 4 would be within the existing railroad corridor, visual impacts would be minor. Project features include adoption of design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area

structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4, including increased noise from horn sounding. However, operation of Alternative 4 on embankment in these existing transportation corridors would not introduce substantial additional sources of train noise because train sounds already occur in this area. Since the park is currently near the railroad right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Sanchez Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Sanchez Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 4.

4.6.1.21 Villa Mira Monte (Resource #29)

The 2.37-acre Villa Mira Monte (resource #29) property is located at 17860 Monterey Road in Morgan Hill. It is a public community and recreational facility, including the historic Morgan Hill House, museum, and gardens, which can be rented by the general public for event use. The Morgan Hill House, which is centrally located on the parcel, is listed on both the NRHP and CRHR (see Section 3.17, *Cultural Resources*). The historic property boundary is limited to the Morgan Hill House such that the remainder of the legal parcel is not eligible for listing in the NRHP or CRHR. The historic portion of the legal parcel would not be adversely affected under Section 106. The property is publicly owned and operated by the Morgan Hill Historical Society and is open to the public for use. Because Villa Mira Monte is outside the RSA for Alternatives 1 and 3, only Alternatives 2 and 4 are discussed.

Alternative 2

No land from Villa Mira Monte would be permanently incorporated under Alternative 2, as illustrated on Figure 4-43. Additionally, no land would be required temporarily during project construction. However, Alternative 2 would include the following project components located within and east of the existing rail right-of-way that forms the northeastern boundary of the legal parcel containing Villa Mira Monte: TCE adjacent to the rear (east) of the legal parcel, which is the resource boundary; underground sewer utility relocation 40 feet from the resource; HSR right-of-way (ballasted track on retained fill, approximately 20 feet above grade, with additional 27-foot-tall OCS poles) 65 feet east of the resource boundary; and staging area 215 feet east of the resource.

Alternative 2 would not affect the use of the Morgan Hill House, allowing for its continued use during construction and operations. Access to the property would also be maintained during construction. However, use of the gardens for outdoor events such as weddings and receptions would be reduced during two phases of construction (concrete pour/aerial structure and track installation) for approximately 1 year because construction noise levels would exceed the threshold. The 70 A-weighted decibels (dBA) criterion (residential nighttime) is most appropriate for the facility. The portion of the property that is situated closest to the Project footprint is currently used for parking. The gardens are located about 350 feet from the centerline of the HSR tracks.

Using 70 dBA as the impact threshold, two construction phases would be incompatible: concrete pour/aerial structure (698-foot distance criterion) and track installation (585-foot distance criterion). Because the gardens would be located within 400 feet of track installation, construction noise would exceed the construction noise threshold and use of the gardens would be impaired during these construction activities, even with project features to minimize noise impacts. Temporary moveable noise barriers would not reduce construction noise from high elevations sufficiently to avoid this impact.

Because construction would occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Villa Mira Monte. Accordingly, this construction noise impact would not be of a severity that the protected activities, features, or attributes that qualify the center for

protection under Section 4(f) would be substantially impaired. Therefore, a Section 4(f) use would not result at Villa Mira Monte.

Proximity impacts on Villa Mira Monte associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the facility (i.e., the new embankment). However, because Alternative 2 would be near the existing Caltrain right-of-way, which is visible from adjacent properties under current conditions, visual changes would be minor, and there would be no new visual impact resulting from the introduction of HSR. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 2 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. While section 3.4 does not identify impacts to specific 4f resources within the vicinity of the project, it does identify moderate and severe operational noise effects at specific locations within each of the subsections, and it includes mitigation, including the installation of noise barriers, to reduce noise impacts at these locations. See Figure 3.4-15 for the location of moderate and severe noise impacts within the Morgan Hill and Gilroy Subsection under Alternative 2.

The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since Villa Mira Monte is currently near the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Villa Mira Monte. The noise impact on this property would be moderate, and therefore, less than significant, and would be further reduced with the installation of noise barriers along the adjacent portion of the HSR alignment. More specifically, noise levels would increase from 70dBA to 72dBA with implementation of recommended mitigation. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Villa Mira Monte for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 2.

Alternative 4

No land from Villa Mira Monte would be permanently incorporated under Alternative 4, as illustrated on Figure 4-43. However, a portion of the facility (0.09 acre) is located within the TCE and would be required temporarily during project construction, resulting in temporary occupancy of the rear parking lot and undeveloped area, pending concurrence from the OWJ. This area would allow for access to the right-of-way during construction of Alternative 4. Prior to any ground-disturbing activities at the resource, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration of temporary impacts, such as replanting trees and vegetation that would be removed (LU-IAMF#3). Before beginning construction, the contractor would submit the restoration plan to the Authority for review and obtain Authority approval.

The portion of the property that is situated closest to the Project footprint is currently used for parking. However, given the proximity of the property to construction activities, use of the gardens for outdoor events such as weddings and receptions would be reduced during one phase of construction (track installation) for approximately 6 months because construction noise levels would exceed the 70 dBA criterion (residential nighttime) threshold for the facility. The gardens are located approximately 350 feet from the centerline of the HSR tracks. Using 70 dBA as the impact threshold, one construction phase would be incompatible: track installation (585-foot distance criterion). Because the property would be located within 400 feet of track installation, construction noise would exceed the construction noise threshold and use of the gardens would be impaired during construction activity.

The project would comply with FTA and FRA noise requirements and implement emission controlling practices for sensitive land uses, which includes the noise sensitive parks and open space facilities (AQ-IAMF#1, AQ-IAMF#4, AQ-IAMF#5, and NV-IAMF#1). As described in Section 3.4, typical construction practices contained in the FRA guidance manual (FRA 2012) for minimizing construction noise and vibration impacts include the following:

- Build noise barriers, such as temporary walls or piles on excavated material, between noisy activities and noise-sensitive resources.
- Route truck traffic away from residential streets where possible.
- Build walled enclosures around especially noisy activities or around clusters of noisy equipment.
- Combine noisy operations so that they occur in the same period.
- Phase demolition, earthmoving, and ground-impacting operations so as not to occur in the same period.
- Avoid impact pile driving where possible in vibration-sensitive areas.

Because construction could occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Villa Mira Monte. With implementation of these mitigation measures, this temporary construction use would not interfere with the protected activity of the resource because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with the above conditions).

Proximity impacts on Villa Mira Monte associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the facility. However, because Alternative 4 would be within one foot of the Project footprint and the existing Caltrain right-of-way, which would be blended with the Caltrain tracks in the existing Caltrans right-of-way under this alternative, visual impacts would be minor. Approximately 6 Caltrain trains currently travel along this alignment; in 2029 up to 48 new HSR trains and 6 new Caltrain trains would travel along this alignment. In 2040, up to 176 new HSR trains would travel along this alignment. As noted above in the discussion of Alternative 2, while Section 3.4 does not identify impacts to specific 4f resources within the vicinity of the project, it does identify moderate and severe operational noise effects at specific locations within each of the Subsections, and recommends mitigation, including the installation of noise barriers, to reduce noise impacts at these locations. See Figure 3.4-21 for the location of moderate and severe noise impacts within the Morgan Hill and Gilroy Subsection under Alternative 4. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since Villa Mira Monte is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Villa Mira Monte. The noise impact on this property would be moderate, and therefore, less than significant, and would be further reduced with the installation of noise barriers along the adjacent portion of the HSR alignment. More specifically, existing noise levels in the vicinity of the resource have been

measured at 70dBA and would be reduced to 66 dBA under this alternative with implementation of recommended mitigation. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Villa Mira Monte for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 4.

4.6.1.22 Morgan Hill Community and Cultural Center Use Assessment (Resource #30)

The 8.67-acre Morgan Hill Community and Cultural Center (resource #30) is located at 17000 Monterey Road in Morgan Hill. It is a multiuse community center featuring a community playhouse, multiuse rooms, and an outdoor amphitheater. The community playhouse, located on the western corner of the legal parcel, is housed within the Church of Christ, which has been determined eligible for listing in the NRHP (see Section 3.17, Cultural Resources). The historic property boundary is limited to the Church of Christ such that the remainder of the legal parcel is not eligible for listing in the NRHP. The historic portion of the legal parcel would not be adversely affected under Section 106. The center is publicly owned and operated by the City of Morgan Hill Recreation and Community Services Department and is open to the public for use. Because the Morgan Hill Community and Cultural Center is outside the RSA for Alternatives 1 and 3, only Alternatives 2 and 4 are discussed.

Alternative 2

Alternative 2 would require incorporation of 1.31 acres (15.1 percent of the total area) of Morgan Hill Community and Cultural Center, as illustrated on Figure 4-45, resulting in a permanent use. Additionally, 0.77 acre at the southern and eastern edges of the community center would be necessary during construction for TCEs under Alternative 2. This land would be necessary to allow for the embankment along the east side of UPRR, where the HSR and UPRR alignments would cross East/West Dunne Avenue, the southern street of the community center, on short bridges over the roadways, which would be lowered 17–30 feet below grade to maintain east-west connections. The land would be needed for roadway right-of-way and TCEs to construct the bridge and reconstruct East/West Dunne Avenue (Figure 4-45). These portions of the community center are landscaped parking strips and on-street parking. Alternative 2 would not affect the use of any of the buildings, rooms, or outdoor amphitheater, allowing for continued use of these facilities during construction and operations. However, any trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the park, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that was removed (LU-IAMF#3). Before beginning construction use of land, the contractor would submit the restoration plan to the Authority for review and would obtain Authority approval.

Access to the community center would be temporarily diminished at one of four access points because of the placement of a TCE along West Dunne Avenue between Church Street and Monterey Road. However, access during construction would be maintained at all times through the other three access points.

Project features would maintain access to park and recreation facilities because the contractor would prepare and submit to the Authority a technical memorandum that identifies project design features to be implemented to minimize impacts on parks and recreation facilities, such as providing safe and attractive access for existing travel modes (e.g., motorists, bicyclists, pedestrians) to existing park and recreation facilities (PK-IAMF#1). Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum and they would be incorporated into the design specifications and would be a pre-condition requirement (PR-MM#4). Additionally, mitigation measures (PR-MM#1) would provide alternative access via a temporary detour to Morgan Hill Community and Cultural Center using existing roadways or other public rights-of-way, and prior to construction, the contractor would prepare a technical memorandum for the Authority documenting how the contractor would maintain connections to the unaffected park portions or nearby roadways during construction

(PR-MM#2). The technical memorandum would be submitted to the Authority for review and approval. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. In addition, temporary construction impacts on access and traffic, such as road closures and other disruptions, would be minimized by providing detours and signage so that motorists and pedestrians would continue to have access to parks, recreation, open space resources, and school district play areas (TR-IAMF#2, TR-IAMF#4, TR-IAMF#5, and TR-IAMF#7). The IAMFs would be incorporated into the design specifications and would be a pre-condition requirement. These technical memoranda would be provided to the OWJ to demonstrate how access would be maintained. Because access would be maintained during construction, temporary decreases in access would have limited effect on the protected activities of Morgan Hill Community and Cultural Center. Through these project features and mitigation measures, Morgan Hill Community and Cultural Center would remain usable during project construction and operation.

However, use of the outdoor amphitheater would be reduced during two phases of construction (concrete pour/aerial structure and track installation) for approximately 1 year because construction noise levels would exceed the threshold. The 70 A-weighted decibels (dBA) criterion (residential nighttime) is appropriate for the amphitheater. The near edge of the amphitheater field is about 555 feet from the centerline of the HSR tracks, and the center of the amphitheater is 635 feet away. Using 70 dBA as the impact threshold, two construction phases would be incompatible: concrete pour/aerial structure (698-foot distance criterion) and track installation (585-foot distance criterion). Because the amphitheater would be located within 585 feet of track installation and within 698 feet of concrete pour/aerial structure activities, construction noise would exceed the construction noise threshold and the amphitheater would not be useable during these construction activities, even with project features to minimize noise impacts. Temporary moveable noise barriers would not reduce construction noise from high elevations sufficiently to avoid this impact. Because construction could occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Morgan Hill Community and Cultural Center. Accordingly, this permanent use would not be of a severity that the protected activities, features, or attributes that qualify the center for protection under Section 4(f) would be substantially impaired. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

Alternative 4

No land from Morgan Hill Community and Cultural Center would be permanently incorporated under Alternative 4, as illustrated on Figure 4-45. Additionally, no land would be required temporarily during project construction.

However, use of the outdoor amphitheater would be reduced during one phase of construction (track installation) for approximately 6 months because construction noise levels, would exceed the threshold. The 70-dBA criterion (residential nighttime) is appropriate for the amphitheater. The near edge of the amphitheater field is about 555 feet from the centerline of the HSR tracks, and the center of the amphitheater is 635 feet away. Using 70 dBA as the impact threshold, one construction phase would be incompatible: track installation (585-foot distance criterion). Because the amphitheater would be located within 585 feet of track installation, construction noise would exceed the construction noise threshold and the amphitheater would not be useable during this construction activity, even with project features to minimize noise impacts. The project would comply with Federal Transit Administration and FRA noise requirements and implement emission controlling practices for sensitive land uses, which includes the noise sensitive parks and open space facilities (AQ-IAMF#1, AQ-IAMF#4, AQ-IAMF#5, and NV-IAMF#1). However, temporary moveable noise barriers would not reduce construction noise sufficiently to avoid this impact.

Because construction could occur on nights and weekends, the Authority would implement NV-MM#1 to minimize the impact of construction noise and PR-MM#6 to minimize construction noise during special events at Morgan Hill Community and Cultural Center. Accordingly, this construction noise impact would not be of a severity that the protected activities, features, or

attributes that qualify the center for protection under Section 4(f) would be substantially impaired. Therefore, a Section 4(f) use would not result at the Morgan Hill Community and Cultural Center.

4.6.1.23 San Ysidro Park Use Assessment (Resource #33)

Alternatives 1, 2, 3, and 4

San Ysidro Park (resource #33) is located at 7700 Murray Avenue in Gilroy. It is 9.25 acres, includes a basketball court, handball court, hiking trails, jogging path, multiuse area, and picnic areas, and is located 92.4 feet from the footprint of all project alternatives. However, the closest part of the project footprint to the park is a PG&E network upgrade; the park is located more than 1,000 feet from the right-of-way of each project alternative. No land from San Ysidro Park would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-46; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

This utility work as part of the PG&E network upgrade would not cause long-term proximity impacts on San Ysidro Park. Visual and noise proximity impacts would not result because San Ysidro Park is more than 1,000 feet from the HSR right-of-way. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify San Ysidro Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.24 Forest Street Park Use Assessment (Resource #34)

The nearest project feature of Alternatives 3 and 4 is more than 200 feet from Forest Street Park; therefore, it is only discussed in Table 4-5.

Alternatives 1 and 2

Forest Street Park (resource #34) is located at 7325 Forest Street in Gilroy. It is 0.25 acre and includes a children's play area, picnic areas, and two horseshoe pits. The park is 132.7 feet from Alternative 1 and 108.1 feet from Alternative 2. No land from Forest Street Park would be permanently incorporated under Alternatives 1 and 2, as illustrated on Figure 4-47; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction.

Proximity impacts on Forest Street Park associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the park (i.e., the new viaduct or embankment). However, because Alternatives 1 and 2 would be near the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 2 on the park. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since Forest Street Park is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of Forest Street Park. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Forest Street Park for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 1 and 2.

4.6.1.25 Gilroy Sports Park Use Assessment (Resource #37)

Gilroy Sports Park (resource #37) is located at 5925 Monterey Frontage Road in Gilroy. It is 79 acres and includes baseball/softball, a jogging path, picnic tables, a playground, a soccer field, and trails. It is located 869.8 feet from Alternative 1, 98.4 feet from Alternative 2, slightly more

than a mile from Alternative 3, and 754.6 feet from Alternative 4. The nearest project feature of Alternatives 1 and 4 are more than 200 feet from the park; therefore, they are only discussed in Table 4-5. Alternative 3 is located outside the RSA and is not discussed further.

Alternative 2

No land from Gilroy Sports Park would be permanently incorporated under Alternative 2, as illustrated on Figure 4-48; therefore, no permanent use would result. Additionally, no land would be required temporarily during project construction. The nearest part of the project footprint to the park includes TCEs along Monterey Road. The park is more than 1,000 feet from the HSR right-of-way. These TCEs would not cause long-term proximity impacts on Gilroy Sports Park. Visual and noise proximity impacts would not result because Gilroy Sports Park is more than 1,000 feet from the HSR right-of-way. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify Gilroy Sports Park for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.26 Cottonwood Creek Wildlife Area Use Assessment (Resource #38)

Alternatives 1, 2, 3, and 4

The Cottonwood Creek Wildlife Area (resource #38) is a 6,300-acre wildlife area situated in the Pacheco Pass north of the San Luis Reservoir. The wildlife area features numerous hunting grounds and wildlife viewing opportunities. A variety of wildlife is present, including wild pigs, black-tailed deer, gray fox, and more than 100 species of birds. The wildlife area is managed by the CDFW. The area is open to the public through foot access and roads, and deer and wild pig hunting is allowed during the permitted hunting season. The area consists of a large, undeveloped open space with a network of trails and roads providing access to hunting grounds throughout the wildlife area. No surface land from Cottonwood Creek Wildlife Area would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-49; therefore, no permanent use would result. Additionally, no land would be temporarily required during construction. Access to the area would not be affected by construction or operation of the project alternatives.

Tunnel 2 would be constructed approximately 1,200 feet below portions of the Cottonwood Creek Wildlife Area under all project alternatives. At such a depth, surface disruptions related to project construction and operation of the tunnel would not be anticipated in the wildlife management area, and no harm to the area would result. Under Section 4(f), tunneling is a means by which to avoid impacting the features that make a property protected under Section 4(f). Therefore, there is no potential for use to result from constructing tunnels below this wildlife management area.

In addition, permanent tunnel easements below the wildlife management area would be purchased by the Authority. Although these easements would grant the Authority the right to construct and operate the HSR in tunnels below the Cottonwood Creek Wildlife Area, they would not impose restrictions on the Section 4(f) property owners to use the property or otherwise grant future right of access to the Authority (e.g., for routine maintenance). While the subsurface area would be technically considered permanently incorporated into the transportation facility, none of the surface would be breached and therefore none of the features that make Cottonwood Creek Wildlife Area a 4(f)-protected property would be impacted. Accordingly, no use would result from the purchasing of tunnel easements beneath the Cottonwood Creek Wildlife Area.

No project construction staging or construction easement would be required from the Cottonwood Creek Wildlife Area. Construction work would take place primarily underground using tunnel boring machinery. Therefore, there is no potential for temporary occupancy of the wildlife area, and no use would result.

The Cottonwood Creek Wildlife Area is not considered vibration sensitive because it is an outdoor land use, and there are no vibration impact criteria for animals. Noise and visual impacts would not occur because the guideway is in a tunnel under the wildlife area, and the nearest tunnel portals are approximately 2 miles from the wildlife area. Therefore, there would no noise,

vibration, or visual impacts on bird flight patterns, elk herds, or day-use camping. Accordingly, operational vibration and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the Cottonwood Creek Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

Construction of the tunnel may result in the lowering of groundwater due to tunnel inflows which may disrupt surface water hydrology within the area. A reduction in streamflow could result in wildlife disruption. However, mitigation measures to address this hydrologic effect include the provision of water to maintain the hydroperiod, as necessary, to avoid affecting wildlife function (BIO-MM#9: Prepare and Implement a Groundwater Adaptive Management and Monitoring Plan and HYD-MM#1: Prepare and Implement a Groundwater Adaptive Management and Monitoring Program). With implementation of these mitigation measures, the disruption to wildlife dependent on streamflow would be avoided. Accordingly, this disruption would not be of a severity that the protected activities, features, or attributes that qualify Cottonwood Creek Wildlife Area for protection under Section 4(f) would be substantially impaired. Therefore, the impact would be *de minimis*, pending concurrence from the OWJ.

4.6.1.27 Volta Wildlife Area Use Assessment (Resource #41)

Alternatives 1, 2, 3, and 4

The Volta Wildlife Area (resource #41) is 0.75 mile north of Volta on Ingomar Grade in Merced County. It is a 3,800-acre wildlife refuge containing managed marsh and valley alkali shrub land, providing permitted hunting during waterfowl season, as well as wildlife viewing opportunities. Managed by the CDFW, this wildlife area is accessible only by foot. No land from the Volta Wildlife Area would be permanently incorporated under any alternative, as illustrated on Figure 4-50; therefore, no permanent use would result. Additionally, no land would be temporarily required during project construction.

The project would be adjacent to the southern edge of the Volta Wildlife Area along Henry Miller Road. Proximity impacts on the Volta Wildlife Area associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible on viaduct from the park. The introduction of viaducts across the flat agricultural landscape would block views and contrast with the very flat topography. It would introduce HSR infrastructure to a semi-remote and rural area, visible by users of the wildlife area, including day-use campers. The concrete-and-steel industrial aesthetic would contrast with the rural setting and simple agricultural structures. However, because the HSR facilities would be visible from only a very small portion of the wildlife area, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the wildlife area. Even though the viaduct would still be seen from the southern portion of the wildlife area, it would not affect the uses, access, or user experience at the wildlife area because all of its features and activities could continue. The project would not alter the setting of the wildlife area such that its use or access would be prohibited. While the visual changes would alter the user experience of day use campers, this would only occur in the southern most portion of the wildlife area, and the user experience would not be substantially degraded.

Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4 and in the *San Jose to Merced Project Section Noise and Vibration Technical Report* (Noise and Vibration Technical Report) (Authority 2019d). Noise modeling was conducted in segments. The Volta Wildlife Area is within the San Waste Way to N. Mercey Spring segment (see Tables 5-11 through 5-13 in the Noise and Vibration Technical Report) (Authority 2019c). Within the area of San Waste Way to North Mercey Spring, the existing noise level for Category 3 land uses (which includes all park resources) is 67 dBA. Within this area, at land use Category 3, the future noise level would be 69 dBA. This noise increase of 2 dBA would not constitute a moderate or severe noise impact. The Authority would still implement mitigation measures to minimize the impacts of operational noise at other moderate and severe impact locations near the Volta Wildlife Area. Mitigation measures NV-MM#3, NV-MM#5, NV-MM#6, and NV-MM#7 require

implementing HSR noise guidelines, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since there would be no moderate or severe noise impacts at this location, it is anticipated that increased noise resulting from HSR operations would have a limited effect on the protected activities of the wildlife area, including day use camping.

Both terrestrial species (elk herds) and aerial species (birds) are present within the wildlife area as described in Section 3.7. The Authority would implement BIO-MM#58 to compensate for noise and visual impacts on aerial species and BIO-MM#80 to avoid and minimize impacts from noise, or some combination of the two measures if necessary. These measures would avoid or minimize noise and visual impacts on habitat or provide for the preservation and enhancement of waterbird habitat. These measures are expected to reduce or eliminate effects on wildlife in the wildlife area.

Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the Volta Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.

4.6.1.28 Los Banos Wildlife Area Use Assessment (Resource #42)

Alternatives 1, 2, 3, and 4

The Los Banos Wildlife Area (resource #42) is 4 miles northeast of Los Banos in Merced County. It encompasses 6,200 acres of wetland habitat, including lakes, sloughs, and managed marsh, offering permitted hunting, wildlife viewing, boating, fishing, and an educational visitors' center. The wildlife area is managed by the CDFW. No land from Los Banos Wildlife Area would be permanently incorporated under any of the project alternatives, as illustrated on Figure 4-51; therefore, no permanent use would result. However, 0.03 acre at the southern edge of the wildlife area would be used during project construction, resulting in temporary occupancy, pending concurrence from the OWJ. This land would be used from the southern edge of the wildlife area. The 0.03 acre would be needed for TCEs to construct the aerial structure along Henry Miller Road (Figure 4-51). This portion of the wildlife area is open space with little vegetation. The project alternatives would not affect the use of any of the features of the wildlife area, allowing for their continued use during project construction and operations. However, any trees or vegetation located within the TCE boundary would be removed during construction. Prior to any ground-disturbing activities at the wildlife area, the contractor would prepare a restoration plan addressing specific actions, sequence of implementation, parties responsible for implementation, and successful achievement of restoration for temporary impacts, such as replanting trees and vegetation that was removed (LU-IAMF#3). Before beginning construction use of land, the contractor would submit the restoration plan to the Authority for review and would obtain Authority approval. Access to the area would not be affected by construction or operation of the project alternatives.

Proximity impacts on the Los Banos Wildlife Area associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible on embankment from the park. The introduction of embankment across the flat agricultural landscape would block views and contrast with the very flat topography. It would introduce HSR infrastructure to a semi-remote and rural area, visible by users of the wildlife area, including day use campers. The concrete-and-steel industrial aesthetic would contrast with the rural setting and simple agricultural structures. However, because the project alternatives would be visible from only a very small portion of the wildlife area, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of the project alternatives on the park. Even though the embankment would still be seen from the southern portion of the Los Banos Wildlife Area, it would not affect the uses, access, or user experience at the wildlife area because all of its features and activities could continue. The project would not alter the setting of the wildlife area such that its use or access would be prohibited. While the visual changes would alter the user experience of day use campers, this would only

occur in the southern most portion of the wildlife area, and the user experience would not be substantially degraded

Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4 and in the Noise and Vibration Technical Report (Authority 2019d), including increased noise from horn sounding under Alternative 4. Noise modeling was conducted in segments. The Los Banos Wildlife area is within the North Mercey Spring to Carlucci Road segment (see Tables 5-11 through 5-13 in the Noise and Vibration Technical Report) (Authority 2019d). Within the area of North Mercey Spring to Carlucci Road, the existing noise level at land use Category 2 (which includes employee housing at the site), is 64 dBA. Within this area, at land use Category 2, the future noise level would be 73 dBA. Because the noise level would increase by 8 dBA, this would constitute a moderate noise impact prior to mitigation. The existing noise level at land use Category 3 (which includes park resources), is 56 dBA. Within this area, at land use Category 3, the future noise level would be 64 dBA. Because the noise level would increase by 7.5 dBA, this would also constitute a moderate noise impact prior to mitigation. However, the Authority would implement mitigation measures to reduce the impacts of operational noise. Mitigation measure NV-MM#3 requires implementation of HSR noise guidelines, potentially including noise easements or a noise barrier, which would reduce the operational noise impact at the Los Banos Wildlife Area to below the noise impact criteria.

Both terrestrial species (elk herds) and aerial species (birds) are present within the wildlife area as described in Section 3.7, The Authority would implement BIO-MM#58 to compensate for noise and visual impacts on aerial species and BIO-MM#80 to avoid and minimize impacts from noise, or some combination of the two measures if necessary. These measures would avoid or minimize noise and visual impacts on habitat or provide for the preservation and enhancement of waterbird habitat to compensate for the reduction in caloric uptake experienced in habitat close to the railroad. Finally, BIO-MM#77 requires consideration of structures, including noise barriers, to minimize or avoid noise impacts on wildlife movement. Use of such structures would reduce the operational noise impact at the Los Banos Wildlife Area to below the noise impact criteria for Category 3 noise.

Since the moderate operations impact would be reduced, it is anticipated that increased noise resulting from HSR operations would have a limited effect on the protected activities of the Los Banos Wildlife Area. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the Los Banos Wildlife Area for protection under Section 4(f) would be substantially impaired, and no constructive use would result.



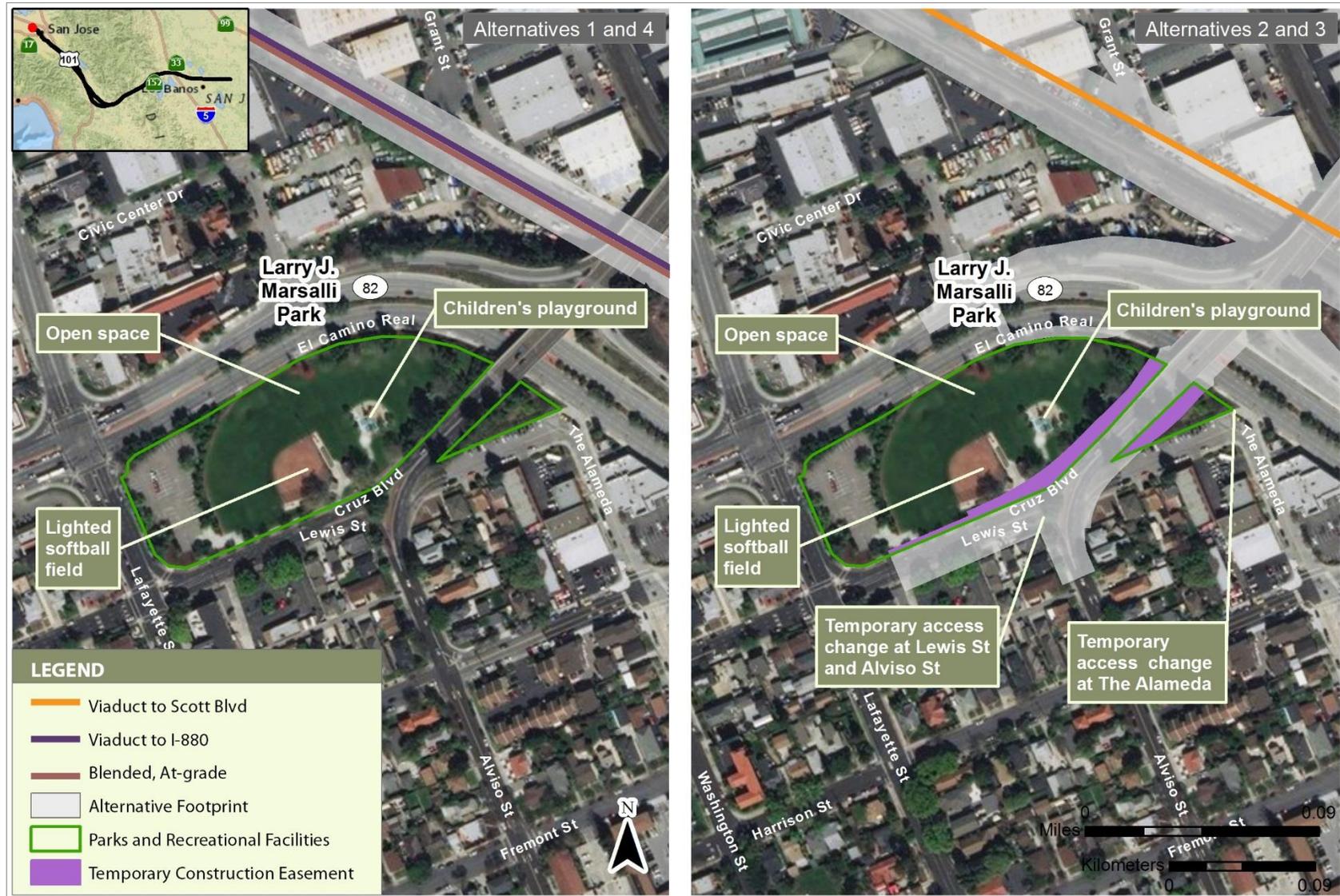
APRIL 2019

Figure 4-18 Guadalupe River Park



APRIL 2019

Figure 4-19 Reed Street Dog Park



APRIL 2019

Figure 4-20 Larry J. Marsalli Park

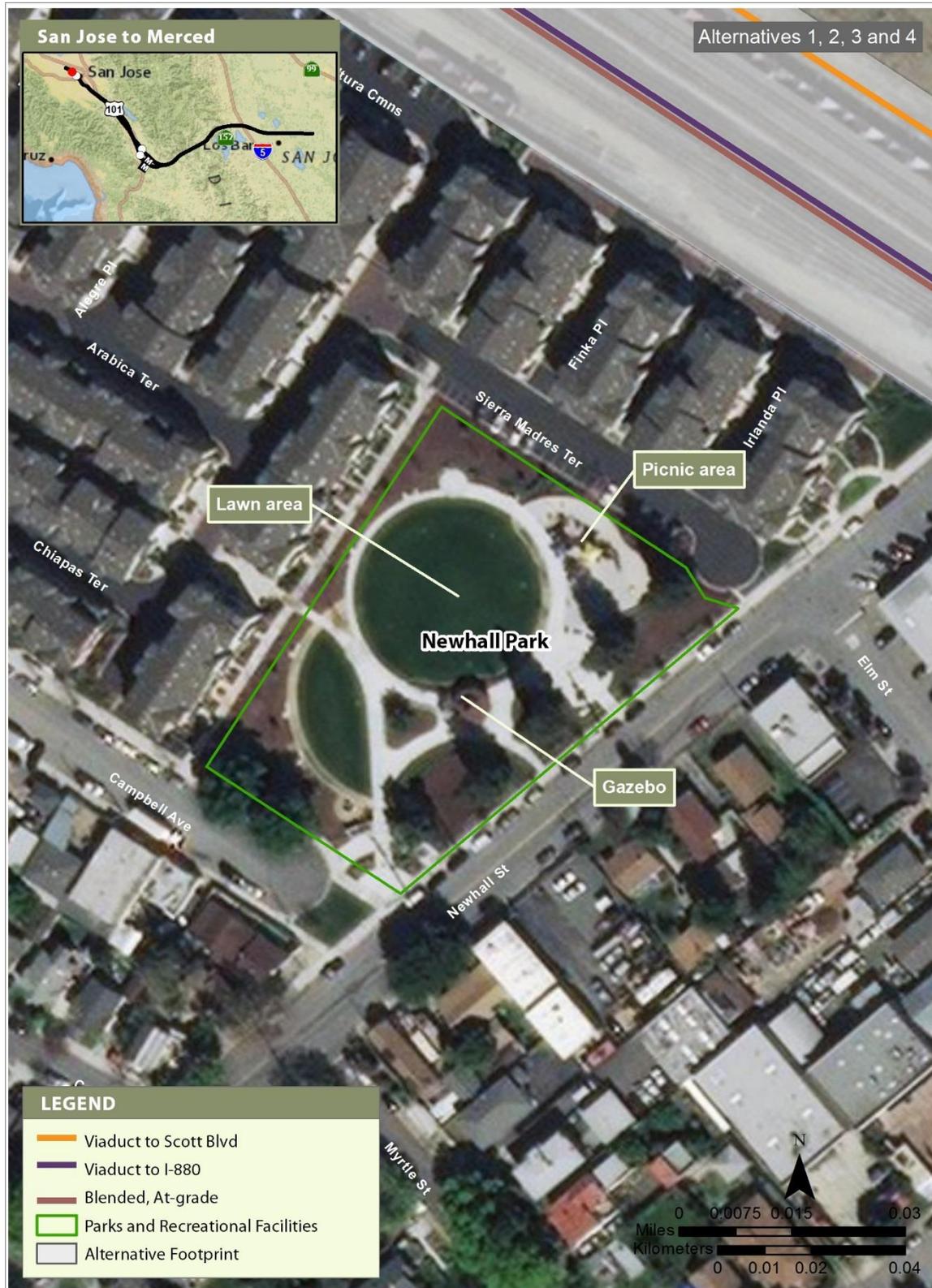
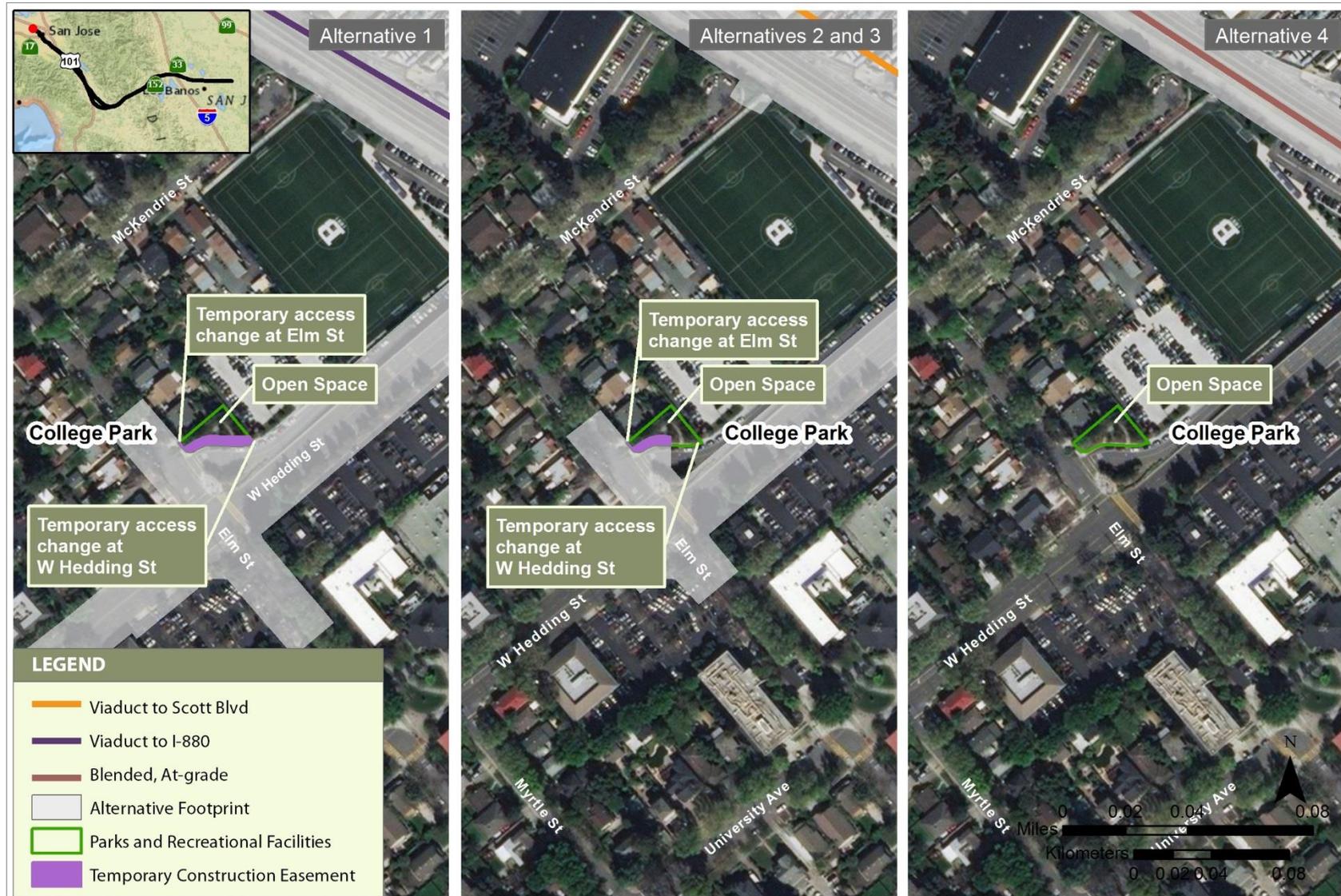


Figure 4-21 Newhall Park



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Figure 4-22 College Park

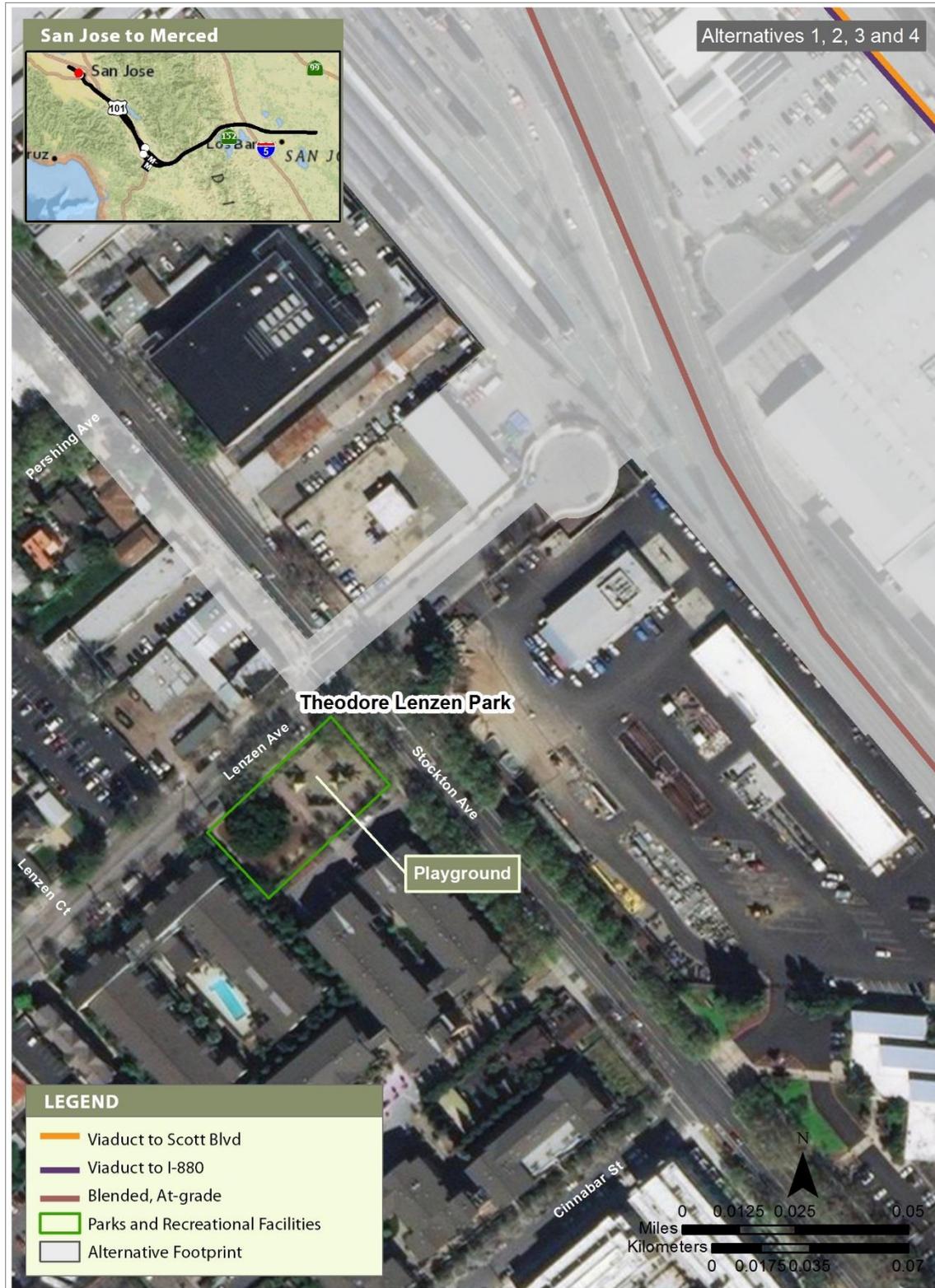
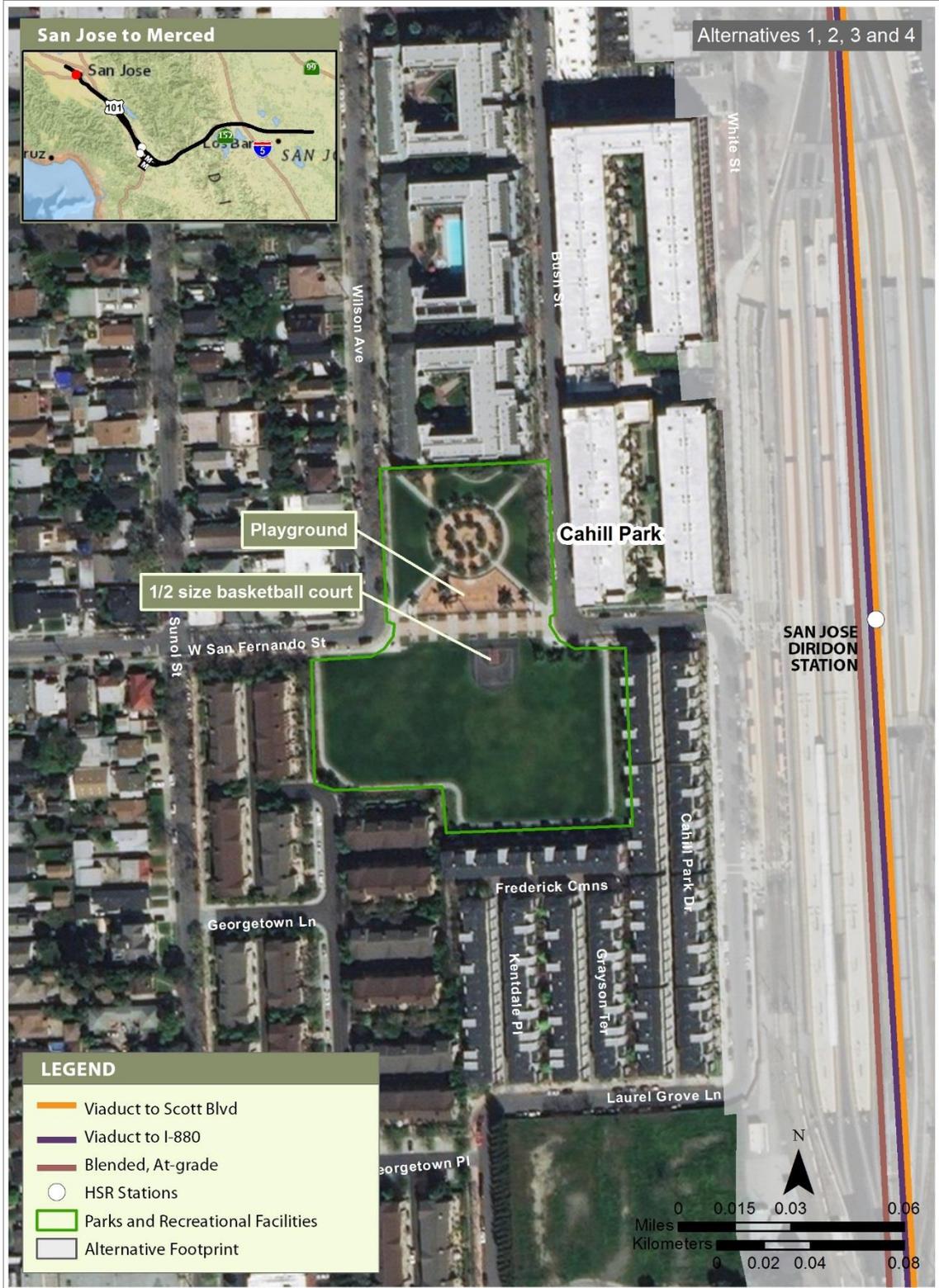


Figure 4-23 Theodore Lenzen Park



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Figure 4-24 Cahill Park



APRIL 2019

Figure 4-25 Los Gatos Creek Trail



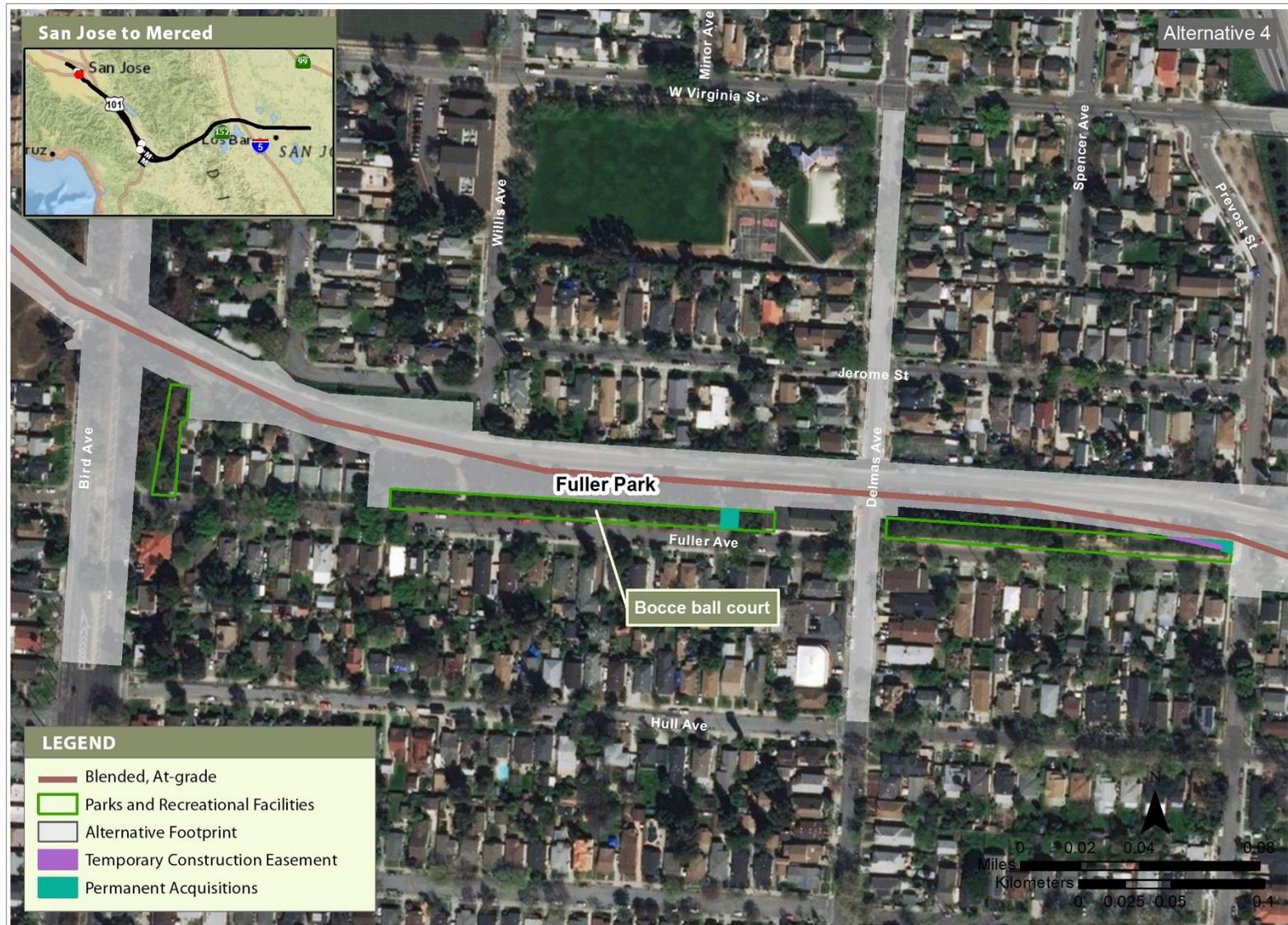
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Figure 4-26 Guadalupe River Trail, Reach 6



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Figure 4-27 Biebrach Park



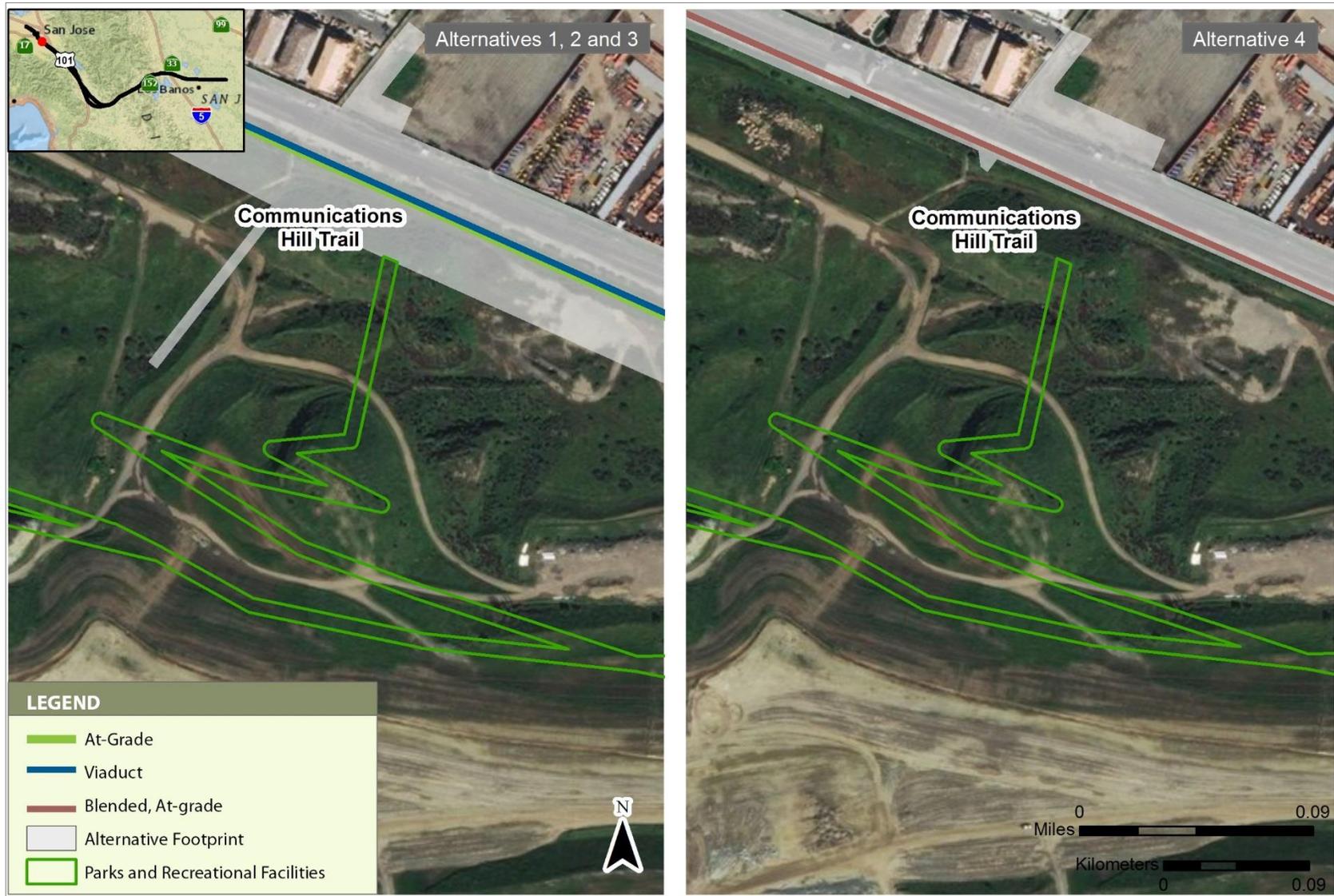
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Figure 4-28 Fuller Park



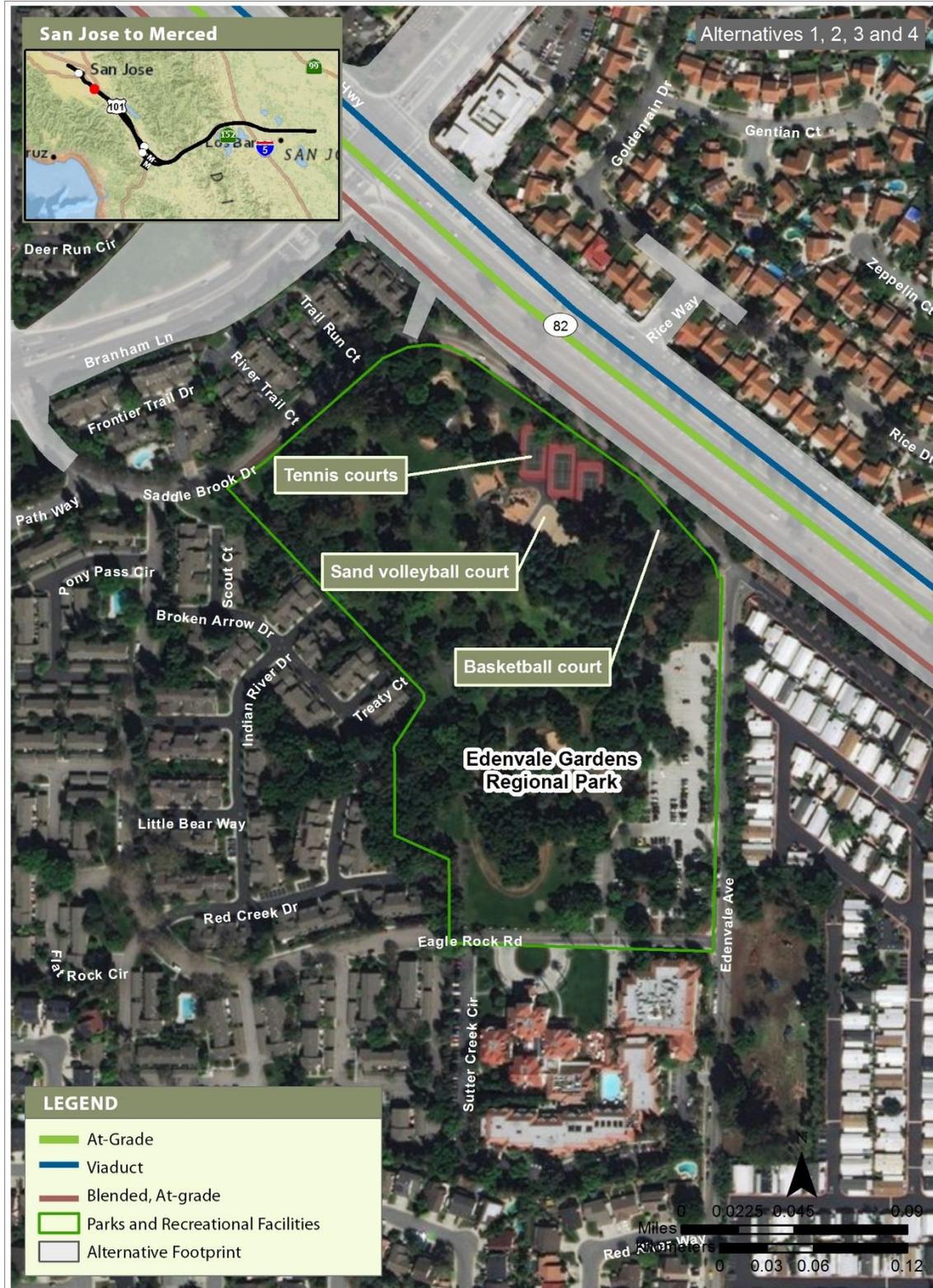
FEBRUARY 2020

Figure 4-29 Tamien Park



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Figure 4-30 Communications Hill Trail



APRIL 2019

Figure 4-31 Edenvale Gardens Regional Park



APRIL 2019

Figure 4-32 Coyote Creek Parkway (Part A)



APRIL 2019

Figure 4-33 Coyote Creek Parkway (Part B)



APRIL 2019

Figure 4-34 Coyote Creek Parkway (Part C)



APRIL 2019

Figure 4-35 Coyote Creek Parkway (Part D)



APRIL 2019

Figure 4-36 Coyote Creek Parkway (Part E)



APRIL 2019

Figure 4-37 Coyote Creek Parkway (Part F)



APRIL 2019

Figure 4-38 Coyote Creek Trail (Part A)



APRIL 2019

Figure 4-39 Coyote Creek Trail (Part B)



APRIL 2019

Figure 4-40 Tulare Hill



APRIL 2019

Figure 4-41 Field Sports Park



Alternatives 1 and 3

Multiple use trails, boating and fishing, and picnic and barbeque facilities

4WD Road

Anderson Lake County Park

Barnett Ave

Vista de Lomas

Quinn Ct

LEGEND

- Viaduct to Downtown Gilroy
- Viaduct to East Gilroy
- Parks and Recreational Facilities
- Alternative Footprint

0 0.04 0.08 0.16
Miles

0 0.05 0.1 0.2
Kilometers

APRIL 2019

Figure 4-42 Anderson Lake County Park



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Figure 4-43 Sanchez Park



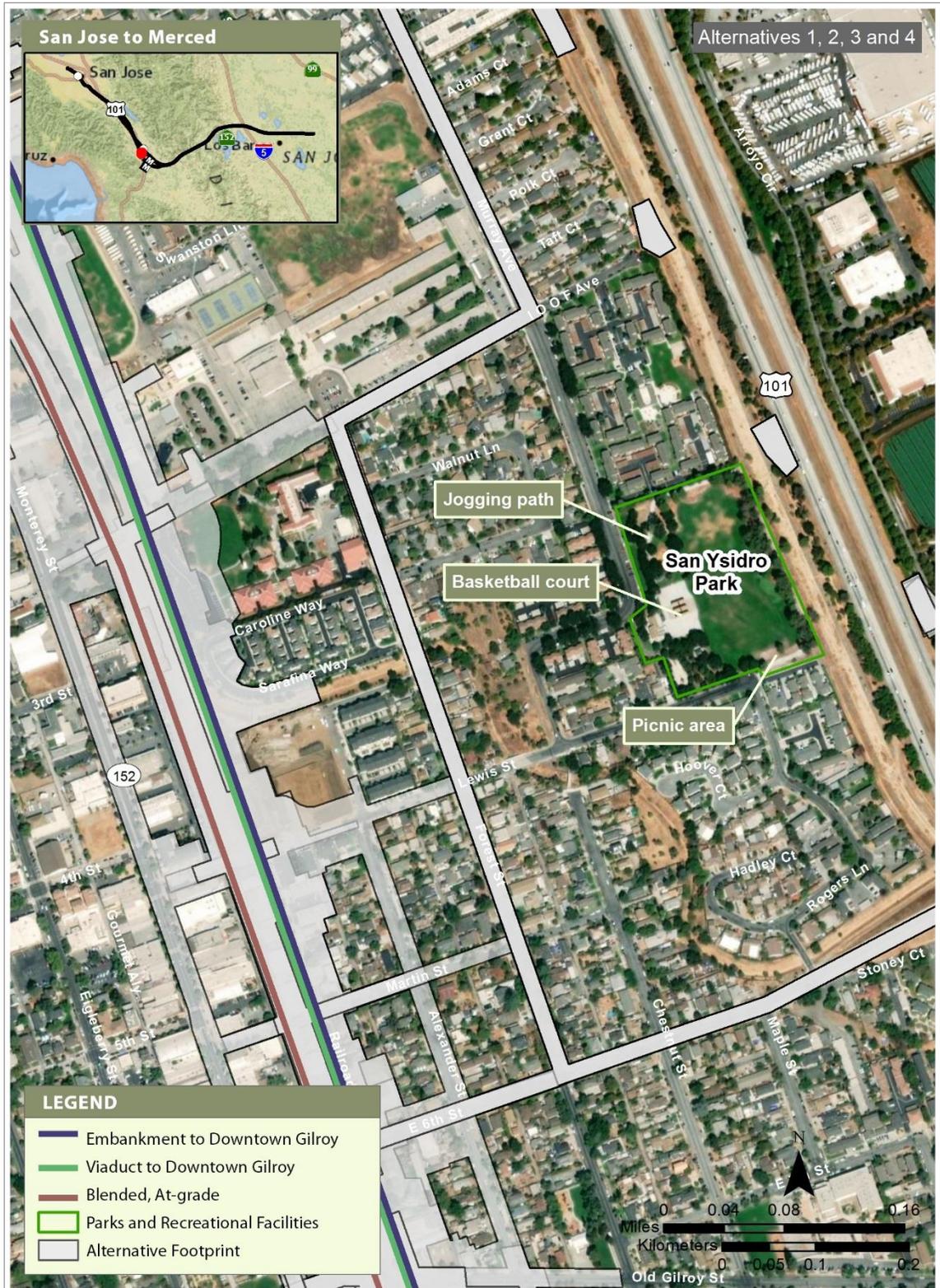
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Figure 4-44 Villa Mira Monte



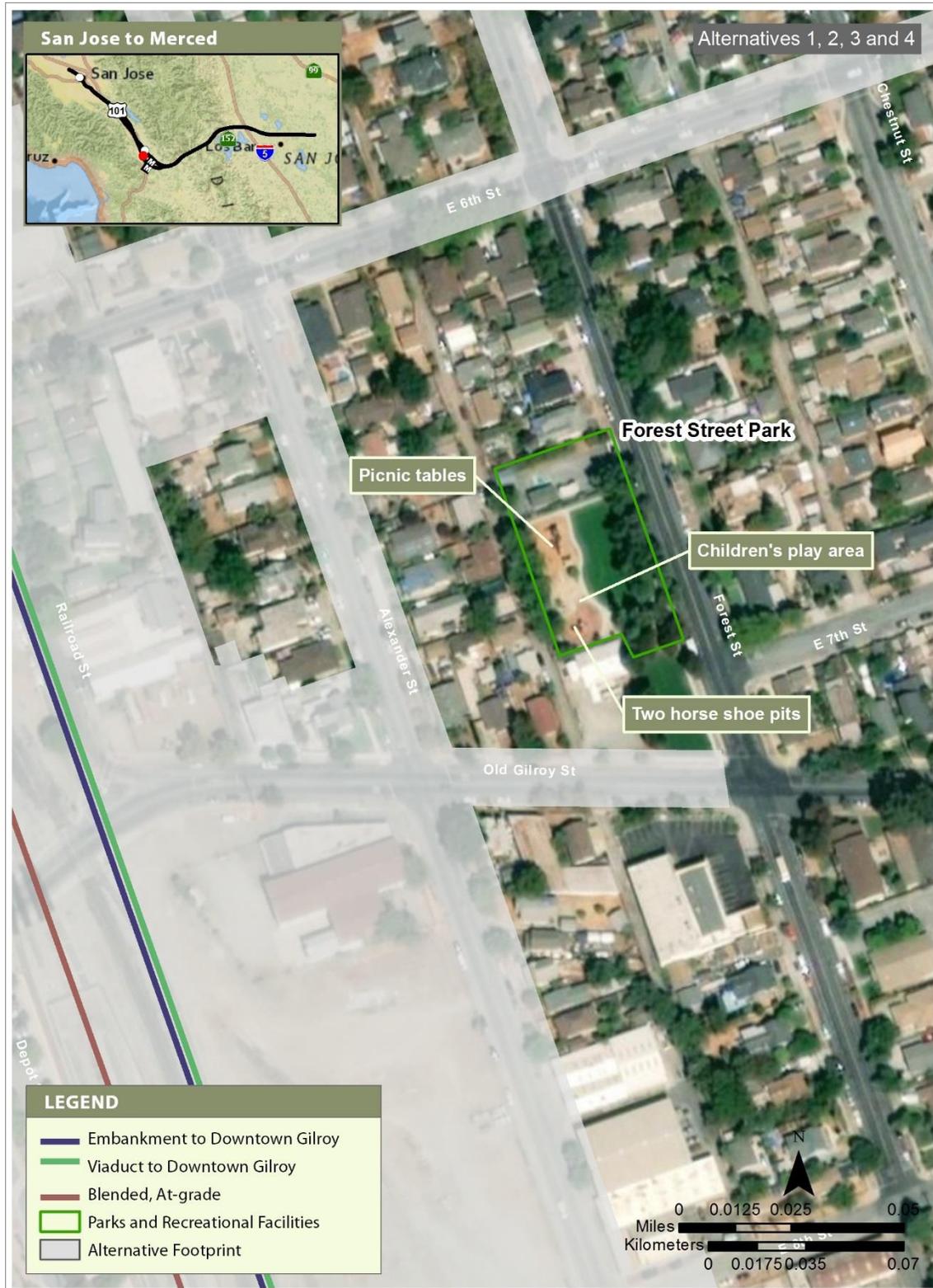
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Figure 4-45 Morgan Hill Community and Cultural Center



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Figure 4-46 San Ysidro Park



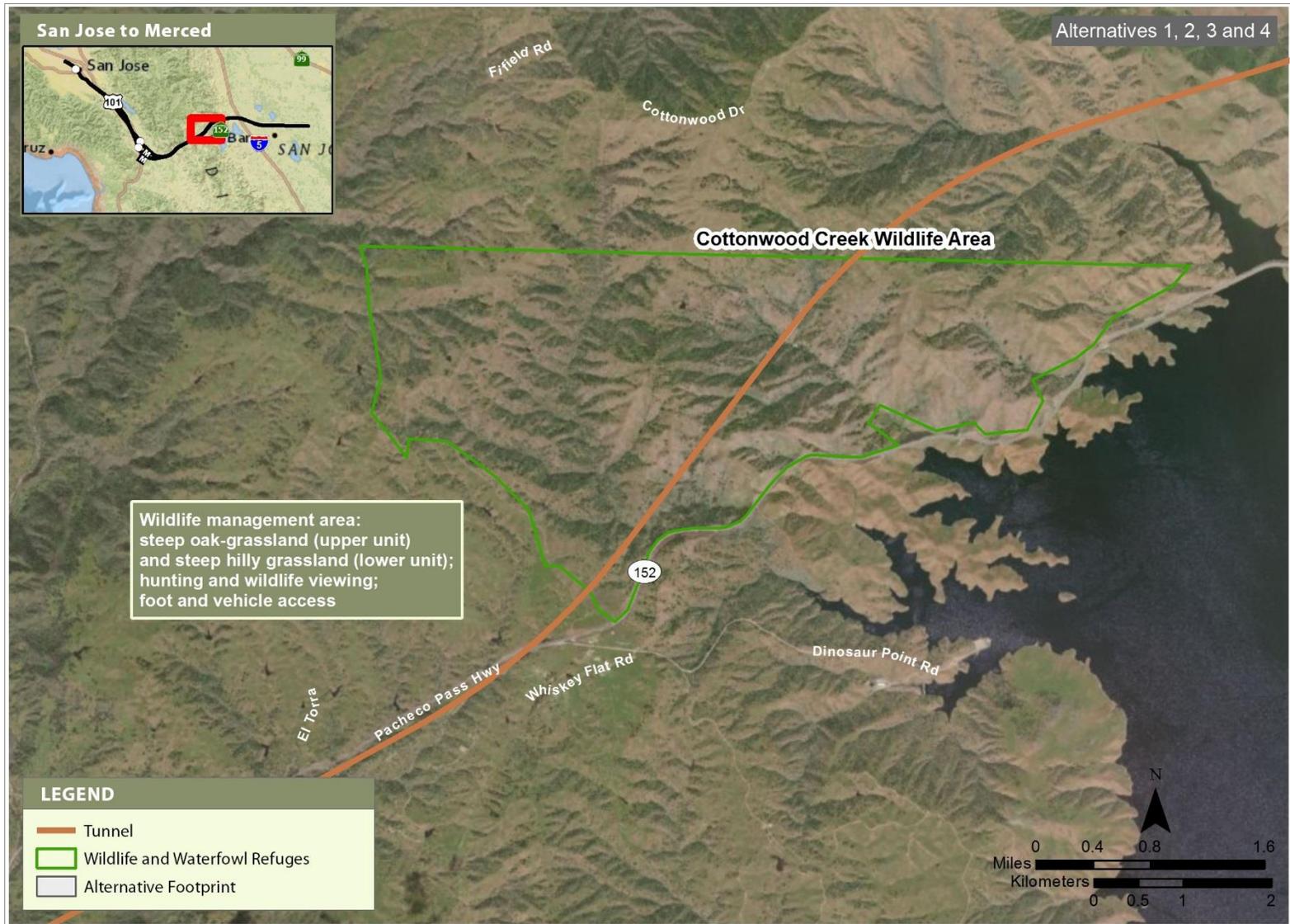
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Figure 4-47 Forest Street Park



APRIL 2019

Figure 4-48 Gilroy Sports Park



APRIL 2019

Figure 4-49 Cottonwood Creek Wildlife Area



APRIL 2019

Figure 4-50 Volta Wildlife Area



Figure 4-51 Los Banos Wildlife Area

4.6.1.29 Summary of Section 4(f) Use Determinations of Parks, Recreation, and Wildlife and Waterfowl Refuges

A summary of Section 4(f) uses of parks, recreation, and wildlife and waterfowl refuges is shown in Table 4-6. In some cases, resources are located within the project footprint of more than one alternative. Direct and *de minimis* preliminary Section 4(f) use determinations and temporary occupancy determinations are included in the table. In total, Alternative 1 would affect 8 resources, Alternative 2 would affect 12 resources, Alternative 3 would affect 11 resources, and Alternative 4 would affect 7 resources. A *de minimis* impact is unlikely to be a significant differentiating factor among alternatives because the net harm resulting from the *de minimis* impact is negligible.

Table 4-6 Summary of Section 4(f) Uses of Parks, Recreation, and Wildlife and Waterfowl Refuges

Alternative	Number of Parks, Recreation, and Wildlife and Waterfowl Refuges Impacts	Parks, Recreation, and Wildlife and Waterfowl Refuges Preliminary Section 4(f) Determinations
San Jose Diridon Station Approach Subsection		
Alternative 1	2	Los Gatos Creek Trail and Park (<i>de minimis</i>) Guadalupe River Trail, Reach 6 (<i>de minimis</i>) Tamien Park (temporary occupancy)
Alternative 2	5	Reed Street Dog Park (<i>de minimis</i>) Larry J. Marsalli Park (temporary occupancy) College Park (temporary occupancy) Los Gatos Creek Trail and Park (<i>de minimis</i>) Guadalupe River Trail, Reach 6 (<i>de minimis</i>) Tamien Park (temporary occupancy)
Alternative 3	5	Reed Street Dog Park (<i>de minimis</i>) Larry J. Marsalli Park (temporary occupancy) College Park (temporary occupancy) Los Gatos Creek Trail and Park (<i>de minimis</i>) Guadalupe River Trail, Reach 6 (<i>de minimis</i>) Tamien Park (temporary occupancy)
Alternative 4	2	Los Gatos Creek Trail and Park (<i>de minimis</i>) Fuller Park (<i>de minimis</i>) Tamien Park (temporary occupancy)
Monterey Corridor Subsection		
None		
Morgan Hill and Gilroy Subsection		
Alternative 1	3	Coyote Creek Parkway (<i>de minimis</i>) Coyote Creek Trail (<i>de minimis</i>) Field Sports Park (temporary occupancy)

Alternative	Number of Parks, Recreation, and Wildlife and Waterfowl Refuges Impacts	Parks, Recreation, and Wildlife and Waterfowl Refuges Preliminary Section 4(f) Determinations
Alternative 2	4	Coyote Creek Parkway (<i>de minimis</i>) Coyote Creek Trail (<i>de minimis</i>) Field Sports Park (temporary occupancy) Morgan Hill Community and Cultural Center (<i>de minimis</i>)
Alternative 3	3	Coyote Creek Parkway (<i>de minimis</i>) Coyote Creek Trail (<i>de minimis</i>) Field Sports Park (temporary occupancy)
Alternative 4	2	Coyote Creek Parkway (<i>de minimis</i>) Field Sports Park (temporary occupancy) Villa Mira Monte (temporary occupancy)
Pacheco Pass Subsection		
None		
San Joaquin Valley Subsection		
Alternative 1	2	Cottonwood Creek Wildlife Area (<i>de minimis</i>) Los Banos Wildlife Area (temporary occupancy)
Alternative 2	2	Cottonwood Creek Wildlife Area (<i>de minimis</i>) Los Banos Wildlife Area (temporary occupancy)
Alternative 3	2	Cottonwood Creek Wildlife Area (<i>de minimis</i>) Los Banos Wildlife Area (temporary occupancy)
Alternative 4	2	Cottonwood Creek Wildlife Area (<i>de minimis</i>) Los Banos Wildlife Area (temporary occupancy)

4.6.2 Cultural Resources

Section 106 of the NHPA requires federal agencies to consider a project's effect on cultural resources in much the same way as Section 4(f). The Section 106 process is the method by which historic properties are identified, project effects on historic properties are determined, and how adverse effects on historic properties will be avoided, minimized, or mitigated. Section 4(f) uses the results of the Section 106 process to analyze if the project would result in a use of a historic property under Section 4(f).

The most important difference between the two statutes is the way each of them measures impacts on cultural resources. Whereas Section 106 is concerned with "adverse effects," Section 4(f) is concerned with "use" of protected properties. An adverse effect does not necessarily result in a Section 4(f) use unless the effect substantially impairs the attributes and features that qualify the resource for protection under Section 4(f).

A Section 4(f) use of a historic property is analyzed by (1) identifying if the project would permanently incorporate land from the property and (2) reviewing the effects on the property as documented during the Section 106 process. If an alternative would permanently incorporate land from the property or result in a temporary use (i.e., does not meet the criteria for temporary occupancy discussed in Section 4.1.4.2) and would also result in an adverse effect under Section 106, this impact would constitute a Section 4(f) use. If the project would result in a permanent incorporation or temporary use, but it does not result in an adverse effect under Section 106, then

the impact would be a *de minimis* determination, provided SHPO concurs with the no adverse effects determination.

Based on the analysis conducted for cultural resources (see Section 3.17), 17 NRHP-listed or eligible historic sites would be adversely affected under Section 106 by one or more project alternatives. Ten of these properties have been preliminarily determined to incur Section 4(f) uses because they would be permanently incorporated into the HSR right-of-way.

A finding of adverse effect does not automatically result in a Section 4(f) use. Where there is the potential for an adverse effect on a protected property, the Authority completes a property-specific evaluation to determine whether the adverse effects would substantially impair the attributes that qualify this resource for protection under Section 4(f). Section 4(f) constructive use determinations are based on analyzing the potential proximity impacts on the properties, taking into account the activities, features, or attributes that qualify the property for protection under Section 4(f).

- If physical impacts result in a finding of adverse effects, then there is a Section 4(f) use.
- If proximity effects substantially impair the attributes of the eligible or listed property, then there is a Section 4(f) constructive use.
- If the effects do not substantially impair the attributes such that the property is going to be permanently incorporated, then there is no use under Section 4(f).
- If the effects do not substantially impair the attributes and the property, or portion thereof, is going to be permanently incorporated, then the impacts should be considered *de minimis*.

The locations of historic properties are illustrated on Figure 4-10 through Figure 4-17. Impacts, Section 106 findings, and preliminary use assessments for all Section 4(f) historic properties are shown in Table 4-7. Detailed use assessments for only those Section 4(f) historic properties that are subject to a permanent use, *de minimis impact*, or temporary occupancy, or for resources that could incur a constructive use, immediately follow Table 4-7. These potential impacts are also illustrated on Figure 4-52 through Figure 4-69. All National Register eligibility determinations have been made by the Authority, the lead agency for Section 106; SHPO has not yet concurred with these determinations. There are two historic properties, Villa Mira Monte (APE ID 2194) and the Church of Christ (APE ID 2363)/Morgan Hill Community and Cultural Center that are also recreational facilities. Effects on these properties are discussed in Section 4.7.1 only because only one Section 4(f) determination can be made for each property.³

³ Note that the historic properties at Villa Mira Monte and the Morgan Hill Community and Cultural Center, the Church of Christ building, would not be adversely affected under Section 106.

Table 4-7 Potential Impacts on Historical Resources Evaluated for Potential Section 4(f) Use

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
San Jose Diridon Station Approach Subsection						
0141	Santa Clara Railroad Historical Complex Santa Clara Depot	Alternatives 1–4: 0 feet (adjacent)	Alternatives 1 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1 and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Santa Clara Railroad Historical Complex Santa Clara Depot for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Section 4.6.2.1 and Figure 4-52
			Alternatives 2 and 3: Same as Alternatives 1 and 4.	Alternatives 2 and 3: Same as Alternatives 1 and 4, except for greater change to integrity of historic setting and feeling.	Adverse effect	
0210	Polhemus House	Alternatives 1–3: 0 feet (adjacent) Alternative 4: 610 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Bellarmine College Preparatory and Polhemus House for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
0304	623 Stockton Avenue, San Jose	Alternatives 1–3: 0 feet (adjacent) Alternative 4: 436 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify 623 Stockton Avenue for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
0497	Southern Pacific Depot (Diridon Station, Hiram Cahill Depot)	Alternatives 1–4: 0 feet (within footprint)	All Project Alternatives: Permanent use, requiring demolition of a contributing structure.	All Project Alternatives 1: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.2 and Figure 4-53

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
0522	Sunlite Baking Company	Alternatives 1–3: 0 feet (within footprint)	Alternatives 1–3: Permanent use, requiring demolition of the structure.	Alternatives 1–3: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.3 and Figure 4-54
		Alternative 4: 0 feet (within footprint)	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Sunlite Baking Company for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Section 4.6.2.3 and Figure 4-54
0585	415 Illinois Avenue	Alternatives 1–3: 0 feet (within footprint)	Alternatives 1–3: Project design requires demolition of the structure. However, CUL-MM#11 would relocate the project component ATC site to a nearby parcel, and demolition would no longer be necessary. Therefore, no permanent use or TCE required. No changes in access would occur.	Alternatives 1–3: Noise and visual impacts would not be of a severity that the protected attributes that qualify 415 Illinois Avenue for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	Adverse effect	No use See Section 4.6.2.4 and Figure 4-55
		Alternative 4: 776 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify 415 Illinois Avenue for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
Morgan Hill and Gilroy Subsection						
1778	Pacific Intertie	Alternatives 1–4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No adverse effect	No use

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
1863	Stevens/Fisher House	Alternatives 1–3: 0 feet (within footprint)	Alternatives 1 and 3: Permanent use of 0.03 acre and temporary use of 0.01 acre would be required. No changes in access would occur. Construction vibration could cause building damage.	Alternatives 1 and 3: Discussion of proximity impacts is not required because a permanent use has been established.	No adverse effect	<i>De minimis</i> See Section 4.6.2.5 and Figure 4-56
			Alternative 2: Permanent use, requiring demolition of the structure.	Alternative 2: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.5 and Figure 4-56
		Alternative 4: 68 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Same as Alternatives 1 and 3.	No adverse effect	No use See Section 4.6.2.5 and Figure 4-56
1909	Barnhart House	Alternatives 1 and 3: 21 feet	Alternatives 1 and 3: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause building damage.	Alternatives 1 and 3: Noise and visual impacts would not be of a severity that the protected attributes that qualify Barnhart House for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Section 4.6.2.6 and Figure 4-57
		Alternative 2: 0 feet (within footprint)	Alternative 2: Permanent use, requiring demolition of the structure.	Alternative 2: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.6 and Figure 4-57
		Alternative 4: 32 feet	Alternative 4: No permanent use or TCE required. No changes in access would occur.	Alternative 4: Same as Alternatives 1 and 3.	No effect	No use See Section 4.6.2.6 and Figure 4-57

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
2127	Madrone Underpass	Alternatives 1 and 3: 2,435 feet	Alternatives 1 and 3: This resource is outside the RSA of Alternatives 1 and 3.	Alternatives 1 and 3: This resource is outside the RSA of Alternatives 1 and 3.	No effect	No use
		Alternative 2: 0 feet (within footprint)	Alternative 2: No permanent use; a 0.08 acre TCE required. No changes in access would occur. Construction vibration could cause building damage.	Alternative 2: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No effect	No use See Section 4.6.2.7 and Figure 4-58
		Alternative 4: 0 feet (within footprint)	Alternative 4: Permanent use, requiring demolition of the structure.	Alternative 4: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.7 and Figure 4-58
3001	San Martin Winery	Alternatives 1-4: 0 feet (within footprint)	Alternative 1: Permanent use, requiring demolition of the structure.	Alternative 1: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.8 and Figure 4-59
			Alternative 2: Permanent use, requiring demolition of the structure.	Alternative 2: Not applicable because of structure demolition.		
			Alternative 3: Permanent use, requiring demolition of the structure.	Alternative 3: Not applicable because of structure demolition.		
			Alternative 4: Permanent use of 0.22 acre and temporary use of 0.44 acre would be required. No changes in access would occur.	Alternative 4: Discussion of proximity impacts is not required because a permanent use has been established.	No adverse effect	<i>De minimis</i> See Section 4.6.2.8 and Figure 4-59
3210	Hoenck House	All Project Alternatives: 158 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Hoenck House for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
3291	Japanese School (Gilroy Grange)	Alternative 1: 0 feet (adjacent) Alternative 3: 1,151 feet Alternative 4: 266 feet	Alternatives 1, 3, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 3, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Japanese School for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Section 4.6.2.9 and Figure 4-60
		Alternative 2: 0 feet (adjacent)	Alternative 2: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause building damage.	Alternative 2: Same as Alternatives 1, 3, and 4.	No adverse effect	
3402	IOOF Orphanage Home	Alternatives 1 and 2: 0 feet (within footprint)	Alternative 1: No permanent use; temporary occupancy of 0.11 acre would be required. No changes in access would occur.	Alternative 1: Noise and visual impacts would not be of a severity that the protected attributes that qualify IOOF Orphanage Home for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	Temporary Occupancy See Section 4.6.2.10 and Figure 4-61
			Alternative 2: Permanent use of 0.93 acre and temporary use of 0.23 acre would be required. No changes in access would occur.	Alternative 2: Discussion of proximity impacts is not required because a permanent use has been established.	Adverse effect	
		Alternatives 3 and 4: 7 feet	Alternatives 3 and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 3 and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify IOOF Orphanage Home for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Figure 4-61

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
3439	Gilroy City Hall	Alternative 1: 11 feet Alternative 3: 945 feet Alternative 4: 6 feet	Alternatives 1, 3, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 3, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Gilroy City Hall for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use See Section 4.6.2.11 and Figure 4-62
		Alternative 2: 5 feet	Alternative 2: Same as Alternatives 1, 3, and 4. Construction vibration could cause building damage.	Alternative 2: Same as Alternatives 1, 3, and 4, except greater change to historic setting.	No adverse effect	
3458	Live Oak Creamery	Alternatives 1, 2, and 4: 0 feet (within footprint)	Alternative 1: Permanent use, requiring demolition of the structure.	Alternative 1: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.12 and Figure 4-63
			Alternative 2: Permanent use, requiring demolition of the structure.	Alternative 2: Same as Alternative 1.		
		Alternative 3: 743 feet	Alternative 4: Permanent use, requiring demolition of the structure.	Alternative 4: Same as Alternative 1.	No adverse effect	No use See Figure 4-63
3610	Southern Pacific Train Station	Alternatives 1, 2, and 4: 0 feet (adjacent)	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Southern Pacific Train Station for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
		Alternative 3: 1,259 feet	Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except fewer changes to historic setting.	No adverse effect	

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
3855	Old Gilroy House 6860 Holsclaw Road	Alternatives 1 and 4: 793 feet Alternative 2: 3,478 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify 6860 Holsclaw Road for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
		Alternative 3: 304 feet	Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting.	No adverse effect	
3871	San Ysidro Valley Presbyterian Church (Ricketts House)	Alternatives 1 and 4: 408 feet Alternative 2: 2,699 feet Alternative 3: 310 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify San Ysidro Valley Presbyterian Church for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
			Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting.	No adverse effect	
3882	Edwin Willson House and Barn	Alternatives 1 and 4: 304 feet Alternative 2: 1,957 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Edwin Willson House and Barn for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
		Alternative 3: 0 feet (adjacent)	Alternative 3: Same as Alternatives 1, 2, and 4	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting.	No adverse effect	

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
3903	White/Sturla Ranch	Alternatives 1 and 3: 41 feet Alternative 2: 720 feet Alternative 4: 67 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify White/Sturla Ranch for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
3906	Horace Willson House	Alternatives 1–4: 0 feet (adjacent)	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Horace Willson House for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
			Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting. Although the SR 152 realignment and the raising of the roadway on embankment would alter the property's agricultural setting, this diminishment of setting would not be of a sufficient degree to prevent the property from conveying its historic and architectural significance.	No adverse effect	

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
3925	Phegley House	Alternatives 1, 2, and 4: 8 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Phegley House for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
		Alternative 3: 2 feet	Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting. Although Alternative 3 would result in changes to the broader agricultural setting of the Phegley House, it would not alter setting characteristics that qualify the property for inclusion in the NRHP.	No adverse effect	
3997	Ellis Ranch	Alternatives 1–4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Ellis Ranch for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
4024	Millers Canal	Alternatives 1–4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause structure damage.	All Project Alternatives: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No effect	No use See Section 4.6.2.13 and Figure 4-64

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
4652	Saint Louise Regional Hospital and 705 Las Animas Avenue Home Site	Alternatives 1, 2, and 4: 1,363 feet	Alternatives 1, 2, and 4: No permanent use or TCE required. No changes in access would occur.	Alternatives 1, 2, and 4: Noise and visual impacts would not be of a severity that the protected attributes that qualify Saint Louise Regional Hospital and 705 Las Animas Avenue Home Site for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
		Alternative 3: 73 feet	Alternative 3: Same as Alternatives 1, 2, and 4.	Alternative 3: Same as Alternatives 1, 2, and 4, except greater changes to historic setting.	No adverse effect	
Pacheco Pass Subsection						
4140	Pacheco CDF	Alternatives 1-4: 384 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Pacheco CDF for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
4214	California Aqueduct	Alternatives 1-4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause structure damage.	All Project Alternatives: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No effect	No use See Section 4.6.2.14 and Figure 4-65
San Joaquin Valley Crossing Subsection						
4231	Delta-Mendota Canal	Alternatives 1-4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause structure damage.	All Project Alternatives: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No effect	No use See Section 4.6.2.15 and Figure 4-66

APE Map ID	Name	Distance to Nearest Project Feature ¹	Construction Impact	Operations Impact	Preliminary Section 106 Determination ²	Preliminary 4(f) Use Determination
4272	San Joaquin and Kings River—Main Canal	Alternatives 1–4: 0 feet (adjacent)	All Project Alternatives: No permanent use or TCE required. No changes in access would occur. Construction vibration could cause structure damage.	All Project Alternatives: This type of property would not be affected by noise or visual impacts. Therefore, no constructive use would result.	No effect	No use See Section 4.6.2.16 and Figure 4-67
4302	Cottani Family Property	Alternatives 1–4: 302 feet	All Project Alternatives: No permanent use or TCE required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Cottani Family Property for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	No adverse effect	No use
4310	Negra Ranch	Alternatives 1–4: 0 feet (within footprint)	All Project Alternatives: No permanent use; temporary occupancy of 0.01 acre would be required. No changes in access would occur.	All Project Alternatives: Noise and visual impacts would not be of a severity that the protected attributes that qualify Negra Ranch for protection under Section 4(f) would be substantially impaired, and no constructive use would result.	Adverse effect	Temporary Occupancy See Section 4.6.2.17 and Figure 4-68
4317	Cozzi Family Property	Alternatives 1–4: 0 feet (within footprint)	All Project Alternatives: Permanent use, requiring demolition of the structure.	All Project Alternatives: Not applicable because of structure demolition.	Adverse effect	Use See Section 4.6.2.18 and Figure 4-69

APE = Area of Potential Effect; ATC = Automatic Train Control; NRHP = National Register of Historic Places; TCE = temporary construction easement;

¹ The nearest project feature could be a TCE or part of the project footprint (permanent ROW, easement, etc.)

² Under Section 106, no adverse effect is considered to be either no use or *de minimis* impacts.

4.6.2.1 Santa Clara Railroad Historical Complex Use Assessment/APE Map ID 141

The Santa Clara Railroad Historical Depot is individually listed in the NRHP (NRHP Reference No. 85000359, certified on NRHP in February 28, 1985); the larger complex was determined eligible for the NRHP. This resource is a combination of two neighboring parcels that includes the listed depot and three outbuildings not included in the NRHP nomination: the control tower (1926), the maintenance-of-way speeder shed (1926) and the maintenance-of-way section tool house (1895). The complex, which includes the listed depot, is eligible under NRHP Criterion A at the local level of significance for its association with the agricultural, industrial, educational, and commercial development of Santa Clara County. The complex is also eligible under NRHP Criterion C as one of the largest surviving wood-frame depots in California and one of few intact examples of board-and-batten depots. These three outbuildings have been reevaluated and found eligible for the NRHP with SHPO concurrence. The footprint of these three buildings and the footprint of the depot building compose the historic boundary of the Santa Clara Railroad Historical Complex.

Alternatives 1 and 4

Under Alternatives 1 and 4 (Figure 4-52), no permanent use or temporary construction use would occur. Existing at-grade Caltrain tracks would be upgraded to accommodate blended Caltrain/HSR service. New UPRR and Caltrain tracks would be constructed just north of the HSR guideway, beginning near Benton Street to just past the Santa Clara Station. The existing UPRR tracks would be shifted to the north side of the HSR right-of-way. Existing at-grade railroad tracks are located on the north side of the resource and the presence of at-grade railroad tracks adjacent to the complex is part of its historic setting.

TCEs would be located within the property boundary of the Santa Clara Depot and would surround the primary depot building and the control tower. However, the TCEs would be located outside the historic boundary of the complex. The control tower, depot building, and southbound platforms would be retained. However, as with any TCE, any activities in support of project construction would be allowed in areas designated as TCE, such as materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE have the potential to result in inadvertent damage or demolition of the resource or its character-defining features.

However, project features and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction. The contractor would prepare a pre-construction conditions assessment of the depot, tool house, speeder shed, and control tower. Based on the condition of each of the buildings, the contractor would then develop a plan for their protection. Protective measures would be in place prior to any construction activities (CUL-IAMF#6: Pre-Construction Conditions Assessment, Plan for Protection of Historic Built Resources, and Repair of Inadvertent Damage). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2: WEAP Training Session). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer, would assess the damage and determine the best approach to repair the buildings, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would prepare a built environment monitoring plan (BEMP) prior to construction to detail the monitoring methods and process required for ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7: Built Environment Monitoring Plan). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8: Implement Protection and/or Stabilization Measures). In addition, under mitigation measure CUL-MM#8: Repair of Inadvertent Damage, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties.

Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternatives 1 and 4 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 1 and 4. Because Alternatives 1 and 4 would not materially impair the resource and its setting such that the significance of the resource would be substantially changed, Alternatives 1 and 4 would not result in a Section 4(f) use of the Santa Clara Railroad Historical Complex.

The Authority has made a finding of no adverse effect on this resource under Section 106 for Alternatives 1 and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternatives 1 and 4 would have no adverse effect on the Santa Clara Railroad Historical Complex, the Authority would make an impact finding of no use for this resource.

Alternatives 2 and 3

Under Alternatives 2 and 3 (Figure 4-52), no permanent use or temporary construction use would occur because new HSR tracks on a 35-foot viaduct with additional 27-foot overhead contact system (OCS) poles would be constructed within the current railroad right-of-way passing adjacent to the Santa Clara Railroad Historical Complex, and would be located to the north of the historic property boundary. The viaduct piers and their footings would be positioned to avoid the historic buildings within the station complex, but they would require demolition and rebuilding of the northbound platform, which is not a character-defining feature of the resource. The new viaduct would be placed approximately 75 feet north of the primary depot building. Additionally, under Alternatives 2 and 3 an existing fiber optic utility line east of the contributing speeder shed and tool house would be shifted west, to a location adjacent to the east façades of these two buildings. Relocation of this utility line would not involve physical change to the contributing buildings of the Santa Clara Railroad Historical Complex. Under Alternatives 2 and 3, an area designated as a TCE would encompass the depot building and control tower, and would overlap a portion of the tool house and speeder shed.

A TCE would be located in the area around the three contributing outbuildings (the control tower, speeder shed, and tool house) and the primary depot building, but not within the historic property boundary. Any activities in support of construction of the project would be allowed in areas designated as TCE, such as materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE have the potential to result in inadvertent damage or demolition of the resource or its character-defining features.

However, project features and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction. The contractor would prepare a pre-construction conditions assessment of the depot, tool house, speeder shed and control tower. Based on the condition of each of the buildings, the contractor would then develop a plan for their protection. Protective measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer, would assess the damage and determine the best approach to repair the buildings, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would prepare a BEMP prior to construction to detail the monitoring methods and process required for ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8). In addition, under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. However, preparation of a Plan for the Protection of Historic Built Resources and Repair of Inadvertent Damage (CUL-IAMF#6), including a pre-condition assessment, will establish a baseline of the property's existing condition and identify structural deficiencies, if any. As a result, project changes can be made to protect and stabilize the resource (CUL-IAMF#8) in order to avoid or minimize inadvertent adverse effects—for example, replacing pile driving with cast-in-drilled-holes. In addition, a BEMP would be prepared prior to construction to detail the monitoring methods and process required prior to initiation of ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternatives 2 and 3 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities,

features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 2 and 3.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternatives 2 and 3 due to impairment of its integrity of setting and feeling. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Although Alternatives 2 and 3 would have an adverse effect on the Santa Clara Railroad Historical Complex, the Authority would make an impact finding of no use for this resource because the two project alternatives would not impair the physical attributes that qualify the resource for listing, nor cause substantial impairment to the resource. Despite the changes to the setting, the resource will still remain eligible for the NRHP, and the physical attributes of the resource will still easily convey the station's historic significance.

4.6.2.2 Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) Use Assessment/APE Map ID 497

Southern Pacific Depot District is a multiple-component property listed in the NRHP (NRHP Reference No. 93000274, certified on NRHP in April 1, 1993). The district is significant under NRHP Criterion C as a property that fully expresses the Italian Renaissance Revival-style. Within the historic boundary, the 1992 nomination documented a total of 10 contributing buildings and structures. Three structures have been demolished since the NRHP nomination in 1992: the water tower, herder's shack, and compressor house. The contributing resources to the district that are extant are the Diridon Station depot building, car cleaner's shack, the iron fence, Santa Clara underpass, two butterfly sheds, and the train tracks.

Alternatives 1, 2, 3, and 4

All four project alternatives (Figure 4-53) would result in adverse effects on the property under Section 106 because components of the historic property would be demolished. Therefore, all four alternatives would result in a use under Section 4(f).

Alternatives 1, 2, and 3 feature aerial platforms elevated to approximately 65 feet and serviced by a four-track aerial station facility with elevated mezzanine-level concourse and two 30-foot-wide, 1,410-foot-long dedicated HSR platforms constructed above the existing Caltrain tracks and platforms. The new HSR station facility would include modern multistory structures built to the north, south, and west of the existing Diridon Station/Hiram Cahill Depot, and would be immediately adjacent to the west façade of the Southern Pacific Depot.

In addition, while the depot building itself would not be altered, construction of the new HSR station service building would require the demolition of contributors to the historic property, such as the wall and fence system, iron gate with square classical posts and curvilinear details on the north side of the depot, existing train tracks, and car cleaner's shack.

Under Alternative 4, HSR tracks would be blended with Caltrain tracks at grade in the approach to the Southern Pacific Depot. OCS poles 27 feet tall would be installed within the Caltrain and HSR right-of-way. The new HSR right-of-way would employ the existing rail overpass that crosses W Santa Clara Street, which is a contributor to the historic property. However, the existing rail tracks within the throat and yard of the station would be reconfigured. HSR trains would use the two center platforms of the station, which would be extended to the south to reach a length of between 1,390 and 1,470 feet. As under the other three project alternatives, a new HSR station facility would be constructed west of the existing historic depot building. The HSR station facility would have a smaller footprint than the facility under Alternatives 1, 2, and 3, and would allow a greater distance between its volume and the rear of the historic depot building; under Alternative 4, the buildings would not directly abut one another. The new HSR station facility would wrap around the north and south ends of the historic depot building, and the south wing would require the demotion of the car cleaner's shack. The footprint of the new HSR station would also overlap the locations of a portion of the iron fence located north of the primary depot building. The existing pedestrian concourse crossing underneath the tracks, which is a character-defining feature of the resource, would be abandoned under Alternative 4 but would remain in

place. The station facility would additionally involve a raised concourse to provide access to the HSR platforms, and vertical circulation paths would require the butterfly sheds located at the station platforms to be removed. This alternative would also relocate the current automobile parking lots and transit station located north of the Southern Pacific Depot; the transit station would be placed along Cahill, Crandall, and Stover Streets.

While design of the HSR station building proposes reuse of the existing Diridon Station/Hiram Cahill Depot, it does not provide details about how the station would be reused, which character-defining features would be retained or lost, what efforts would be undertaken to comply with the SOI's Standards for Rehabilitation, or what design guidelines would be employed so that new construction would be compatible with the character of the existing depot building. However, mitigation measure CUL-MM#10: Station Design Consistent with the SOI's Standards for the Treatment of Historic Properties would be implemented at this resource. The Authority would issue requests for qualifications (RFQ) to receive statements of qualifications (SOQ) from qualified firms (contractor) for station designs and related services. Such firms would be contracted to provide professional consultant and design services for all design stages through final design. Selected firms would be responsible for making their designs context sensitive and meeting the SOI's Standards for the Treatment of Historic Properties. The Authority would require the contractor to provide three schemes for Authority review, including an evaluation of each scheme. The deliverables would also include drawings, such as plans, elevations, and renderings. The contractor would be required to include in each evaluation a historic property design compatibility report prepared by a qualified architectural historian describing how the scheme is consistent with the SOI's Standards for Rehabilitation for infill designs or additions, and if any restoration or rehabilitation would be required of the historic buildings and structures and how such restoration is consistent with the SOI's Standards for Restoration. The report would be reviewed and commented upon by the Authority's professionally qualified staff and may require revision prior to transmitting it to the SHPO and other MOA signatories and consulting parties, as specified in the MOA and BETP.

Under all alternatives, the project includes features to avoid inadvertent damage and demolition of the remainder of the resource that would not be demolished as part of the HSR Project. The contractor would prepare a pre-construction conditions assessment of the depot building and Santa Clara Underpass, and, based on the condition of each of the contributing features, develop a plan for their protection; protective measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be informed of the need to avoid affecting any of these built resources, as well as tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer, would assess the damage and determine the best approach to repair the buildings, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would prepare a BEMP prior to construction to detail the monitoring methods and process required for ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8).

After construction is complete, TCEs would be returned to their pre-construction condition. Under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented. Implementation of the mitigation measure would minimize the impact on the resource.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project

features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

The Authority has made a finding of adverse effect for this resource under Section 106 for all project alternatives. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

All project alternatives require construction of a modern multistory station infrastructure north and west of the existing Diridon Station/Hiram Cahill Depot, resulting in the demolition or destruction of character-defining features during construction. Thus, all four project alternatives would result in a Section 4(f) use.

4.6.2.3 Sunlite Baking Company Use Assessment/APE Map ID 522

The Sunlite Baking Company is a one-story building eligible for listing under NRHP Criterion C as a distinctive example of the Art Moderne architectural style interpreted for an industrial production facility. The historic property boundary is the footprint of the building on the parcel. The building's irregular plan is composed of the original (northeast) volume, constructed in 1936 as an industrial-scale bakery, appended to a series of additions. The central feature is a stepped Streamline Moderne-style entrance that rises slightly above the roofline and contains a recessed entry, made of a steel pedestrian door underneath a projecting canopy. The architectural features that directly convey the building's architectural style remain largely intact such that it continues to convey its significance under Criterion C.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 (Figure 4-54) would result in adverse effects on the property under Section 106 because it would be demolished. A portion of the resource is located in the path of the new HSR right-of-way, with track on viaduct, and a new permanent roadway right-of-way with bike lane. A new HSR station parking lot would be constructed on the western half of the parcel, with drop-off and pick-up areas in the center of the parcel. These changes would expand the existing Caltrain right-of-way located to the west.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternatives 1, 2, and 3. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because the Sunlite Baking Company would be demolished and permanently incorporated into the project footprint, resulting in the alteration of its physical characteristics such that the qualities that qualify it for listing in the NRHP would be destroyed, Alternatives 1, 2, and 3 would result in a Section 4(f) use.

Alternative 4

Under Alternative 4 (Figure 4-54), no permanent use or temporary occupancy would occur. The parcel containing the resource would be located within an area temporarily designated for construction access during implementation of the project, although no property acquisition would occur, and the resource would not physically be used for access or otherwise temporarily used during construction. Note that the historic property boundary is restricted to the footprint of the building. The HSR right-of-way would be blended with the Caltrain tracks in the existing Caltrain right-of-way, which at nearest lies approximately 50 feet from the rear façade of the Sunlite Baking Company. New 27-foot-tall OCS poles would be installed within the Caltrain and HSR rights-of-way. Under Alternative 4, Cahill Street would not be extended south past Otterson

Street, such that the project alternative would not demolish the Sunlite Baking Company. Additionally, telecommunication utilities would be relocated within the S Montgomery Street right-of-way, which leads east of the Sunlite Baking Company. The utility relocation would occur approximately 50 feet from the primarily façade of the resource.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 4 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 4 on the resource. Since the resource is currently near to the Caltrain right-of-way and a quiet setting is not considered to be a character-defining feature, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 4.

Because Alternative 4 would not materially impair the resource and its setting such that the significance of the resource would be substantially changed, Alternative 4 would not result in a Section 4(f) use of the Sunlite Baking Company.

The Authority has made a finding of no adverse effect on this resource under Section 106 for Alternative 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 4 would have no adverse effect on the Sunlite Baking Company, the Authority would make an impact finding of no use for this resource.

4.6.2.4 415 Illinois Avenue/APE Map ID 0585

415 Illinois Avenue is a small, one-story residential building that is a good example of a turn-of-the-century worker's cottage in San Jose. The property is individually eligible for listing in the NRHP under Criterion C. The period of significance for 415 Illinois Avenue is 1899 to 1950, the era in which the residence was constructed and used as a worker's cottage. The historic property boundary is the footprint of the worker's cottage building (located on APN 26419038).

Alternative 4 is located approximately 776 feet from the resource; therefore, it is only discussed in Table 4-7.

Alternatives 1, 2, and 3

Alternatives 1, 2, and 3 (Figure 4-55) would result in adverse effects on the property under Section 106 because the project would demolish the resource and construct an automatic train control (ATC) site within the parcel that currently contains it. All three project alternatives would also construct an approximately 70-foot-tall HSR viaduct that crosses the southern corner of the parcel. However, a mitigation measure (CUL-MM#11) has been designed to avoid demolition of the resource during construction. The ATC site would be relocated on a nearby parcel within the footprint of the alternatives, such that demolition of the resource would no longer be necessary.

With implementation of this mitigation measure, proximity impacts on the resource associated with HSR operations would be vibration-related damage to the characteristics that qualify 415 Illinois Street for listing in the NRHP and CRHR, increased noise, and changed visual environment. In order to protect the physical characteristics of 415 Illinois Avenue from vibration impacts during HSR construction, CUL-MM#11 would also require the incorporation of the following project features: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BETP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). With implementation of CUL-MM#11 and project design features, vibration would not diminish the physical characteristics of the resource such that it no longer

qualifies for listing in the NRHP and CRHR. Since the resource is currently near the Caltrain right-of-way, it is anticipated that increased noise and changes to the visual environment resulting from HSR operations would have a limited effect on the protected activities of the resource. Accordingly, operational vibration, noise, and visual impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 1, 2, and 3.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternatives 1, 2, and 3. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Although 415 Illinois Avenue would be demolished and permanently incorporated into the project footprint before mitigation, the application of CUL-MM#11 would prevent its demolition. Therefore, Alternatives 1, 2, and 3 would not result in the alteration of its physical characteristics such that the qualities that qualify it for listing in the NRHP would be destroyed, and Alternatives 1, 2, and 3 would result in no Section 4(f) use.

4.6.2.5 Stevens/Fisher House Use Assessment/APE Map ID 1863

The property is individually eligible for listing in the NRHP under Criterion A at the local level as an example of early settlement and residential development in the Coyote Valley. The historic property boundary is APN 725011008. The building retains many of its original design features, included its height and massing, general fenestration pattern, and wood elements including wrap-around porch with spindlework, milled wood trim, fish-scale shingles, and carved brackets. Integrity of setting and feeling have been slightly reduced because of nearby construction or new residential buildings, which abut the subject property at the rear of the northwest lot line, adjacent to the barn; however, despite this change, several factors enable the subject property to retain an adequate level of integrity of setting and feeling to convey its historic significance.

Alternatives 1 and 3

Under Alternatives 1 and 3 (Figure 4-56), a permanent use of the property would result because the relocated Monterey Road would be widened and would encroach into the historic property boundary, resulting in the use of 0.03 acre. Additionally, 0.01 acre would be used temporarily during construction. The existing roadway is currently 42 feet from the residence's primary (west) façade. The roadway right-of-way would pass approximately 20 feet in front of the residence's primary façade. The acquisition is small, on the periphery of the property, and would not affect the building. Although Alternatives 1 and 3 would minimally alter the character-defining features and its historic setting, the project alternatives would not change the ultimate use of the property. Therefore, this encroachment and permanent use would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

The contractor would prepare a pre-construction conditions assessment of the Stevens/Fisher House. Based on the condition of the resource, the contractor would then develop a plan for its protection. Protective measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer would assess the damage and determine the best approach to repair the buildings, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would prepare a BEMP prior to construction to detail the monitoring methods and process required for ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8). After construction is complete, the TCE area would be returned to its pre-construction condition.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

The Authority has made a finding of no adverse effect for this resource under Section 106 for Alternatives 1 and 3. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

The Authority would make a *de minimis* impact finding for this resource because the two project alternatives would not result in destruction of the attributes that qualify this resource for protection under Section 4(f) after the implementation of mitigation measures and the use of this resource would not change. The Authority would notify the SHPO of its intent to make a *de minimis* finding during the Section 106 consultation process. The Authority cannot approve the use of Stevens/Fisher House without written concurrence from the SHPO on the finding of no adverse effect.

Alternative 2

Under Alternative 2 (Figure 4-56), adverse effects on the property would result under Section 106 from the permanent use of 0.28 acre and temporary use of 0.22 acre of the resource, resulting in structure demolition. The Monterey Road right-of-way would be shifted to the east and would encroach onto the western half of the parcel that contains the Stevens/Fisher House. New telecommunications and electrical utilities would be placed adjacent to the road right-of-way on the current location of the Stevens/Fisher House. This road right-of-way and utilities would demolish the residence. The detached outbuilding located between the primary residence and detached garage would also be demolished.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternative 2. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 2 would require demolition of the residence on the western portion of property and could lead to demolition of the detached outbuilding east of the residence, Alternative 2 would materially impair the historic property's ability to convey its association with the early settlement and residential development in the Coyote Valley. Thus, a Section 4(f) use would result.

Alternative 4

Under Alternative 4 (Figure 4-56), no permanent use or temporary construction use would occur. The HSR right-of-way would be blended with the Caltrain tracks in the existing Caltrain right-of-way, which is approximately 90 feet southwest of the Stevens/Fisher House. New 27-foot-tall OCS poles would be installed within the Caltrain and HSR right-of-way. A new wildlife crossing would be constructed underneath the HSR and Monterey Road rights-of-way approximately 415 feet southeast of the Stevens/Fisher House.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 4 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station

area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 4.

Because Alternative 4 would not materially impair the resource and its setting such that the significance of the resource would be substantially changed, Alternative 4 would not result in a Section 4(f) use of Stevens/Fisher House.

The Authority has made a finding of no adverse effect on this resource under Section 106 for Alternative 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 4 would have no adverse effect on Stevens/Fisher House, the Authority would make an impact finding of no use for this resource.

4.6.2.6 Barnhart House Use Assessment/APE Map ID 1909

The Barnhart House is eligible for listing in the NRHP under Criterion C for its display of the Craftsman, Prairie, and Colonial Revival architectural styles. The property is located at 9940 Monterey Road in Morgan Hill, and the historic property boundary is the footprint of the residential building. The residence is a large, primarily single-story, sprawling bungalow.

Alternatives 1 and 3

Under Alternatives 1 and 3 (Figure 4-57), no permanent use or temporary construction use would occur within the historic property boundary, which is the footprint of the residential building. Under Alternatives 1 and 3, the HSR right-of-way would pass alongside the southwest boundary of the parcel, approximately 50 feet from the front of the Barnhart House. The HSR right-of-way would consist of track on viaduct, with a height varying between approximately 45 and 50 feet above grade alongside the parcel, with additional 27-foot-tall OCS poles. The viaduct would be located within the Monterey Road right-of-way. A traction power switching station, ATC site, and associated permanent access easement would be located in the west corner of the parcel, approximately 400 feet northwest of the Barnhart House. Because the existing setting consists of rural agricultural land, four-lane road, and at-grade railroad tracks, introduction of the elevated viaduct would alter the property's setting.

Under Alternatives 1 and 3, Monterey Road would be widened along the southwestern boundary of the parcel that contains the Barnhart House. The widened roadway would overlap the parcel by approximately 5 feet and Monterey Road would be expanded 5 feet closer to the resource than the current roadway. In its new location, the roadway would be approximately 25 feet from the southwest façade of the Barnhart House.

Also under Alternatives 1 and 3, a TCE would overlap the parcel by approximately 10 feet along Monterey Road, and would be separated from the historic resource boundary (the footprint of the Barnhart House) by approximately 20 feet. Any activities in support of project construction would be allowed in areas designated as TCEs, such as materials staging, operation of construction equipment, and installation of protective fencing. Although this TCE does not overlap with any of the property's character-defining features and is limited to an area of landscaping on the southern edge of the property, adjacent construction activities have the potential to result in inadvertent damage or demolition of the resource or its character-defining features. However, project features

and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction.

Project features include effective measures requiring training of construction staff on measures to avoid or protect cultural resources during construction (CUL-IAMF#2); preparation of assessments and plans prior to construction to outline protection measures that would need to be in place to protect the resource (CUL-IAMF#6); preparation of a built environment monitoring plan by the contractor in coordination with the Authority prior to construction to detail the monitoring methods and process (CUL-IAMF#7); and implementation of these planning documents by the contractor so that the plans are followed and that protection mechanisms are in place prior to the start of construction (CUL-IAMF#8). In addition, under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans would be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented. After construction is complete, the TCE area would be returned to its pre-construction condition.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternatives 1 and 3 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 3 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 1 and 3.

The Authority has made a finding of no adverse effect for this resource under Section 106 for Alternatives 1 and 3. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the Barnhart House that would lead to the removal of any of the resource's character-defining

features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternatives 1 and 3 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternatives 1 and 3 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

Alternative 2

Under Alternative 2 (Figure 4-57), adverse effects on the property would result under Section 106 from the permanent use of 0.08 acre and temporary use of 0.1 acre of the resource, resulting in structure demolition. The Barnhart House is located in the path of a new permanent roadway right-of-way, electrical and telecommunications utilities, and TCE. As a result of project construction, the resource and adjacent outbuildings would be demolished.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternative 2. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because construction of Alternative 2 would require the demolition of the resource and would materially alter its physical characteristics such that the qualities that qualify it for listing would be destroyed, Alternative 2 would result in a Section 4(f) use.

Alternative 4

Under Alternative 4 (Figure 4-57), no permanent use or temporary construction use would occur within the historic property boundary, which is the footprint of the residential building. The HSR right-of-way would be blended with the Caltrain tracks in the existing Caltrain right-of-way, which is located approximately 125 feet southwest of the Barnhart House. New 27-foot-tall OCS poles would be installed within the Caltrain and HSR right-of-way. Telecommunication lines would be relocated immediately adjacent to the northeast side of the HSR right-of-way, and an area designated for temporary HSR construction access would be placed within the alignment of Monterey Road, which lies adjacent to the southwestern boundary of the parcel that contains the Barnhart House. Four-quadrant gates would be introduced at the intersection of the HSR right-of-way and Palm Avenue, approximately 310 feet northwest of the resource. No project activities would occur within the parcel containing the resource or its immediate setting.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 4 would be within the existing Caltrain right-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near to the Caltrain right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 4.

The Authority has made a finding of no effect for this resource under Section 106 for Alternative 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the Barnhart House that would lead to the removal of any of the resource's character-defining features, and the resource would retain sufficient integrity to convey its significance, Alternative 4 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternative 4 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.7 Madrone Underpass Use Assessment/APE Map ID 2127

The Madrone Underpass is individually eligible for listing in the NRHP under Criterion A for its association with the earliest railroad and highway traffic safety programs implemented in Santa Clara County in the 20th century. The period of significance is 1933, the year the underpass was constructed. The historic property boundary is limited to the through plate girder bridge (from abutment to abutment), the concrete abutments, the pedestrian passage, the concrete wing walls, and the footprint of the pumphouse. The historic property boundary excludes the railroad tracks on either side of the bridge, the new concrete retaining walls, and the new concrete sidewalk. The property continues to be used as a grade separation for rail, road, and pedestrian traffic.

Alternatives 1 and 3 are located approximately 4,200 feet from the resource; therefore, they are only discussed in Table 4-7.

Alternative 2

Under Alternative 2 (Figure 4-58), a TCE would cross over the resource and continue outside the resource boundary. As with any TCE, any activities in support of project construction would be allowed in areas designated as TCE, such as materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the 0.08-acre boundary of the TCE have the potential to result in inadvertent damage or demolition of the resource or its character-defining features.

However, project features and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction. A pre-construction conditions assessment of the structure would be prepared, and, based on the condition of the resource, a plan for its protection would be developed; the protective measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be informed as to the need to avoid affecting this built resource, as well as tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer, would assess the damage and determine the best approach to repair the resource, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). These planning documents would be implemented by the contractor to make sure that protective measures are in place prior to the start of construction (CUL-IAMF#8). In addition, under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented.

After construction is complete, the TCE areas would be returned to their pre-construction conditions and there would be no permanent change in the setting of the resource.

Under Alternative 2, new HSR tracks on embankment would be constructed approximately 35 feet northeast of the plate girder bridge of the Madrone Underpass. The HSR crossing over Monterey Road would be located above the lower end of the Madrone Underpass's north wing wall, but no physical alteration of the resource is included in this work. Alternative 2 would cause no material impairment of the Madrone Underpass because no permanent change to the setting

of the resource would result and the easement would be returned to its original condition once construction is complete. Therefore, Alternative 2 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f).

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

The Authority has made a finding of no effect for this resource under Section 106 for Alternative 2. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Under Alternative 2, there would be no permanent use or temporary construction use, nor would project activities lead to the removal of any of the property's character-defining features. Mitigation measures would ensure that the property would retain sufficient integrity to convey its significance and that its NRHP-eligibility would be maintained. Alternative 2 would not cause a substantial adverse change in the significance of the resource because none of the characteristics that qualify it for listing would be materially impaired. Therefore, Alternative 2 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

Alternative 4

Under Alternative 4 (Figure 4-58), adverse effects on the property would result under Section 106 from the permanent use of 0.08 acre and temporary use of 0.1 acre of the resource, resulting in structure demolition. The HSR right-of-way would be placed on approximately 15-foot-high ballasted fill within the existing Caltrain right-of-way, which passes over the Madrone Underpass. To accommodate the new HSR right-of-way in this location, the Madrone Underpass would be demolished and replaced by a new box girder overpass structure.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternative 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because construction of Alternative 4 would require the demolition of the resource and would materially alter its physical characteristics such that the qualities that qualify it for listing would be destroyed, Alternative 4 would result in a Section 4(f) use.

4.6.2.8 San Martin Winery Use Assessment/APE Map ID 3001

The San Martin Winery property is individually eligible for listing in the NRHP under Criterion A for its role in California's post-Prohibition wine industry, and the main building is significant under Criterion C as an example of Spanish Eclectic-style architecture. The San Martin Winery property is located at 13000 Depot Street in San Martin. The historic property boundary encompasses the San Martin Winery building and the elements of its setting that continue to contribute to the property's significance on APNs 82501001 and 82501013. Contributing elements are the main building and its setting, which includes a tree-lined driveway, a residence, warehouses, numerous wood and metal outbuildings, vineyards, and wine-production features. The historic property is bound by a railroad easement to the west (APN 82501012), a residential property to the northeast (APN 82501002), South Street to the north, and modern industrial features located on the adjacent property to the southeast (APN 82501014).

Alternatives 1, 2, and 3

These three project alternatives would result in adverse effects under Section 106 as a result of the use of the resource, resulting in demolition of the resource. Alternative 1 would require permanent use of 1.85 acres and temporary use of 1.37 acres, Alternative 2 would require permanent use of 1.99 acres and temporary use of 13.46 acres, and Alternative 3 would require permanent use of 1.85 acres and temporary use of 1.24 acres, all resulting in structure demolition. Under Alternatives 1 and 3 (Figure 4-59), new HSR tracks on viaduct (35-foot structure plus additional 27-foot OCS poles) would be constructed on the current site of the historic building cluster and tree-lined drive, which are along the western edge of the historic property adjacent to the UPPR tracks and Monterey Road. Construction of the HSR viaduct would require demolition of these buildings and the drive, which are character-defining features of the resource. Under Alternative 2 (Figure 4-59), new HSR tracks on at-grade ballasted track on retained fill would be constructed on the current site of the historic building cluster and tree-lined drive, and would also require demolition of the resource. A staging area would fill most of the historic property boundary, containing additional buildings and active vineyards.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternatives 1, 2, and 3. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because the San Martin Winery would be demolished and permanently incorporated into the project footprint, resulting in alternation of its physical characteristics such that the qualities that qualify it for listing in the NRHP would be destroyed, Alternatives 1, 2, and 3 would result in a Section 4(f) use.

Alternative 4

Under Alternative 4 (Figure 4-59), a permanent use of 0.22 acre the property would result from construction of a retaining wall approximately 10 feet inside the historic property boundary. Additionally, 0.44 acre would be used temporarily during construction. The HSR right-of-way would be blended with the Caltrain tracks in the existing Caltrain right-of-way, which leads immediately adjacent to the western boundary of the historic property. Sections of the HSR right-of-way adjacent to the San Martin Winery would also be placed on retained fill at near-grade level. New 27-foot-tall OCS poles would be installed within the HSR right-of-way. A retaining wall would be constructed along the HSR right-of-way, approximately 10 feet inside the historic property boundary. The retaining wall extending 3 feet above grade with additional security fencing for a distance of approximately 350 feet would transition to fill slope adjacent to the buildings within the San Martin Winery. An area designated as a TCE, as well as an OCS portal at the end of an OCS tension section, would extend approximately 20 feet into the historic property boundary; the TCE would overlap portions of the contributing buildings within the San Martin Winery. The retaining wall would remain below eye level, and the security fencing would be visually permeable, such that these new elements would not separate the resource from the adjacent railroad right-of-way.

Any activities in support of construction of the project would be allowed in areas designated as TCEs, such as materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE would have the potential to result in inadvertent damage to or demolition of the resource or its character-defining features. Under all four project alternatives, the contractor would prepare a pre-construction conditions assessment of the Millers Canal. Based on the condition of the resource, the contractor would then develop a plan for their protection. Protective measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian and, if needed, a structural engineer would assess the damage and determine the best approach to repair the buildings, following the SOI's Standards for the

Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would prepare a BEMP prior to construction to detail the monitoring methods and process required for ground-disturbing activities within 1,000 feet of the property (CUL-IAMF#7). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8). After construction is complete, the TCE area would be returned to its pre-construction condition.

The Authority has made a finding of no adverse effect for this resource under Section 106 for Alternative 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 4 would have no adverse effect on San Martin Winery, the Authority would make a *de minimis* impact finding for this resource because the project alternative would not result in destruction of the attributes that qualify this resource for protection under Section 4(f) and the use of this resource would not change. The Authority would notify the SHPO of its intent to make a *de minimis* finding during the Section 106 consultation process. The Authority cannot approve the use of San Martin Winery without written concurrence from the SHPO on the finding of no adverse effect.

4.6.2.9 Japanese School/APE Map ID 3291

The Japanese School, at 8191 Swanston Lane in Gilroy has been determined eligible for listing in the NRHP under Criterion A at the local level of significance for its historical association with the prewar Gilroy Japanese community school and their wartime loss of the building, which reflects the devastating effects of the wartime incarceration on the community. The historic boundary of the property is limited to the historic building, the circular gravel drive, and the historic-era cypress tree on APN 84102003. The building was used by the Japanese community of Gilroy as a school and social hall. When Japanese Americans were forced to leave their homes and properties and incarcerated during World War II, the city took possession of the building, and after the suspension of Executive Order 9066, which interned those of Japanese descent, the building was sold to the Gilroy Grange. Its simple massing, false-front construction, stepped parapet and clapboard façade all serve as character-defining features that clearly communicate the building's period of significance.

Alternatives 3 and 4 would be over 200 feet from the resource; therefore, they are only discussed in Table 4-7.

Alternative 1

Under Alternative 1 (Figure 4-60), no permanent use or temporary occupancy would occur. Changes to the alignment of the existing cul-de-sac would occur, which would require a TCE to surround the Wheeler Street roadwork, extending into the legal parcel that contains the school, but outside the boundary of the resource. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. After construction is complete, the TCE area would be returned to its pre-construction condition. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8).

Also under Alternative 1, new HSR tracks on viaduct (40-foot structure plus 27-foot OCS poles) would be located approximately 40 feet west of the parcel in the location of an existing parking lot and adjacent warehouse building. The new viaduct would be approximately 70 feet from the rear façade of the resource. Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 1 would be within or near existing transportation rights-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3,

AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 1 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near existing railroad right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 1.

Because Alternative 1 would not materially impair the resource and its setting such that the significance of the resource would be substantially changed, Alternative 1 would not result in a Section 4(f) use of the Japanese School.

The Authority has made a finding of no adverse effect on this resource under Section 106 for Alternative 1. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 1 would have no adverse effect on the Japanese School, the Authority would make an impact finding of no use for this resource.

Alternative 2

Under Alternative 2 (Figure 4-60), no permanent use or temporary occupancy would occur. Similar to Alternative 1, Alternative 2 would require changes to the alignment of the existing cul-de-sac, and HSR tracks on embankment 30 feet southwest of the building. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8).

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 2 would be within or near existing transportation rights-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 2 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is

currently near to existing railroad right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 2.

The Authority has made a finding of no adverse effect for this resource under Section 106 for Alternative 2. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the Japanese School that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternative 2 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternative 2 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.10 IOOF Orphanage Home Use Assessment/APE Map ID 3402

The IOOF Orphanage Home (Rebekah's School) in Gilroy is eligible for listing in the NRHP under Criterion A as a prominent surviving and intact example of the work of the influential Independent Order of Odd Fellows (IOOF), particularly in the realm of caring for orphans, and under Criterion C as a distinctive example of Spanish Revival-style architecture. The historic buildings on the property are limited to the large Spanish Revival-style main building and campanile (bell tower) built in 1921, as well as the small hospital building and gymnasium, built circa 1930. The landscaped grounds, which include a large lawn, manicured roundabout, and historic tree line on the northwest sidewalk, are included. Two U-shaped buildings and a small rectangular building at the southern end of the property are not considered to be contributing features of the historic resource. The historic property boundary is limited to the four historic-age buildings and the landscaped grounds on APN 84104024. It does not include three buildings at the south edge of the property that were built in the 1990s. Despite many of the original windows having been replaced with vinyl sashes, the historic buildings and landscape retain their integrity of location, design, setting, materials, workmanship, feeling, and association.

Alternatives 3 and 4 would have no effect on the resource; therefore, they are only discussed in Table 4-7.

Alternative 1

Project components and activities associated with Alternative 1 (Figure 4-61) would be present within the legal parcel boundary associated with the IOOF Orphanage Home, but would not be present within the historic property boundary. Under Alternative 1, a utility high voltage permanent easement would be located in the Forest Street right-of-way, adjacent to the easternmost portion of the historic property boundary. This feature would be adjacent to several of the property's character-defining features but would not physically alter them. Therefore, because none of the project activities would be within the historic property boundary, no permanent use would occur.

However, Alternative 1 includes a TCE that would be located in the campus's existing parking lot and extend beyond the parcel to the north, into the IOOF Avenue right-of-way. The TCE overlaps several street trees in the lawn adjacent to IOOF Avenue near the western edge of the IOOF Orphanage Home campus. This would result in temporary occupancy of 0.11 acre, pending concurrence from the OWJ. None of the trees in the historic tree line on the northwest sidewalk would be affected by this temporary occupancy.

Construction activities within the boundaries of the TCE have the potential to result in inadvertent damage or demolition of the resource or its character-defining features. However, project features and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction. Project features include requiring training of construction staff

on measures to avoid or protect cultural resources during construction (CUL-IAMF#2); preparation of assessments and plans prior to construction to outline protection measures that would need to be in place to protect the resource (CUL-IAMF#6); preparation of a BEMP by the contractor in coordination with the Authority prior to construction to detail the monitoring methods and process (CUL-IAMF#7); and implementation of these planning documents by the contractor so that the plans are followed and that protection mechanisms are in place prior to the start of construction (CUL-IAMF#8). In addition, under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented. After construction is complete, the TCE area would be returned to its pre-construction condition. The TCE does not overlap with any character-defining features of the resource and has no potential to physically alter the essential characteristics of the resource or its setting.

This temporary construction use would not interfere with the protected activity of the property because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions). Under Alternative 1, the HSR right-of-way, on a 45-foot-high viaduct structure with an additional 27 feet of OCS above, would be approximately 110 feet west of the western boundary of the historical resource. While the addition of this infrastructure would alter the property's setting, it would not physically change the property's ability to convey its significance.

The Authority has made a finding of no adverse effect for this resource under Section 106 for Alternative 1. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 1 would have no adverse effect on the IOOF Orphanage Home, the Authority would make a preliminary finding of temporary occupancy for this resource, pending concurrence from the OWJ. The Authority would notify the SHPO of its intent to make a finding of temporary occupancy during the Section 106 consultation process. The Authority cannot approve the temporary occupancy of IOOF Orphanage Home without written concurrence from the SHPO on the finding of no effect.

Alternative 2

Alternative 2 would result in adverse effects under Section 106 as a result of the use of the resource. Under Alternative 2 (Figure 4-61), a paved parking lot and turnaround would be placed near the western edge of the IOOF Orphanage Home site. The footprint of the parking lot and turnaround would overlap the current parking lot and adjacent cluster of trees in this location and would encroach approximately 20 feet into the historic property boundary and would replace a portion of the lawn that makes up the western portion of the IOOF Orphanage Home. Furthermore, the IOOF Avenue roadway would be lowered to a depth of approximately 16 feet where it crosses underneath the HSR right-of-way. The area of work associated with the lowered roadway overlaps street trees that currently line IOOF Avenue and encroaches within the historic property boundary. These project components would result in a permanent use of 0.93 acre.

In addition, both the parking lot and the roadway would be lined by areas of TCE, which would encroach into the historic property boundary on the west and north sides, and would result in temporary use of 0.23 acre.

The introduction of a new paved parking lot and turnaround would replace an existing parking lot and cluster of trees, neither of which is considered to be a character-defining feature of the

resource. However, the new parking lot and drainage pump station would extend into the lawn, which is a historic feature of the IOOF Orphanage Home campus and would erode the firm edge at the western boundary of the resource. In its proposed location, the drainage pump station would be clearly visible from the IOOF Orphanage Home main building and campanile, and it would intrude into the open space that currently frames the most prominent buildings within the campus. Furthermore, the lowering of IOOF Avenue would require removal of character-defining trees lining the roadway, which would further degrade the historic landscape characteristics of the IOOF Orphanage Home campus. Therefore, Alternative 2 would directly and indirectly alter characteristics that qualify the IOOF Orphanage Home for inclusion in the NRHP. The direct effects would impair the historic property's integrity of materials, design, and feeling, and the indirect effects would impair the integrity of feeling and setting such that the project alternative would have an adverse effect.

The Authority has made a finding of adverse effect of this resource under Section 106 for Alternative 2. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternative 2 would have a adverse effect on the IOOF Orphanage Home such that it would directly and indirectly alter characteristics that qualify the IOOF Orphanage Home for inclusion in the NRHP, Alternative 2 would result in a use of the IOOF Orphanage under Section 4(f).

4.6.2.11 Gilroy City Hall/APE Map ID 3439

The Old City Hall is individually listed in the NRHP (NRHP Reference No. 75000480, certified on April 16, 1975). The building is significant under NRHP Criterion C for possessing distinctive characteristics of a period and style of architecture. Located at 7410 Monterey Street, the Old City Hall continues to represent a whimsical take on Mission Revival style, with Baroque and Flemish Revival elements. It is a highly unusual style for the area, and retains sufficient integrity of design, materials, and workmanship to convey its architectural significance, as well as its integrity of location and feeling. None of the qualities that qualified the building for listing in 1975 under Criterion C have been lost. The NRHP nomination did not include a historic property boundary or map; for the purposes of this project, the historic property boundary can be considered the footprint of Old City Hall on APN 84106061.

Alternative 3 is approximately 945 feet from the resource; therefore, it is only discussed in Table 4-7.

Alternatives 1 and 4

Under Alternatives 1 and 4 (Figure 4-62), no permanent use or temporary occupancy would occur. Under Alternative 1, the resource would be adjacent to TCEs on the south and east sides. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. The TCE would not extend into the parcel or overlap the resource boundary (which is limited to the building footprint), so the project would not physically affect the historic property. The TCE would be returned to its pre-construction condition after construction. The HSR viaduct (approximately 35 feet tall with additional 27-foot OCS poles) would be constructed approximately 150 feet northeast of the resource, parallel to Monterey Road.

Under Alternative 4, the HSR right-of-way would be placed at grade approximately 95 feet east of the rear façade of Gilroy City Hall. OCS poles 27 feet tall would be installed within the HSR right-of-way. Telecommunications utilities would be relocated within the West Sixth Street roadway, immediately adjacent to the resource to the south. However, the area in which utilities would be relocated would not overlap the historic resource boundary; following completion of the project, the current relationship of Gilroy City Hall and its adjacent roadway/sidewalk would be retained.

The following project features would be incorporated into the project: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of

inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8).

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternatives 1 and 4 would be within or near existing transportation rights-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternatives 1 and 4 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near to existing railroad right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternatives 1 and 4.

Because Alternatives 1 and 4 would not materially impair the resource and its setting such that the significance of the resource would be substantially changed, Alternatives 1 and 4 would not result in a Section 4(f) use of the Gilroy City Hall.

The Authority has made a finding of no adverse effect on this resource under Section 106 for Alternatives 1 and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because Alternatives 1 and 4 would have no adverse effect on the Gilroy City Hall, the Authority would make an impact finding of no use for this resource.

Alternative 2

Under Alternative 2 (Figure 4-62), no permanent use or temporary occupancy would occur. A new road would be built adjacent to the historic property to the north and would require the demolition of the existing adjacent building. This change would introduce a new traffic lane adjacent to Gilroy City Hall and would physically separate the resource from the adjacent commercial district of which it is a prominent contributing feature.

Alternative 2 would also include improvement of a portion of the adjacent roadway and sidewalk along West Sixth Street approximately 15 feet from the southwest corner of the historic property boundary. This project activity would lower West Sixth Street to pass underneath the HSR right-of-way east of Gilroy City Hall. The roadwork would involve the construction of retaining walls along either side of West Sixth Street; the northern retaining wall would be approximately 12 feet from the south façade of the resource. This work would be limited to the existing public right-of-way, would not encroach into the historic property boundary, and would not cause physical alteration to the resource.

Alternative 2 would also include a TCE that encroaches over the eastern edge of the legal parcel containing the resource by approximately 14 feet. As under Alternative 1, any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. The TCE at the eastern edge of the legal parcel would be in an area covered by an existing surface-level parking lot. The areas designated as TCE would be returned to their pre-construction condition after construction. The HSR embankment (approximately 25 feet tall with additional 27-foot OCS poles) would be constructed approximately 140 feet northeast of the resource, parallel to Monterey Road.

The following project features would be incorporated into the project: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8).

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because Alternative 2 would be within or near existing transportation rights-of-way, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of Alternative 2 on the resource. Changes to the noise environment related to train operations also would occur, as discussed in Section 3.4. The Authority would implement mitigation measures to minimize the impacts of operational noise. Mitigation measures NV-MM#3, NV-MM#4, NV-MM#5, NV-MM#6, and NV-MM#7 require implementing HSR noise guidelines, assisting local jurisdictions to establish Quiet Zones, meeting federal regulations for locomotives, special track work at crossovers and turnouts, and additional noise analysis during final design. Since the resource is currently near existing railroad right-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under Alternative 2.

Because there would be no permanent use or temporary construction use, no project activities on the resource that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternative 2 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternative 2 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.12 Live Oak Creamery Use Assessment/APE Map ID 3458

Live Oak Creamery is individually listed in the NRHP (NRHP Reference No. 82002263, certified on March 11, 1982) and CRHR (Office of Historic Preservation (OHP) Status Code 1S). The building is significant under NRHP Criterion A for its association with early industry in Gilroy. Located at 88 Martin Street, this simple building of utilitarian design is historically associated with the local dairy industry. The Live Oak Creamery was constructed in 1908 as the first butter factory established in Gilroy and was the only insulated structure in the area at the time. It later housed a cheese processing facility until it closed in 1945, and represents a period when Gilroy's dairy industry rated second only to agriculture in productivity. However, the structure appears to have deteriorated significantly since its last recordation in 1979. The roof and gable at the south elevation of the original brick portion of the building appear to be collapsing, windows and doors

are missing or boarded up, and the southern (rear) board-and-batten addition appears to have been demolished with only concrete foundation remaining. The unrelated gable-roofed building described in 1979 is also no longer present. Overall, the building is in an extreme state of disrepair. The current owner is the City of Gilroy.

Alternative 3 would be approximately 742 feet from the resource; therefore, it is only discussed in Table 4-7.

Alternatives 1, 2, and 4

Alternatives 1, 2, and 4 would result in adverse effects on the Live Oak Creamery under Section 106 because of the use of the resource, resulting in structure demolition. Under Alternatives 1, 2, and 4 (Figure 4-63), Live Oak Creamery would be in the path of the new HSR right-of-way and would be demolished as a result of project construction.

The Authority has made a finding of adverse effect for this resource under Section 106 for Alternatives 1, 2, and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because the Live Oak Creamery would be demolished and permanently incorporated into the project footprint, resulting in alteration of its physical characteristics such that the qualities that qualify it for listing would be destroyed, Alternatives 1, 2, and 4 would result in a use of the Live Oak Creamery under Section 4(f).

4.6.2.13 Millers Canal/APE ID 4024

The Miller's Canal property is eligible for individual listing in the NRHP under Criterion A for its association with the Miller and Lux Company's earliest reclamation and irrigation efforts in the Santa Clara Valley. Miller's Canal is in eastern Gilroy, and the historic property boundary is the 3.2-mile canal and its right-of-way. The unlined, earthen canal operates seasonally to control wetland flooding, and is devoid of water during dry seasons and drought periods.

Alternatives 1, 2, 3, and 4

Under all alternatives (Figure 4-64), no permanent use or temporary occupancy would occur. Under Alternatives 1, 2, and 4, the HSR right-of-way would cross Millers Canal between SR 25 and Frazier Lake Road on viaduct approximately 40 feet above the bed of the canal, with additional 27-foot OCS poles. On either side of the canal, the viaduct would be approximately 25 feet above grade. The piers and foundations supporting the viaduct would be on either side of the earthen structure of the Millers Canal channel. An area designated as TCE would be placed within the canal alignment surrounding the HSR viaduct crossing. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE would have the potential to result in inadvertent damage to or demolition of the resource or its character-defining features. Under all four alternatives, the contractor would prepare a pre-construction conditions assessment of the Millers Canal (CUL-IAMF#6). The condition of the resource, as identified in the survey, will determine whether the implementation of additional IAMFs and development of further protective measures are required. The contractor would put required protective measures in place prior to the start of construction (CUL-IAMF#8). Additional protective measures may include protocols to alert construction staff of the need to avoid affecting the Millers Canal (CUL-IAMF#2), and the assessment and repair of any inadvertent damage that may occur during construction following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). After construction is complete, the TCE area would be returned to its pre-construction condition.

Under Alternative 3, the HSR right-of-way would cross Millers Canal approximately 4,450 feet northeast of Frazier Lake Road on a viaduct approximately 40 feet above the bed of the canal, with additional 27-foot OCS poles. The viaduct would be approximately 25 feet above grade surrounding the canal. The piers and foundations supporting the viaduct would be on either side of the Millers Canal channel. A stormwater canal TCE would be within Millers Canal at the viaduct

crossing, which would protect the canal from damage and support its continued use during the construction of the project. Alternative 3 would also include a new permanent bridge crossing Millers Canal at Lake Road, which is approximately 3,500 feet northeast of the HSR viaduct crossing. A temporary staging area would be placed at Lake Road, approximately 630 feet southeast of Millers Canal.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because all alternatives would be within existing transportation right-of-way to the extent feasible, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of all alternatives on the resource. Since the resource is currently near existing transportation rights-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under all alternatives.

The Authority has made a finding of no effect for this resource under Section 106 for all alternatives. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the resource that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternatives 1, 2, 3, and 4 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternatives 1, 2, 3, and 4 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.14 California Aqueduct/APE ID 4214

The California Aqueduct is eligible for listing in the NRHP under Criterion A as an integral part of the State Water Project that facilitates large-scale redistribution of water resources throughout the state, and under Criterion C for its exceptional design and engineering. The California Aqueduct's eligibility is found also under Criterion Consideration G as a resource that is less than 50 years old that demonstrates exceptional historical significance. The California Aqueduct conveys water from northern Sacramento Valley reservoirs to hydroelectric plants, reservoirs, and distribution facilities as far south as Riverside County. The property was evaluated by Ambacher in its entirety and found eligible for listing in the NRHP in 2011. SHPO concurred with this finding in 2012. One previously unrecorded portion of the property is in the APE, a 0.1-mile canal segment. This portion of the property retains good integrity of location, design, materials, workmanship,

setting, feeling, and association. The historic property boundary is the main canal, its right-of-way, and its associated infrastructure, including bridges, siphons, culverts, and drains.

Alternatives 1, 2, 3, and 4

Under all alternatives (Figure 4-65), no permanent use or temporary occupancy would occur. The HSR right-of-way would cross over the California Aqueduct and adjacent access roads on viaduct approximately 75 feet above the aqueduct, with additional 27-foot OCS poles. The piers and foundations supporting the viaduct would be on the land side of the levee structures and access roads that line the canal, and thus construction of the viaduct would not result in a direct physical change to the resource. West of the aqueduct, the HSR right-of-way would be on ballasted track in a cut through the adjacent hill; east of the aqueduct, the HSR right-of-way would transition to ballasted track on embankment approximately 90 feet above grade.

Alternatives 1, 2, 3 and 4 would place an area designated as TCE surrounding the HSR right-of-way's crossing over the California Aqueduct. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE may result in inadvertent damage to the resource or its character-defining features.

Under all four alternatives, the contractor would prepare a pre-construction conditions assessment of the California Aqueduct. Based on the condition of the resource, the contractor would then develop a plan for its protection. These measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian, and if needed a structural engineer, would assess the damage and determine the best approach to repair the aqueduct, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would implement these planning documents to put protective measures in place prior to construction (CUL-IAMF#8). After construction is complete, the TCE area would be returned to its pre-construction condition. Additionally, overhead electrical utilities would be installed underground in the access road approximately 125 feet east of the California Aqueduct.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because all alternatives would be within the existing transportation right-of-way to the extent feasible, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of all alternatives on the resource. Since the resource is currently near existing transportation rights-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect

on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under all alternatives.

The FRA has made a finding of no effect for this resource under Section 106 for Alternatives 1, 2, 3, and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the resource that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternatives 1, 2, 3, and 4 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternatives 1, 2, 3, and 4 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.15 Delta-Mendota Canal/APE ID 4231

The Delta-Mendota Canal is eligible for listing in the NRHP under Criterion A for the property's association with the early-20th-century U.S. Bureau of Reclamation Central Valley Project and its role in California's Central Valley irrigation history, and Criterion C for the property's exceptional engineering design and construction. The Delta-Mendota Canal and its associated infrastructure conveys water from the Tracy Pumping Station in San Joaquin County to its terminus in Fresno County. The property was evaluated as one of four elements of the Central Valley Project that convey its historical significance. The entire Delta Mendota Canal was evaluated by JRP in 1996 and again in 2010 by AECOM. According to the OHP Historic Properties Directory file (OHP 2014), the property was found eligible for the NRHP in 2010. Two previously unrecorded portions of the property are located in the APE, a 2.8-mile canal segment and a 0.7-mile canal segment. These two portions of the property retain good integrity of location, design, materials, workmanship, setting, feeling, and association. The historic property boundary is the main canal, its right-of-way, and its associated infrastructure, including bridges and drains.

Alternatives 1, 2, 3, and 4

Under all alternatives (Figure 4-66), no permanent use or temporary occupancy would occur. The HSR right-of-way would cross over the Delta-Mendota Canal and adjacent access roads on viaduct approximately 75 feet above the canal, with additional 27-foot OCS poles. On either side of the canal, the HSR right-of-way would transition to ballasted track on embankment approximately 75 feet above grade. The piers and foundations supporting the viaduct would be located on the land side of the levee structures and access roads that line the canal, and thus construction of the viaduct would not result in a direct physical change to the resource.

Under all alternatives, a stormwater canal TCE would be within the Delta-Mendota Canal at the viaduct crossing, which would protect the canal from damage and supports its continued use during construction of the project. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE would have the potential to result in inadvertent damage to or demolition of the resource or its character-defining features. Under all four alternatives, the contractor would prepare a pre-construction conditions assessment of the Delta-Mendota Canal. Based on the condition of the resource, the contractor would then develop a plan for its protection. These measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6, and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian, and if needed a structural

engineer, would assess the damage and determine the best approach to repair the canal, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would implement these planning documents to put protective measures in place prior to the start of construction (CUL-IAMF#8). After construction is complete, the TCE area would be returned to its pre-construction condition. West of the Delta-Mendota Canal, the alignment of an existing stormwater drainage channel would be shifted slightly south and would continue to convey drainage that crosses the canal on an overcrossing.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because all alternatives would be within the existing transportation right-of-way to the extent feasible, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of all alternatives on the resource. Since the resource is currently near existing transportation rights-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under all alternatives.

The FRA has made a finding of no effect for this resource under Section 106 for Alternatives 1, 2, 3, and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the resource that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternatives 1, 2, 3, and 4 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternatives 1, 2, 3, and 4 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.16 San Joaquin and Kings River—Main Canal/APE ID 4272

The San Joaquin and Kings River—Main Canal is eligible for listing in the NRHP under Criterion A as a main canal and an important component of the Miller and Lux Company's earliest water control systems that transformed California's San Joaquin Valley. The property is an earthen canal that delivers water from the San Joaquin River to western San Joaquin Valley grasslands near Los Banos. The property was evaluated in its entirety and found eligible for listing in the NRHP in 1996. One previously unrecorded portion of the Main Canal is in the APE, a 1.64-mile canal segment. This portion of the property retains good integrity of location, design, materials,

workmanship, setting, feeling, and association. The historic property boundary is the canal structure and its right-of-way and excludes lateral canals that extend from the main canal.

Alternatives 1, 2, 3, and 4

Under all alternatives (Figure 4-67), no permanent use or temporary occupancy would occur. The HSR right-of-way would cross over the San Joaquin and Kings River—Main Canal and adjacent access roads on viaduct approximately 50 feet above the canal, with additional 27-foot OCS poles. The piers and foundations supporting the viaduct would be on the land side of the levee structures, and outboard of Cherokee Road and Levee Road, which are on either side of the canal. Construction of the viaduct would not result in a direct physical change to the resource.

A water protect-in-place TCE would be located within the San Joaquin and Kings River—Main Canal at the viaduct crossing. A TCE would surround the permanent HSR right-of-way, and it would occupy the parcel southeast of the HSR overcrossing. Any activities in support of construction of the project would be allowed in areas designated as TCE, including but not limited to materials staging, operation of construction equipment, and installation of protective fencing. Construction activities within the boundaries of the TCE may result in inadvertent damage to or demolition of the resource or its character-defining features. Under all four alternatives, the contractor would prepare a pre-construction conditions assessment of the Main Canal. Based on the condition of the resource, the contractor would then develop a plan for its protection. These measures would be in place prior to any construction activities (CUL-IAMF#6). Construction staff would be alerted of the need to avoid affecting any of these built resources in the reports completed for CUL-IAMF#6 and would be tasked to maintain protective measures throughout construction (CUL-IAMF#2). An architectural historian would monitor the efficacy of the protective measures, as defined in the protection plan. Should any inadvertent damage occur during construction, the design-builder's qualified architectural historian, and if needed a structural engineer, would assess the damage and determine the best approach to repair the canal, following the SOI's Standards for the Treatment of Historic Properties and in consultation with the Authority and the SHPO (CUL-IAMF#6). The contractor would implement these planning documents to put protective measures in place prior to construction (CUL-IAMF#8). After construction is complete, the TCE area would be returned to its pre-construction condition. A permanent emergency access easement would also be located in the access road west of the canal, leading south approximately 1 mile before terminating north of West Henry Miller Avenue.

Additionally, the project would include pile driving within 50 feet of the historical resource, which has the potential to diminish those characteristics that qualify it for listing. The following project features would be incorporated for this resource: preparation of a pre-construction conditions assessment, plan for protection of historic built resources, and repair of inadvertent damage (CUL-IAMF#6), preparation of a BEMP (CUL-IAMF#7), and implementation of protection and/or stabilization measures (CUL-IAMF#8). Mitigation measure CUL-MM#8 will also be implemented, which would require the contractor to repair any inadvertent damage with the approved plan and with the SOI's Standards for Rehabilitation. This mitigation measure is anticipated to be effective because it would plan for restoration of historic features, if any inadvertent damage occurs, to their pre-construction condition such that they would continue to be observed as maintaining the character-defining features that define their significance, and NRHP-eligibility would be maintained.

Proximity impacts on the resource associated with HSR operations would be limited to minor changes to the visual environment because trains and some track facilities would be visible from the resource (i.e., the at-grade tracks). However, because all alternatives would be within the existing transportation right-of-way to the extent feasible, visual impacts would be minor. The project would adopt design standards (AVQ-IAMF#1) and a design review process to guide the development of non-station area structures (AVQ-IAMF#2). Mitigation measures (AVR-MM#3, AVR-MM#4, and AVR-MM#6) calling for visual screening would reduce the visual impact of all alternatives on the resource. Since the resource is currently near existing transportation rights-of-way, it is anticipated that increased noise resulting from HSR operations would have limited effect on the protected activities of the resource. Accordingly, operational visual and noise impacts

would not be of a severity that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) would be substantially impaired, and no constructive use would occur under all alternatives.

The FRA has made a finding of no effect for this resource under Section 106 for Alternatives 1, 2, 3, and 4. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because there would be no permanent use or temporary construction use, no project activities on the resource that would lead to the removal of any of the resource's character-defining features, mitigation measures would ensure NRHP-eligibility would be maintained, and the resource would retain sufficient integrity to convey its significance, Alternatives 1, 2, 3, and 4 would not cause a substantial adverse change in the significance of the resource because alteration of the resource's setting would not materially impair characteristics that qualify it for listing. Therefore, Alternatives 1, 2, 3, and 4 would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

4.6.2.17 *Negra Ranch Use Assessment/APE Map ID 4310*

The Negra Ranch is eligible for listing in the NRHP under Criterion A for its association with early 20th-century settlement of the Volta and Badger Flats agricultural communities. The property is at 21788 West Henry Miller Road, and the historic property boundary is the assessor's parcel. The historic property boundary encompasses its contributing elements, which include a Queen Anne-style farmhouse, a detached wood-frame tankhouse, and a wooden garage. The location of these three buildings on the parcel and the rural setting and feeling continue to associate the property with its period of significance.

Alternatives 1, 2, 3, and 4

Under all project alternatives (Figure 4-68), no permanent use of the property would result. However, all project alternatives include a TCE that would encroach several feet into the southeast corner of the historic property boundary, resulting in temporary occupancy of 0.01 acre, pending concurrence from the OWJ. This TCE would not overlap any of the resource's character-defining features. A second TCE would be adjacent to the property's southern boundary, outside the historic property boundary, within the right-of-way of Henry Miller Road and at the southeast corner of the property (approximately 179 feet east of the residence's eastern façade).

Construction activities within the boundaries of the TCE have the potential to result in inadvertent damage or demolition of the resource or its character-defining features. However, project features and mitigation measures have been designed to minimize the potential for inadvertent damage to the resource during construction. Project features include requiring training of construction staff on measures to avoid or protect cultural resources during construction (CUL-IAMF#2); preparation of assessments and plans prior to construction to outline protection measures that would need to be in place to protect the resource (CUL-IAMF#6); preparation of a BEMP by the contractor in coordination with the Authority and the FRA prior to construction to detail the monitoring methods and process (CUL-IAMF#7); and implementation of these planning documents by the contractor so that the plans are followed and that protection mechanisms are in place prior to the start of construction (CUL-IAMF#8). In addition, under mitigation measure CUL-MM#8, the Authority-prepared MOA and BETP would identify properties subject to the preparation of plans for the repair of inadvertent damage; these plans are to be developed prior to the start of construction in the immediate proximity of the historic properties. Should the resource be damaged as a result of construction activities, the contractor would repair it in accordance with the approved plan and with the SOI's Standards for Rehabilitation. All repairs would be reviewed and approved by the Authority prior to determining that the treatment has been adequately implemented. After construction is complete, the TCE area would be returned to its pre-construction condition.

This temporary construction use would not interfere with the character-defining features of the property because it meets the conditions for temporary occupancy, pending concurrence from the OWJ, under Section 4(f) (i.e., it would be of shorter duration than construction; there would be no

change in ownership of the land; scope of the work would be minor; there would be no temporary or permanent adverse changes to the activities, features, or attributes of the property; the property would be fully restored to a condition at least as good as it was prior to the project; and there would be documented agreement from the OWJs over the property with these conditions).

Additionally, under all project alternatives, new HSR tracks on viaduct (i.e., 40-foot structure plus additional 27-foot OCS poles) would be south of Henry Miller Road, opposite the roadway from the Negra Ranch. The HSR right-of-way would be approximately 90 feet south of the southern boundary of the historical resource, which is the legal parcel that contains the Negra Ranch. Because the existing setting is composed of rural agricultural land and a two-lane road, introduction of elevated viaduct train track and systems would represent an alteration to the property's historic setting. While the project alternatives would alter the rural agricultural setting, the project alternatives would not change the ultimate use of the property. Therefore, the project alternatives would not result in a substantial impairment of the attributes that qualify this resource for protection under Section 4(f) and would not result in a Section 4(f) use.

The FRA has made a finding of adverse effect of this resource under Section 106 for all project alternatives due to impairment of its integrity of setting and feeling. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Although all project alternatives would have an adverse effect on Negra Ranch, the FRA would make a preliminary finding of temporary occupancy for this resource, pending concurrence from the OWJ because the project alternatives would not impair the resource's physical attributes, nor cause substantial impairment to the resource. Despite the changes to the setting, the resource will still remain eligible for the NRHP, and the physical attributes of the resource will still easily convey the station's historic significance. The FRA would notify the SHPO of its intent to make a finding of temporary occupancy during the Section 106 consultation process. The FRA cannot approve the temporary occupancy of Negra Ranch without written concurrence from the SHPO on the finding of adverse effect.

4.6.2.18 Cozzi Family Property Use Assessment/APE Map ID 4317

The Cozzi Family Property is eligible for listing in the NRHP under Criterion C for the residence's late Queen Anne-style architecture. The property is at 21391 Henry Miller Road, and the historic property boundary is limited to the historic residence on APN 081040004. The parcel contains a Queen Anne-style residence and a modern era non-contributing utilitarian outbuilding.

Alternatives 1, 2, 3, and 4

All four project alternatives would result in adverse effects on the Cozzi Family Property under Section 106 because the property would be demolished. Under all project alternatives (Figure 4-69), new HSR tracks on viaduct, including a 40-foot-high structure with an additional 27 feet of OCS poles, would pass through the parcel that contains the Cozzi Family Property and would be constructed directly over the resource. All project alternatives would therefore require demolition of the resource.

The FRA has made a finding of adverse effect for this resource under Section 106 for all project alternatives. This finding would be provided to the SHPO for review, comment, and concurrence as part of the Section 106 process.

Because the Cozzi Family Property would be demolished and permanently incorporated into the project footprint, resulting in the alteration of its physical characteristics such that the qualities that qualify it for listing on the NRHP would be destroyed, Alternatives 1, 2, 3, and 4 would result in a Section 4(f) use.



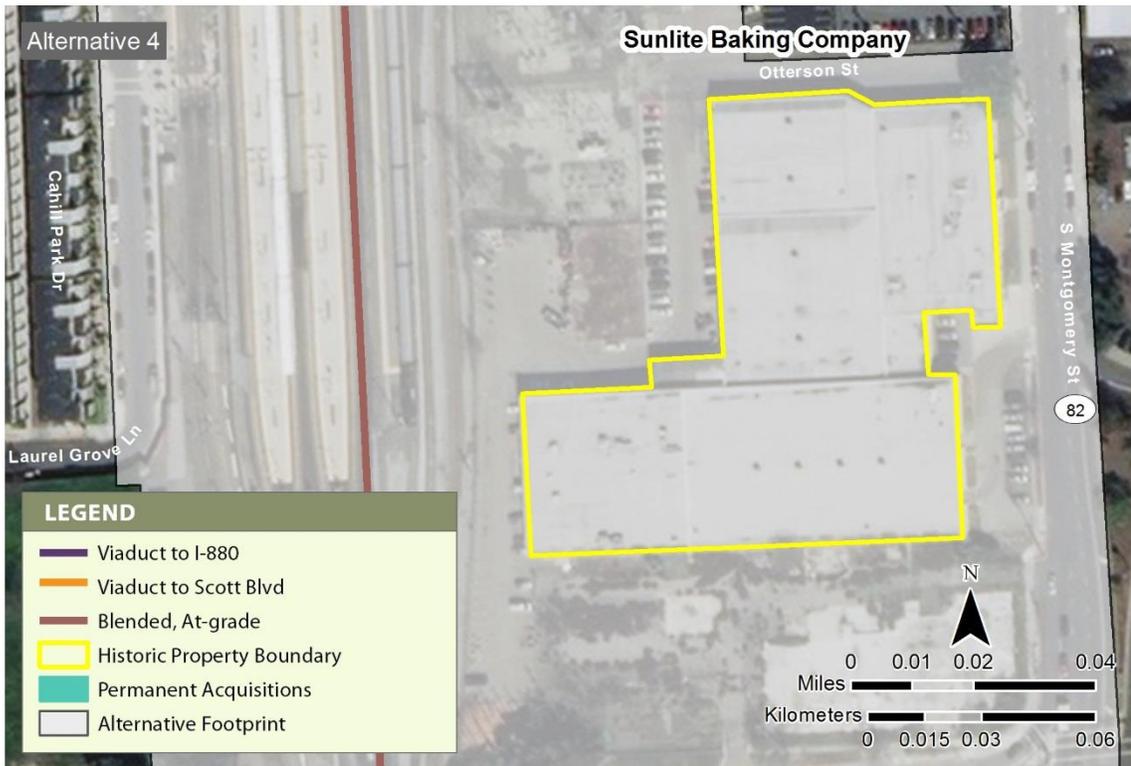
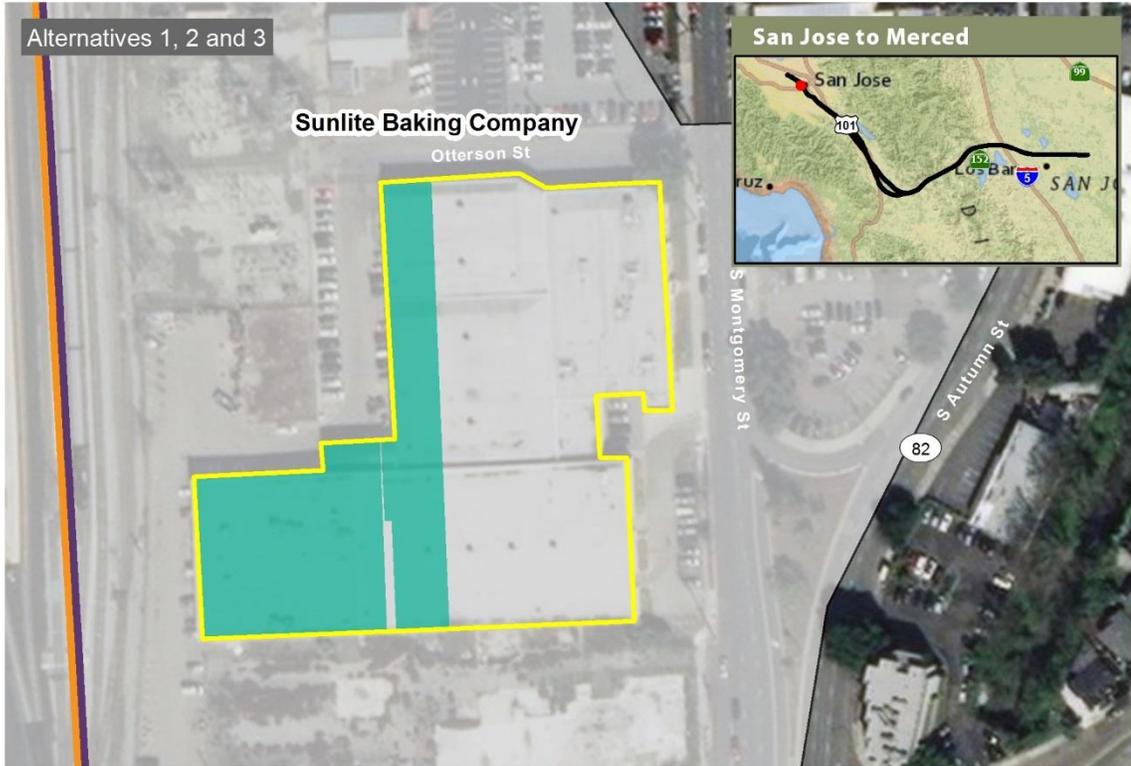
JANUARY 2019

Figure 4-52 Santa Clara Railroad Historical Complex



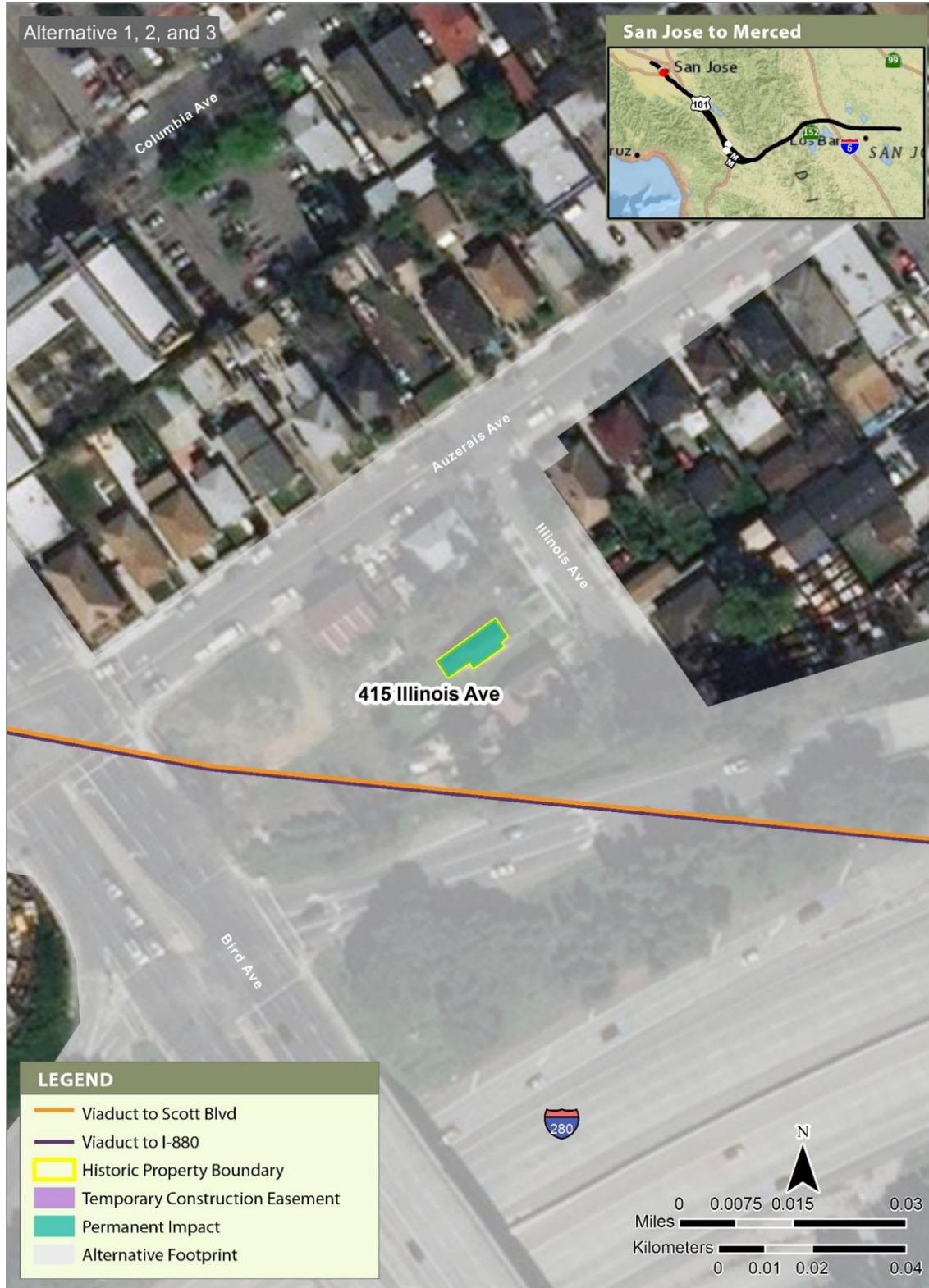
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Figure 4-53 Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)



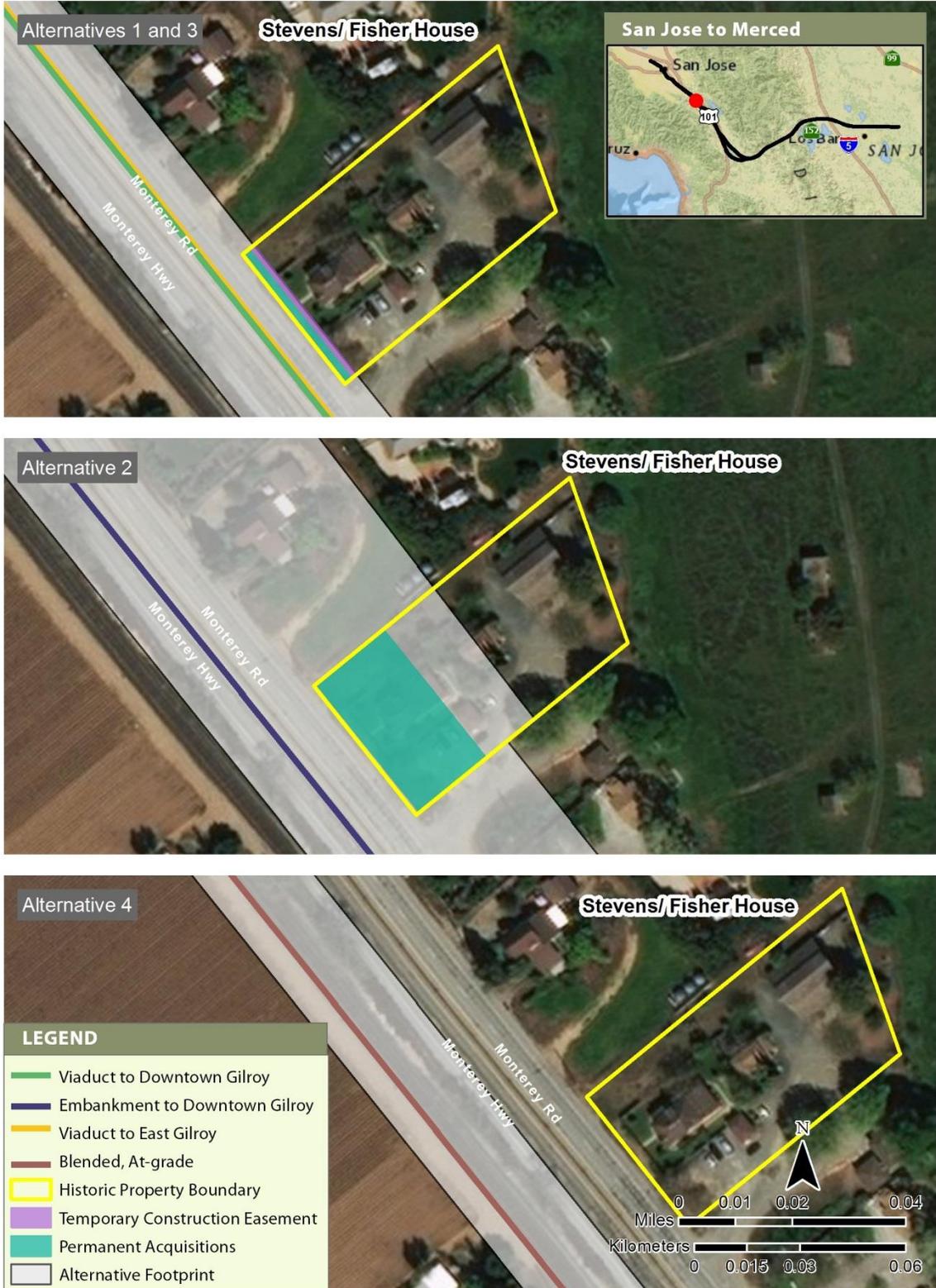
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Figure 4-54 Sunlite Baking Company



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Figure 4-55 415 Illinois Avenue



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Figure 4-56 Stevens/Fisher House



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Figure 4-57 Barnhart House



Figure 4-58 Madrone Underpass



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Figure 4-59 San Martin Winery



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Figure 4-60 Japanese School



Figure 4-61 IOOF Orphanage Home



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Figure 4-62 Gilroy City Hall



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Figure 4-63 Live Oak Creamery



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Figure 4-64 Millers Canal

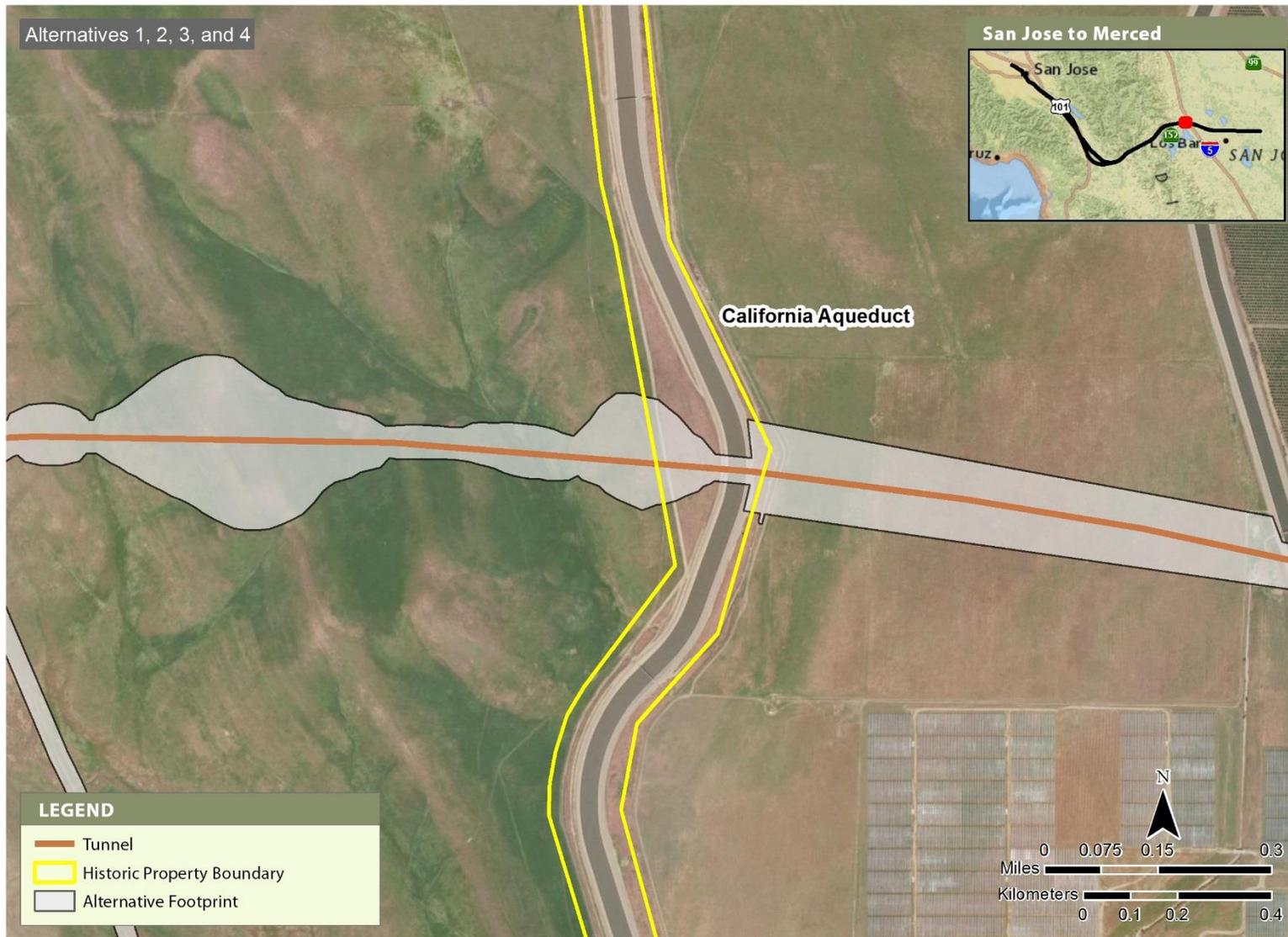


Figure 4-65 California Aqueduct

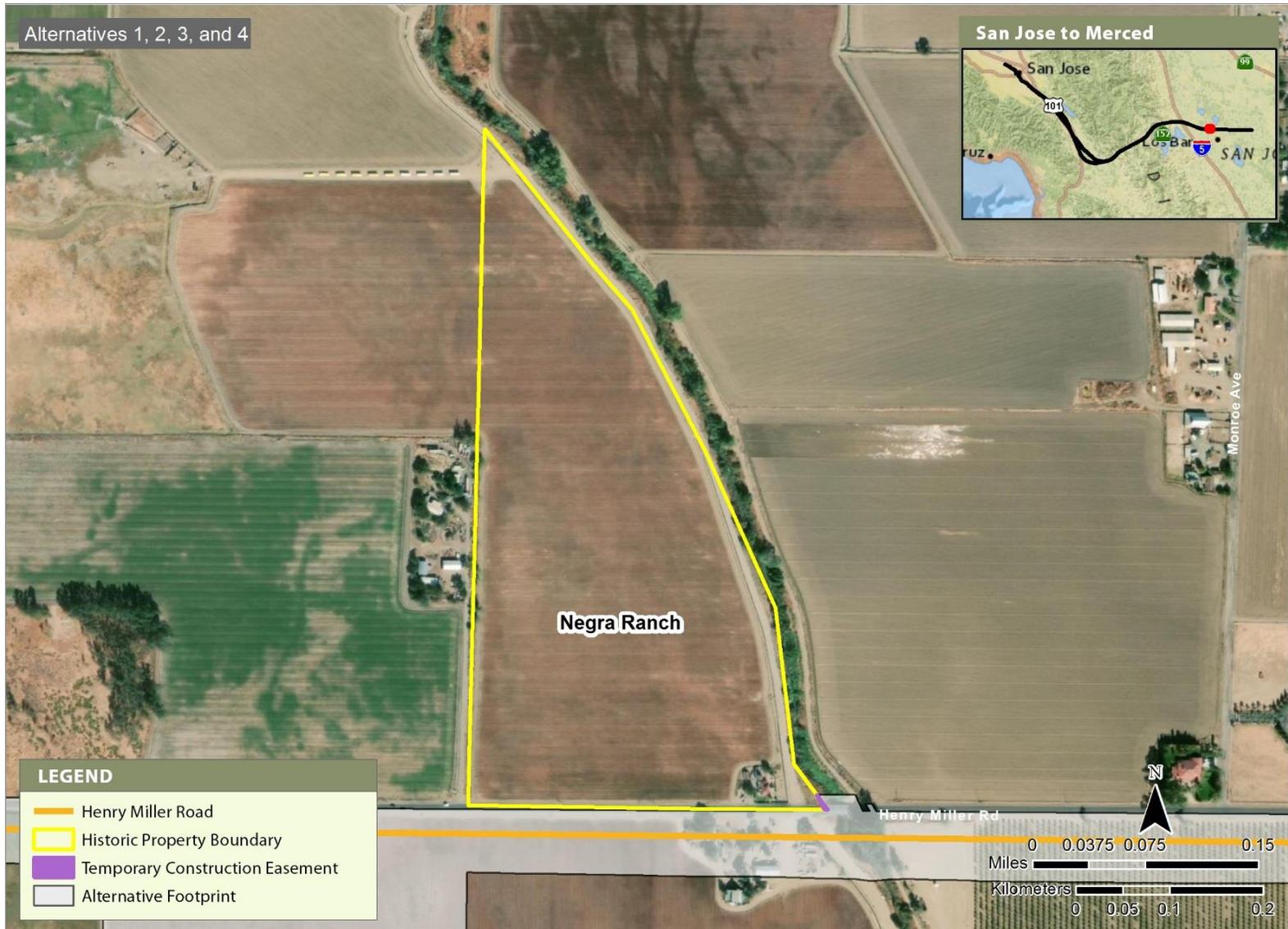


Figure 4-66 Delta-Mendota Canal



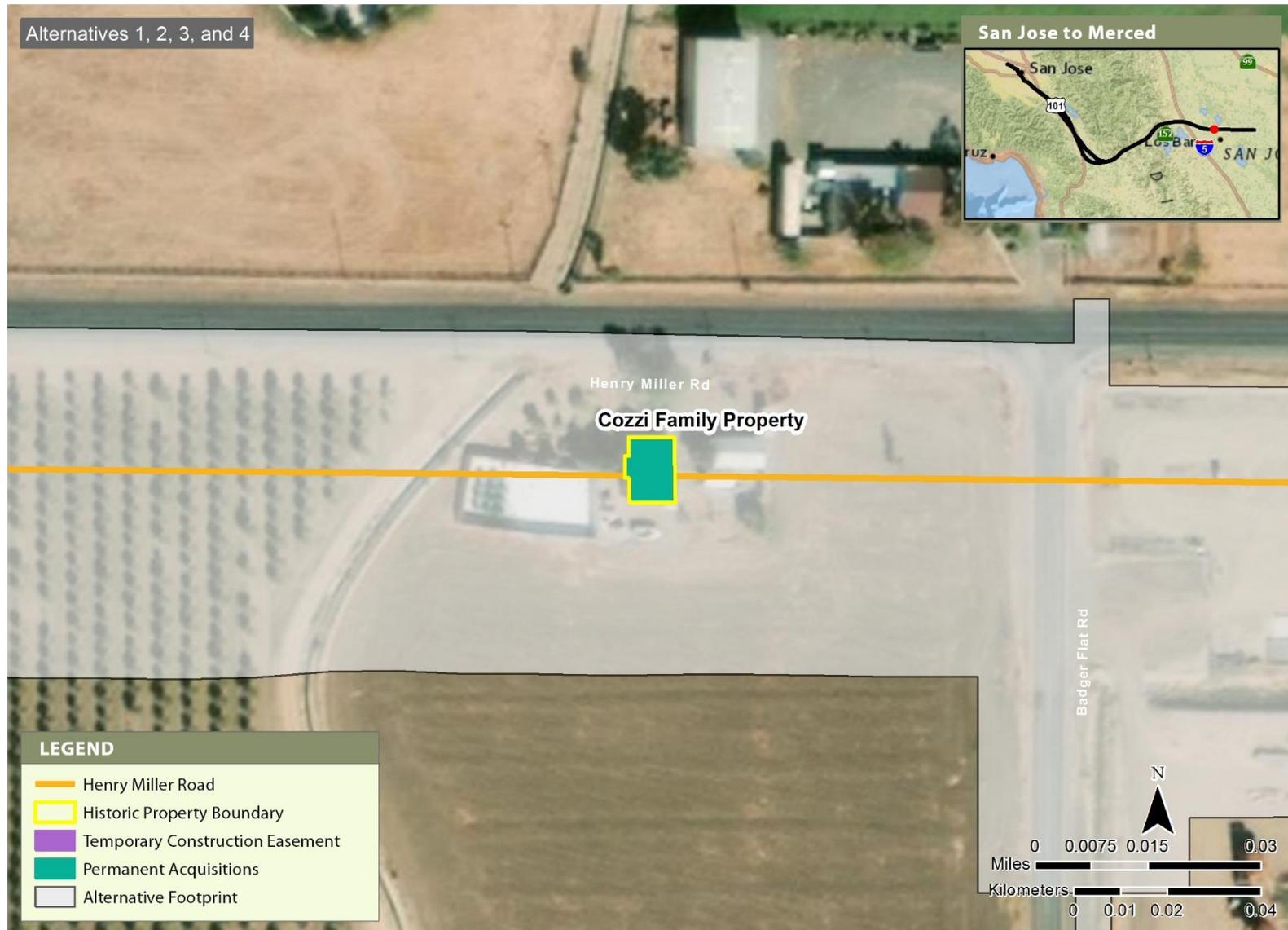
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Figure 4-67 San Joaquin and Kings River – Main Canal



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Figure 4-68 Negra Ranch



JANUARY 2019

Figure 4-69 Cozzi Family Property

4.6.2.19 Summary of Section 4(f) Use Determinations of Historic Properties

A summary of Section 4(f) uses of NRHP-listed or eligible historic properties is shown in Table 4-8. In some cases, historic properties are within the alignment of more than one project alternative. Direct and *de minimis* preliminary Section 4(f) use determinations are included in the table. In total, Alternative 1 would affect 9 historic properties, Alternative 2 would affect 10 historic properties, Alternative 3 would affect 7 historic properties, and Alternative 4 would affect 6 historic properties. A *de minimis* impact is unlikely to be a significant differentiating factor among alternatives because the net harm resulting from the *de minimis* impact is negligible.

Table 4-8 Summary of Section 4(f) Uses of NRHP-Listed or Eligible Properties

Alternative	Number of Historic Property Impacts	Historic Property Section 4(f) Determinations
San Jose Diridon Station Approach Subsection		
Alternative 1	3	Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) (use) Sunlite Baking Company (use)
Alternative 2	3	Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) (use) Sunlite Baking Company (use)
Alternative 3	3	Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) (use) Sunlite Baking Company (use)
Alternative 4	1	Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) (use)
Monterey Corridor Subsection		
None		
Morgan Hill and Gilroy Subsection		
Alternative 1	4	Stevens/Fisher House (<i>de minimis</i>) San Martin Winery (use) IOOF Orphanage Home (temporary occupancy) Live Oak Creamery (use)
Alternative 2	5	Stevens/Fisher House (use) Barnhart House (use) San Martin Winery (use) IOOF Orphanage Home (use) Live Oak Creamery (use)
Alternative 3	2	Stevens/Fisher House (<i>de minimis</i>) San Martin Winery (use)
Alternative 4	3	Madrone Underpass (use) San Martin Winery (<i>de minimis</i>) Live Oak Creamery (use)
Pacheco Pass Subsection		
None		
San Joaquin Valley Subsection		
Alternative 1	2	Negra Ranch (temporary occupancy) Cozzi Family Property (use)

Alternative	Number of Historic Property Impacts	Historic Property Section 4(f) Determinations
Alternative 2	2	Negra Ranch (temporary occupancy) Cozzi Family Property (use)
Alternative 3	2	Negra Ranch (temporary occupancy) Cozzi Family Property (use)
Alternative 4	2	Negra Ranch (temporary occupancy) Cozzi Family Property (use)

4.7 Avoidance Alternatives

Section 4(f) requires the selection of an alternative that avoids the use of Section 4(f) properties if that alternative is deemed feasible and prudent. The Purpose and Need statement presented in Chapter 1 of this Draft EIR/EIS tiers off the approved program EIR/EIS documents (Authority and FRA 2005). The project alternatives evaluation process conducted as part of the HSR project for the San Jose to Central Valley Wye Project Extent concluded that there was no feasible and prudent HSR alternative within the study area that did not result in a use of a Section 4(f) resource (Authority and FRA 2010, 2011a, 2011b). Although the project alternatives analysis process considered multiple criteria, the screening emphasized the project objective to maximize the use of existing transportation corridors and available rights-of-way to the extent feasible; the result of this effort was the carrying forward of the north-south alignment alternatives that follow the existing Caltrain and UPRR rail corridor. The project alternatives evaluation process resulted in the conclusion that, in accordance with 49 U.S.C. Section 303(c), there was no feasible and prudent HSR alternative within the study area.

The reason for this finding is as follows:

- All HSR alternatives were designed to follow existing railroad corridors to the extent allowed by design speeds. Locating the HSR alignment along these corridors is an objective of the project intended to minimize impacts on the natural and human environment. Any alternative that did not follow these or other transportation corridors would substantially increase the number of displacements, overall community disruption, adverse impacts on natural environment resources, and adverse social and economic impacts.
- Any alternative that did not follow these or other transportation corridors would not meet the Purpose and Need of the project because such an alternative would fail to link the major metropolitan areas of the state, deliver predictable and consistent travel times, and relieve capacity constraints of the existing transportation system as intercity travel demand in California increases, in a manner sensitive to and protective of California's unique natural resources.

The Authority and the FRA solicited input from the public and agencies through the project-level environmental review process from commencement in 2009 through 2017. The development of initial project-level alternatives in 2009 followed the process described in *Alternatives Analysis Methods for Project Level EIR/EIS, Version 2* (Authority 2009). The Authority evaluated potential alternatives against HSR system performance criteria. The project alternatives screening process and evaluation criteria are discussed in detail in Section 2.4.2, Alternative Consideration Process, of this Draft EIR/EIS.

Each alternative was evaluated to isolate concerns and to screen and refine the overall alternative to avoid key environmental issues or improve performance. For example, all four project alternatives would avoid a Section 4(f) use of the Cottonwood Creek Wildlife Area through the tunnel design modification that was incorporated into the project alternatives. The North Pacheco Pass deep tunnel, Tunnel 2, which was designed in 2016 to minimize impacts on the wildlife area, would entail construction of tunnels below portions of the Cottonwood Creek Wildlife

Area under all project alternatives. The tunnels would be at a depth of at least twice the diameter of the tunnel below the ground surface of the wildlife management area. At such a depth, surface disruptions related to construction and operation of the tunnel are not anticipated at the wildlife management area, and no harm to the purposes of this area would result. Under Section 4(f), tunneling is a means by which to avoid a Section 4(f) use. Therefore, the determination is that the four project alternatives would not result in a Section 4(f) use of the wildlife area. Because these design modifications have been incorporated into the project alternatives, a Section 4(f) use has been avoided and an individual resource avoidance assessment is not required. The project alternatives not carried forward had greater direct and indirect environmental impacts, were impracticable, or failed to meet the Purpose and Need for the project.

The No Project Alternative, which includes improvements that would be implemented independent of the project and is fully described in Chapter 2, would not include the construction of the HSR project or any associated facilities and would thus have no impact on any Section 4(f) or Section 6(f) resources associated with the construction and operations of the HSR system. However, there could be impacts on Section 4(f) or Section 6(f) resources as a result of the existing and planned improvements associated with the No Project Alternative. This alternative would not address the state's Purpose and Need for the project. This alternative is insufficient to meet existing and future travel demand; current and projected future congestion of the transportation system would continue to result in deteriorating air quality, reduced reliability, and increased travel times. Because the No Project Alternative does not meet the project Purpose and Need, it is not prudent and is not discussed further as an avoidance alternative for any Section 4(f) or Section 6(f) resources.

Greater detail on alternatives considered but dismissed is provided in Section 2.4 of this Draft EIR/EIS, and in the *Final Program EIR/EIS for the Proposed California High-Speed Train System* (Authority and FRA 2005), the *Alternatives Analysis Methods for Project EIR/EIS, Version 2* (Authority 2009), *San Jose to Merced Preliminary Alternatives Analysis Report* (Authority and FRA 2010), and two San Jose to Merced Supplemental Alternatives Analysis reports (Authority and FRA 2011a, 2011b) available via request on the Authority's website.

As described in Section 4.6.1, all potential uses of parks, recreation facilities, and wildlife and waterfowl refuges would be *de minimis* or temporary occupancy, pending concurrence from the OWJ. With a *de minimis* or temporary occupancy determination, individual resource avoidance assessments are not required. Therefore, the following section only provides individual resource avoidance assessments for Section 4(f) uses of cultural resources. Cultural resources with *de minimis* or temporary occupancy determinations, pending concurrence from the OWJ, are also not included in the following section.

4.7.1 Individual Resource Avoidance Assessments

4.7.1.1 Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)

The Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) is in downtown San Jose. The depot was restored to SOI standards in 1994, and continues to function as a rail station as it did historically, serving Amtrak, Caltrain, Altamont Corridor Express, and (Santa Clara) Valley Transit Authority (VTA) light rail. Additionally, multiple bus lines are serviced from the depot, retaining and expanding its function as a transportation hub. The depot remains an important resource and landmark in San Jose, and is considered a high value resource.

All four project alternatives would result in a Section 4(f) use of Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) because all entail the construction of a modern multistory station infrastructure to the north, south, and west of the existing Diridon Station/Hiram Cahill Depot (Figure 4-53). In addition, the demolition or destruction of character-defining features would occur during construction. The design team evaluated design modifications to determine if the use of the resource could be avoided. Changes to the vertical profile of the project alternatives could involve underground, tunnel, or at-grade options. However, an underground alternative would conflict with the future Bay Area Rapid Transit (BART) station at Diridon. The tunnel option was eliminated from consideration because of the level of the water table. At-grade alternatives would

require additional right-of-way, would be constrained by existing VTA tracks on the west side of the station as well as existing residential buildings and Cahill Park, which is also a Section 4(f) resource. The SAP Center at San Jose and associated features are to the east of the station. Therefore, these vertical profile changes are either not feasible because of engineering constraints or not prudent because of existing physical constraints, cost, displacements, and the potential for use at Cahill Park.

Horizontal alignment changes were also evaluated. Shifting the station location to avoid the resource would require shifting the track and station away from existing transportation corridors, which would deviate from a requirement of Prop 1A. Also, having HSR at Diridon Station is an essential component of the HSR system and having a San Jose station located elsewhere to avoid the Section 4(f) resource would not meet the purpose of the project. Additionally, there are existing VTA tracks on the west side of the station as well as existing residential buildings and Cahill Park, while the SAP Center at San Jose and associated features are to the east of the station. Therefore, these horizontal profile changes are not prudent because of existing constraints, project objectives, displacements, the potential for use at Cahill Park, and cost.

One other potential design modification could include moving the bents to avoid the historic fence, which would require increasing the height of the viaduct to accommodate longer spans. This would be an expensive design modification, and it would not ultimately avoid the use of the property.

Therefore, avoidance of this resource is not possible because Diridon Station/Hiram Cahill Depot is an integral part of the HSR system and modifications to the resource are necessary to accommodate HSR service. Additionally, the relative value of this resource to the community would remain intact because it would still function as a transportation hub. Therefore, there is no prudent avoidance alternative.

4.7.1.2 Sunlite Baking Company

The Sunlite Baking Company is south of and adjacent to the existing Diridon Station. Prior to 2016, AT&T operated out of the building, but in late 2016 an investment firm, Rhyolite Enterprises LLC, bought the parcel, likely to develop the area to complement San Jose's real estate boom. It is unclear what the property is used for currently, but it is likely vacant or being rented for industrial purposes, inconsistent with its historic use. Considering there are additions outside the period of the significance and the property is in fair condition, it is considered a moderate-value resource.

Alternatives 1, 2, and 3 would result in a Section 4(f) use of the Sunlite Baking Company because a portion of the resource is in the path of the new HSR right-of-way, with track on viaduct, and a new permanent roadway right-of-way with bike lane (Figure 4-54). Alternatives 1, 2, and 3 would also entail construction of a new HSR station parking lot in the western half of the parcel, and drop-off and pick-up areas in the center of the parcel. These facilities would result in demolition of the building.

The design team evaluated design modifications to determine if the use of the resource could be avoided. Changes to the vertical profile of Alternatives 1, 2, and 3 could involve underground, tunnel, or at-grade options. However, an underground alternative would conflict with the future BART station at Diridon. The tunnel option was eliminated from consideration because of the level of the water table. At-grade alternatives would require additional right-of-way, would be constrained by existing VTA tracks on the west side of the station as well as existing residential buildings and Cahill Park, which is also a Section 4(f) resource. The SAP Center at San Jose and associated features are to the east of the station. Therefore, these vertical profile changes are either not feasible because of engineering constraints or not prudent because of existing physical constraints, cost, displacements, and the potential for use at Cahill Park.

The design team also evaluated horizontal alignment changes. Shifting the station location to avoid the resource would require shifting the track and station away from existing transportation corridors (Prop 1A states that the HSR system be designed to follow existing transportation and utility corridors to the extent feasible and functionally viable), and would require substantial right-

of-way acquisition elsewhere as well as result in conflicts with city zoning and the general plan. Also, having HSR at Diridon Station is an essential component of the HSR system and having a San Jose station located elsewhere to avoid the Section 4(f) resource would not meet the purpose of the project. Because the Sunlite Baking Company building is adjacent to Diridon Station, it cannot be avoided. Additionally, there are existing VTA tracks on the west side of the station as well as existing residential buildings and Cahill Park, while the SAP Center at San Jose and associated features are to the east of the station. Therefore, these horizontal profile changes are not prudent because of existing constraints, project objectives, displacements, the potential for use at Cahill Park, and cost.

Therefore, avoidance of this resource is not possible under Alternatives 1, 2, and 3 because Diridon Station/Hiram Cahill Depot is an integral part of the HSR system and modifications to the resource are necessary to accommodate HSR service. Additionally, the relative value of Sunlite Baking Company to the community is moderate, the resource is currently vacant, and it is not providing significant value to the community. It would not be prudent to expend the resources necessary to avoid this resource. Therefore, because of the extensive cost, right-of-way, and displacements that would be required to avoid this resource, and the relative value of this resource, there is no prudent avoidance alternative under Alternatives 1, 2, and 3. The use of Sunlite Baking Company could be avoided by selecting Alternative 4, which would avoid the resource. Alternative 4 is the feasible and prudent alternative to the Section 4(f) use that would result from Alternatives 1, 2, and 3.

4.7.1.3 Stevens/Fisher House

The Stevens/Fisher House is on Monterey Road in Morgan Hill. There has been some infill of modern structures. Additionally, the property has been subdivided over the years, and is now adjacent to large, modern residential properties that detract from the historic feeling and setting. For the purposes of Section 4(f) it is considered to be a resource of moderate value.

Under Alternative 2, the Monterey Road right-of-way would be shifted to the east and would encroach within the western half of the parcel that contains the Stevens/Fisher House (Figure 4-56). New telecommunications and electrical utilities would be placed adjacent to the road right-of-way on the current location of the Stevens/Fisher House. The road right-of-way and utilities would demolish the residence, the Stevens/Fisher House. These project activities would result in a Section 4(f) use of the property.

The design team evaluated design modifications for Alternative 2 to see if the resource could be avoided. The design team evaluated a tunnel option, but this would cause significant disturbance during construction to both this property and to 586 Monterey Road because the tunnel would need to span both of these properties, in addition to being significantly more expensive. Cut-and-cover construction would be an expensive undertaking that would cause significant disturbance to the residence, requiring the residence to be temporarily relocated, stored, and protected during construction. Changing the horizontal alignment to the west is not feasible because of the UPRR right-of-way. Therefore, given the physical constraints on the resource and the cost, and given the relative value of the resource, it would not be prudent to avoid the resource under Alternative 2.

The use of Stevens/Fisher House under Alternative 2 could be avoided by selecting either Alternative 1 or Alternative 3, which would result in a *de minimis* impact, or Alternative 4, which would result in no impact. Under Alternatives 1 and 3, the relocated Monterey Road would encroach into the historic property boundary, resulting in a permanent use of the property. The existing roadway is currently 42 feet from the residence's primary (west) façade. The road right-of-way would pass approximately 20 feet in front of the residence's primary façade. Although Alternatives 1 and 3 would alter the character-defining features of the property and its historic setting, the project alternatives would not change the ultimate use of the property. Therefore, this encroachment and permanent use would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) and the impact would be *de minimis*. Additionally, Alternative 4 would result in no use of the resource because it would be approximately 90 feet southwest of the Stevens/Fisher House. Therefore, Alternatives 1, 3, and 4

are the feasible and prudent alternatives to the Section 4(f) use that would result from Alternative 2.

4.7.1.4 Barnhart House

The Barnhart House is adjacent to Monterey Road in Morgan Hill. One modern structure as well as a modern vineyard, paved driveway, and nonhistoric landscape features are deviations from its historic configuration. However, its setting remains rural, and the property is still in use as a residence. For the purposes of Section 4(f) it is considered to be a resource of moderate value.

Under Alternative 2, the Barnhart House would be in the path of a new permanent roadway right-of-way, electrical and telecommunications utilities, and TCE (Figure 4-57). The resource and adjacent outbuildings would be demolished as a result of construction. Because construction of Alternative 2 would require the demolition of the resource and would materially alter its physical characteristics such that the qualities that qualify it for listing would be destroyed, Alternative 2 would result in a Section 4(f) use of the Barnhart House.

The design team evaluated design modifications for Alternative 2 to see if the resource could be avoided. A viaduct structure would avoid the resource, which is the design for Alternatives 1 and 3. The design team evaluated a tunnel option, but this would cause significant disturbance to this property, in addition to being significantly more expensive. Cut-and-cover construction would be an expensive undertaking that would cause significant disturbance to the residence, requiring the residence to be temporarily relocated, stored, and protected during construction. Changing the horizontal alignment to the west is not feasible because of the UPRR right-of-way.

The design team also evaluated other structural design changes. Retaining walls could be installed for a grade separation, but this would still result in demolition of the property. Increasing the span of the grade separation to avoid footings in the property would require a 1,100-foot span over the UPRR tracks, Monterey Road, the HSR right-of-way, and the Barnhart property. Under this option, the jug handle would have to be extended farther east, which would then result in impacts on Coyote Creek Parkway and Trail, another Section 4(f) resource, and would be expensive. The jug handle is needed to provide connection between Palm Avenue and Monterey Road with the new grade separation that is required to cross HSR.

Therefore, given the physical constraints on the resource and the cost, and given the relative value of the resource, it would not be prudent to avoid the resource under Alternative 2. The use of Barnhart House could be avoided by selecting either Alternative 1, 3, or 4, all of which would avoid the resource. Alternatives 1, 3, and 4 are the feasible and prudent alternatives to the Section 4(f) use that would result from Alternative 2.

4.7.1.5 Madrone Underpass

Madrone Underpass is an underpass along Monterey Road in Morgan Hill. The setting of the underpass has experienced low-density residential development since the property was constructed in 1933, but the girder bridge, abutments, and pedestrian passage have not been visibly altered. Additionally, the property has been in consistent use as a railroad underpass since its construction, making this a moderate-value resource.

Under Alternative 4 (Figure 4-58), the HSR right-of-way would be placed on approximately 15-foot-high ballasted fill within the existing Caltrain right-of-way, which passes over the Madrone Underpass. To accommodate the new HSR right-of-way in this location, the Madrone Underpass would be demolished and replaced by a new box girder overpass structure, resulting in a Section 4(f) use because the Madrone Underpass cannot support the new HSR tracks in its existing condition.

The design team evaluated design modifications for Alternative 4 to see if the resource could be avoided. It was determined that the tracks could not be shifted to the north because there is an existing wetland area that would be affected, and the tracks could not be shifted to the south because the El Toro Fire Station would then be affected and displaced. The design team also

evaluated a tunnel option, but this would cause significant disturbance to the surrounding area, in addition to being significantly more expensive.

Therefore, given the physical constraints on the resource, additional displacements, and transportation and community impacts, it would not be prudent to avoid the resource under Alternative 4. Madrone Underpass could be avoided by selecting Alternatives 1, 2, or 3, which would avoid the resource. Alternative 1, 2, or 3 is a feasible and prudent alternative to the Section 4(f) use that would result from Alternative 4.

4.7.1.6 San Martin Winery

San Martin Winery is in San Martin adjacent to the existing UPRR tracks. While the site has experienced some infill with modern buildings not related to its period of significance, it is still an active expression of wine making in the Santa Clara Valley, and has been in consistent use as a winery since 1933. For the purposes of Section 4(f) it is considered to be a resource of moderate value.

Under Alternatives 1 and 3, new HSR tracks on viaduct (35-foot-high structure plus additional 27-foot OCS poles) would be constructed on the current site of the historic building cluster and tree-lined drive, which are along the western edge of the historic property adjacent to the UPRR tracks and Monterey Road. Construction of the HSR viaduct would require demolition of the resource (Figure 4-59). Under Alternative 2, new HSR tracks on an at-grade ballasted track on retained fill would be constructed on the current site of the historic building cluster and would also require demolition of the resource. Alternatives 1, 2, and 3 would result in a Section 4(f) use.

The design team evaluated design modifications for Alternatives 1, 2, and 3 to see if the resource could be avoided. Under Alternatives 1 and 3, which are on viaduct, avoiding the property would require a 1,280-foot clear span, as well as increasing the height of the viaduct substantially. This would cause additional visual impacts in the area and would greatly increase the construction cost. In addition, this option would still affect the property because the viaduct would be directly over the property and could result in a constructive use due to the amount of the viaduct that would span the property and the scale of it. The design team evaluated a tunnel option, but this would cause significant disturbance to this property, in addition to being significantly more expensive. Cut-and-cover construction would be an expensive undertaking that would cause significant disturbance to the resource, requiring the residence to be temporarily relocated, stored, and protected during construction. The resource is also constructed of masonry materials, which are heavy and not easily moved or transported without sustaining damage, which would add more challenges to moving the resource.

A horizontal alignment shift of 800 feet to the east would also be required to completely avoid the property. Shifting the alignment to avoid the resource would require shifting the track away from existing transportation corridors (Prop 1A states that the HSR system be designed to follow existing transportation and utility corridors to the extent feasible and functionally viable), and would require substantial right-of-way acquisition elsewhere as well as result in conflicts with city zoning and the general plan. This shift would also cause additional impacts on creeks, water quality, biological resources, and agricultural property acquisitions. Additionally, the straddle bents under Alternatives 1 and 3 cannot be shifted to completely avoid the resource because the span between bents would be too large. Changing the horizontal alignment to the west is not feasible because of the UPRR right-of-way.

Therefore, given the physical constraints on the resource and the cost, it would not be prudent to avoid the resource under Alternatives 1, 2, and 3, despite the relatively high value of the resource. However, the use of San Martin Winery under Alternatives 1, 2, and 3 could be avoided by selecting Alternative 4, which would result in a *de minimis* impact. Under Alternative 4, a retaining wall would be constructed along the HSR right-of-way, approximately 10 feet inside the historic property boundary, resulting in a permanent use of the property. However, the retaining wall would remain below eye level, and the security fencing would be visually permeable, such that these new elements would not separate the resource from the adjacent railroad right-of-way. Although Alternative 4 would result in a permanent use, it would not materially impair the characteristics that qualify it for listing, or change the property's use. Therefore, this

encroachment and permanent use would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f) and the impact would be *de minimis*. Therefore, Alternative 4 is the feasible and prudent alternative to the Section 4(f) use that would result from Alternatives 1, 2, and 3.

4.7.1.7 IOOF Orphanage

IOOF Orphanage is located at 290 IOOF Avenue in Gilroy. The site has experienced some expansion and infill not related to its period of significance, but it has operated continuously as an orphanage and foster care center since it was opened. It remains the last operating Odd Fellow children's home in the United States and is the last active expression of the IOOF child care programs of the late 19th and early 20th centuries. For the purposes of Section 4(f), it is considered to be a resource of high value.

Under Alternative 2, a Section 4(f) use would result because the footprint of the new parking lot and turnaround would overlap the current parking lot and adjacent cluster of trees in this location and would encroach approximately 20 feet into the historic property boundary and replace a portion of the lawn that makes up the western portion of the IOOF Orphanage Home. In addition, it would indirectly impair the historic setting and feeling.

The design team evaluated design modifications for Alternative 2 to see if the resource could be avoided. The alignment could not be shifted east, as that would result in greater impacts on the resource; nor could it be shifted farther west, as that would disrupt Monterey Road and lead to additional displacements and community impacts. The impacts on the west side of the resource result from the need to realign Millers Slough, which necessitates the IOOF Orphanage Home parking lot to be moved farther into the grassy area. It is not possible to move this parking lot to another location without causing additional impacts on the resource.

There is also an impact from a new drainage pump station, whose purpose is to keep the IOOF Avenue undercrossing dry. The design team determined that the drainage pump station could be moved from within the IOOF Orphanage Home to an area between the UPRR tracks and Monterey Road. This design change would reduce the overall impact on the resource, but it would not completely eliminate it because impacts from the relocated parking lot would still occur.

Therefore, given the physical constraints on the resource, additional displacements, and transportation and community impacts, it would not be prudent to avoid the resource under Alternative 2. IOOF Orphanage Home could be avoided by selecting Alternatives 1, 3, or 4, which would avoid the resource, or in the case of Alternative 1, would require a temporary occupancy, but would not result in a use. Alternative 1, 3, or 4 is a feasible and prudent alternative to the Section 4(f) use that would result from Alternative 2.

4.7.1.8 Live Oak Creamery

The Live Oak Creamery is adjacent to the existing Caltrain right-of-way. It is vacant and has not been used as a dairy or creamery (as it had been historically) since the 1940s; it appears to have been vacant since the 1970s. While character-defining features such as the brick-bond walls and flat roof remain intact, the creamery is extremely deteriorated, and no attempt appears to have been made to maintain or restore the property. The southern addition has been demolished. It is considered a low-value resource for the purposes of Section 4(f).

Under Alternatives 1, 2, and 4, the resource would be demolished because it is in the path of the HSR right-of-way, resulting in a Section 4(f) use (Figure 4-63). The design team evaluated design modifications for Alternatives 1, 2, and 4 to see if the resource could be avoided. The viaduct height could be increased so that it could clear the top of the building, but a footing would still be present within the property boundary, resulting in structure demolition. The design team evaluated a tunnel option, but this would cause significant disturbance to this property, in addition to being significantly more expensive. Cut-and-cover construction would be an expensive undertaking that would cause significant disturbance to the resource, requiring the residence to be temporarily relocated, stored, and protected during construction.

The horizontal alignment could be shifted to the east, but this could cause additional impacts on the IOOF Orphanage Home and Japanese School, other Section 4(f) resources, which are resources of higher value. Changing the horizontal alignment to the west is not feasible because of the UPRR right-of-way. Additionally, shifting the alignment west would cause the acquisition and demolition of many other buildings in downtown Gilroy that are adjacent to the right-of-way, including portions of the Monterey Street Downtown District.

Therefore, because of engineering constraints, cost, additional displacements, and additional impacts on other Section 4(f) resources, avoidance of this resource is not prudent under Alternatives 1, 2, and 4. In addition, the relative value of this resource to the community is low because of its current state of disrepair. It would not be prudent to expend the resources necessary to avoid this resource. Live Oak Creamery could be avoided by selecting Alternative 3, which would be approximately 742 feet from the resource. Alternative 3 is a feasible and prudent alternative to the Section 4(f) use that would result from Alternatives 1, 2, and 4.

4.7.1.9 Cozzi Family Property

The Cozzi Family Property is south of Henry Miller Road. One modern structure not related to the historic residence, as well as a new metal fencing system, is present; however, the property retains its rural feeling and character-defining features, and is therefore considered a moderate-value resource for the purposes of Section 4(f).

Under all four project alternatives, new HSR tracks on viaduct—a 40-foot-high structure plus 27-foot OCS poles—would pass through the parcel that contains the Cozzi Family Property and would be constructed directly over the resource. All project alternatives would therefore require demolition of the resource, resulting in a Section 4(f) use (Figure 4-69). The design team evaluated design modifications for all project alternatives to see if the resource could be avoided. For the viaduct to clear the buildings, the track profile would need to be increased to above 40 feet, which would require additional viaduct structures and additional bents. The additional straddle bents would still be within the property boundary. The design team evaluated a tunnel option, but this would cause significant disturbance to this property, in addition to being significantly more expensive. Cut-and-cover construction would be an expensive undertaking that would cause significant disturbance to the residence, requiring the residence to be temporarily relocated, stored, and protected during construction, and would affect Los Banos Creek. Because of engineering constraints and cost, these options would not be prudent.

A horizontal alignment shift of 240 feet north would be required to avoid the property, but this would require permanent incorporations of other Section 4(f) resources, such as Negra Ranch and Los Banos Wildlife Area, and would disrupt agricultural businesses, potentially resulting in severe disruption of existing farm operations (e.g., through severance of a parcel by the project footprint). Shifting the alignment to the south by 500 feet would result in similar impacts on existing farm operations. Such a modification would have both cost and schedule implications.

Therefore, because of engineering constraints, cost, additional displacements, and additional impacts on other Section 4(f) resources and other agricultural resources, avoidance of this resource is not feasible or prudent. In addition, the relative value of the Cozzi Family Property to the community is moderate; it would not be prudent to expend the resources necessary to avoid this resource. In view of these factors, there is no feasible and prudent avoidance alternative.

4.7.1.10 Summary of Avoidance Alternatives

Table 4-9 shows a summary of which alternatives could be used as an avoidance alternative for the resources that incur a Section 4(f) use.

Table 4-9 Summary of Section 4(f) Avoidance Alternatives

Resource	Alternative 1	Alternative 2	Alternative 3	Alternative 4	No Avoidance Alternative
San Jose Diridon Station Approach Subsection					
Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)					X
Sunlite Baking Company				X	
Monterey Corridor Subsection					
None					
Morgan Hill and Gilroy Subsection					
Stevens/Fisher House	X		X	X	
Barnhart House	X		X	X	
Madrone Underpass	X	X	X		
San Martin Winery				X	
IOOF Orphanage Home	X		X	X	
Live Oak Creamery			X		
Pacheco Pass Subsection					
None					
San Joaquin Valley Subsection					
Cozzi Family Property					X

IOOF = Independent Order of Odd Fellows

4.8 Measures to Minimize Harm

Measures to minimize harm include impact avoidance and minimization features (IAMF) that are incorporated into the project design to avoid or minimize impacts. The application of IAMFs does not imply there are 4(f) uses to 4(f)-protected properties. Mitigation and enhancement measures to compensate for unavoidable project impacts mitigate project impacts that cannot be avoided or minimized with the incorporation of IAMFs; 4(f)-protected properties for which impacts are mitigated may therefore be subject to a 4(f) use, including temporary occupancy and de minimis. Each applicable IAMF and MM are described in Table 4-10, as applicable to each 4(f)-protected property, as required by 49 U.S.C. Section 303(c)(2). Additionally, avoidance alternatives have been developed to avoid uses to Section 4(f) properties where possible, as described in Section 4.7, Avoidance Alternatives, and will be coordinated with the OWJs over the resource. The Authority and the FRA are continuing ongoing coordination, as appropriate, with these officials. During the FRA's consideration of its decision and during final design, additional measures may be agreed on to further reduce potential impacts on Section 4(f) properties.

For effects on historic properties, as previously described, the PA outlines an approach for compliance with Section 106 of the NHPA. In compliance with Section 106, mitigation measures would be negotiated in consultation that may include federal, state, and local agencies, Native American tribes, and other interested parties. An MOA then formalizes these measures; agreed-upon mitigation would be implemented after the MOA is executed. An MOA that is under development for the San Jose to Merced Project Section would address the treatment of adverse

effects from the HSR alignment. The MOA would stipulate which treatment measures would be applied to which historic properties and that the treatment of built resources would be described in the BETP, and the treatment of known and anticipated archaeological resources would be described in the ATP. IAMFs and MMs for all historic properties are listed together in Table 4-10, as applicable to each historic property. The mitigation measures that are listed in Table 4-10 are standardized mitigation and may not be applied as discussed, pending continued consultation with interested parties. The appropriate mitigation measures will be identified prior to the Final EIR/EIS. As described, the project will include all possible planning to minimize harm to Section 4(f) properties resulting from use, as required by 49 U.S.C. Section 303(c)(2).

Table 4-10 Measures to Minimize Harm

Impact	Measures to Minimize Harm
<p>Potentially Affected Parks: Reed Street Dog Park; Los Gatos Creek Trail and Park; Guadalupe River Trail, Reach 6; Fuller Park; Coyote Creek Parkway and Trail; Morgan Hill Community and Cultural Center; Cottonwood Creek Wildlife Area</p>	
<ul style="list-style-type: none"> ▪ Acquisition of land from park ▪ Temporary construction activities in the park ▪ Temporary changes in access 	<ul style="list-style-type: none"> ▪ Final design would continue to minimize right-of-way impacts on Reed Street Dog Park; Los Gatos Creek Trail and Park; Guadalupe River Trail, Reach 6; Fuller Park, Coyote Creek Parkway and Trail, and Morgan Hill Community and Cultural Center. Acquisition of land would be pursuant to California Code of Civil Procedure Section 1240 for the permanent use of land in each park. ▪ The Authority and the FRA would continue to work with the agencies with jurisdiction on the establishment of appropriate compensation in terms of allowance or additional property to accommodate displaced park use during construction. Options could include preparing a plan for alternative public recreation resources during the period of closure and preparing signs and newsletters describing the project, its schedule, and alternative public recreational opportunities. ▪ The Authority and the FRA would coordinate public involvement efforts prior to construction activities to notify the public about any changes to park access. ▪ The Authority and the FRA would maintain access to park and recreation facilities to the greatest extent practicable. ▪ Prior to construction-related ground-disturbing activities affecting trails, the contractor would prepare a technical memorandum documenting how connections to the unaffected portions of trails and nearby roadways would be maintained during construction. The contractor would provide alternative access via a temporary trail detour using existing roadways or other public rights-of-way. The contractor would provide detour signage and lighting and alternative routes that meet public safety requirements. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. The activities would be incorporated into the design specifications and would be a pre-condition requirement. ▪ Prior to construction-related ground-disturbing activities affecting park access, the contractor would prepare a technical memorandum documenting how connections to the unaffected park portions or nearby roadways would be maintained during construction. Upon approval by the Authority, the contractor would implement the activities identified in the technical memorandum. The activities would be incorporated into the design specifications and would be a pre-condition requirement. ▪ During the design phase, the contractor would prepare a technical memorandum documenting how access to parks would be maintained or established following completion of construction activities. The technical memorandum would be submitted to the Authority for review and approval. ▪ Upon approval by the Authority, the contractor would implement the project design features identified in the technical memorandum prepared as part of PK-IAMF#1: Parks,

Impact	Measures to Minimize Harm
	<p>Recreation, and Open Space. The project design features would be incorporated into the design specifications and would be a pre-condition requirement.</p> <ul style="list-style-type: none"> ▪ During preparation of the construction management plan, the contractor will coordinate with representatives from Morgan Hill Community and Cultural Center to modify construction as necessary (which may include scheduling modifications) to avoid construction noise disruption of noise sensitive outdoor events (such as concerts and weddings). ▪ To minimize potential impacts on public and private water supplies derived from groundwater resources, including water supply wells, springs, and seeps, as well as from surface water resources supported by groundwater, the Authority proposes to implement a long-term Groundwater Adaptive Management and Monitoring Program, which will include ongoing monitoring, management, and reporting activities to detect, address, and remedy groundwater and hydrology impacts that may arise during and after tunneling in a timely manner. See HYD-MM#1: Prepare and Implement a Groundwater Adaptive Management and Monitoring Program in Section 3.8 for more details. ▪ To avoid, minimize and mitigate for potential impacts on wetlands, creeks, ponds, springs, riparian vegetation, special-status plant and wildlife species and protected trees, the Authority would prepare and implement a groundwater adaptive management and monitoring plan (GAMMP) prior to, during, and after tunnel construction to implement the requirements described under HYD-MM#1 and as described below concerning biological resources as described under BIO-MM#9. Prior to construction, the GAMMP would be submitted to the USFWS, CDFW, SWRCB, and Regional Water Quality Control Board (RWQCB) for review (and approval where applicable). See BIO-MM#9: Prepare and Implement a Groundwater Adaptive Management and Monitoring Plan in Section 3.7 for more details.
Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) (APE Map ID 0497)	
<p>Property Demolition or Acquisition</p> <p>Design and construction of a new station building consistent with the SOI's Standards for the Treatment of Historic Properties</p>	<ul style="list-style-type: none"> ▪ The property would be fully documented prior to construction to record the character-defining features of the depot complex and its setting. ▪ An interpretive exhibit would be created about the history of the depot, including the annex and associated features. A qualified historian and designer would craft a public exhibition documenting the significant history of the property. ▪ The station design would be prepared post-ROD. The Authority would issue RFQs to receive SOQs from qualified firms (contractor) for station designs and related services. Such firms would be contracted to provide professional consultant and design services for all design stages through final design. Selected firms would be responsible for making their designs context sensitive and meeting the SOI's Standards for the Treatment of Historic Properties.
Sunlite Baking Company (APE Map ID 0522)	
<p>Property Demolition or Acquisition</p>	<ul style="list-style-type: none"> ▪ The property would be fully documented prior to construction to capture the architectural quality of the resource as a distinctive example of the Art Moderne architectural style interpreted for an industrial production facility. ▪ An interpretive exhibit would be created about the history of the resource and its architecture. A qualified historian and designer would craft a public exhibition documenting the significant history of the resource.

Impact	Measures to Minimize Harm
Stevens/Fisher House (APE Map ID 1863)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be fully documented prior to construction to record the character-defining features of the resource and its setting. ▪ An interpretive exhibit would be created about the history of the resource and its role in the early settlement and residential development in the Coyote Valley. A qualified historian and designer would craft a public exhibition documenting the significant history of the resource within the Coyote Valley.
Barnhart House (APE Map ID 1909)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be relocated to avoid its destruction and minimize adverse effects resulting from physical damage or alteration. The relocation of the property would be specified in the BETP by the Authority or the PI, depending on when the location is identified, and take into account the historic site and layout (i.e., the orientation of the buildings to the cardinal directions), and their potential reuse. ▪ The property would be fully documented prior to construction to record the character-defining features of the resource and its setting. ▪ An interpretive exhibit would be created about the history of the resource and its architectural character. A qualified historian and designer would craft a public exhibition documenting the significant architectural history of the resource.
Madrone Underpass (APE Map ID 2127)	
	<ul style="list-style-type: none"> ▪ The property would be fully documented prior to construction to record the character-defining features of the resource and its setting. ▪ An interpretive exhibit would be created about the history of the resource and its architectural character. A qualified historian and designer would craft a public exhibition documenting the significant architectural history of the resource.
San Martin Winery (APE Map ID 3001)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be further documented for its association with the Bruce Felice winemaking family and the main buildings architectural quality as an example of the Spanish Eclectic-style. ▪ An interpretive exhibit would be created about the history of the resource and its role within the larger agricultural industry in area. A qualified historian and designer would craft a public exhibition documenting the significant history of the resource within Santa Clara County.
IOOF Orphanage Home (APE Map ID 3402)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be further documented for its association with the work of the IOOF, particularly in the realm of caring for orphans, and as an example of Spanish Revival-style architecture. ▪ An interpretive exhibit would be created about the history of the resource and its architectural character. A qualified historian and designer would craft a public exhibition documenting the significant architectural history of the resource.
Live Oak Creamery (APE Map ID 3458)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be further documented for its association with early industry in Gilroy, including the building's association with the important dairy industry in Gilroy. ▪ An interpretive exhibit would be created about the history of the resource and its role within the larger dairy industry in Gilroy during the first half of the 20th century. A qualified historian and designer would craft a public exhibition documenting the significant history of the dairy industry in Gilroy.

Impact	Measures to Minimize Harm
Cozzi Family Property (APE Map ID 4317)	
Property Demolition or Acquisition	<ul style="list-style-type: none"> ▪ The property would be further documented for its association with the agricultural industry and Italian settlement and community development in the area. ▪ An interpretive exhibit would be created about the history of the resource and its role within the larger agricultural industry in the area, with a focus on the important contributions of Italian settlers to the local community. A qualified historian and designer would craft a public exhibition documenting the significant history of the resource.

APE = area of potential effect
 BETP = built environment treatment plan
 FRA = Federal Railroad Administration
 ID = identification number
 IOOF = Independent Order of Odd Fellows
 PI = principal investigator
 RFQ = request for qualifications
 ROD = Record of Determination
 SOI = Secretary of the Interior
 SOQ = statement of qualifications

4.9 Section 4(f) Least Harm Analysis

When there is no feasible and prudent avoidance alternative to using Section 4(f) resources, the FRA must approve the alternative that causes the least overall harm to Section 4(f) resources, taking into consideration the preservation purpose of the statute. To ascertain which alternative that uses Section 4(f) properties would cause the overall least harm, the FRA considers the following seven factors:

- Ability to mitigate adverse impacts on each Section 4(f) property (including any measures that result in benefits to the property)
- Relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection
- Relative significance of each Section 4(f) property
- Views of the official(s) with jurisdiction over each Section 4(f) property
- Degree to which each alternative meets the Purpose and Need for the project
- After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)
- Substantial differences in costs among the project alternatives

The first four factors relate to the net harm that each project alternative would cause to the Section 4(f) property, and the remaining three factors take into account concerns with the project alternatives that are not specific to Section 4(f).

Considering the foregoing discussion of the project's use of Section 4(f) properties and alternatives assessment, there is no feasible and prudent avoidance alternative to the use of two Section 4(f) properties, regardless of which project alternative is selected:

- Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)
- Cozzi Family Property

The following discussion demonstrates the overall least harm alternative for impacts in the project footprint that is consistent with the Preferred Alternative (see Chapter 8, Preferred Alternative and Station Sites).

4.9.1 Least Harm Analysis for San Jose to Central Valley Wye Project Alternatives

Because all four project alternatives would result in a Section 4(f) use of the Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) and Cozzi Family Property, the FRA has completed the following least harm analysis for the project. Table 4-11 shows the Section 4(f) properties that would incur a use as a result of the project alternatives and characterizes each alternative using the seven least harm analysis factors (23 C.F.R. § 774.3(c)). Any resource with a use or *de minimis* finding is also included because there is no true avoidance alternative that would avoid all Section 4(f) resources. The bolded resources with an asterisk in Table 4-11 indicate a full Section 4(f) use, while non-bolded resources indicate a *de minimis* finding.

For historic properties that would be demolished, measures to mitigate their loss will be part of Section 106 consultation. However, for Section 4(f), their loss constitutes a full use that cannot be mitigated under Section 4(f).

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Table 4-11 Preliminary Least Harm Analysis for the San Jose to Central Valley Wye Project Alternatives

Least Harm Factor	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Section 4(f) property incurring a use	<p>Use or <i>de minimis</i> finding for 12 resources:</p> <ul style="list-style-type: none"> ▪ Los Gatos Creek Trail and Park ▪ Guadalupe River Trail, Reach 6 ▪ Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)* ▪ Sunlite Baking Company* ▪ Coyote Creek Parkway ▪ Coyote Creek Trail ▪ Stevens/Fisher House ▪ San Martin Winery* ▪ Live Oak Creamery* ▪ Cottonwood Creek Wildlife Area ▪ Cozzi Family Property* 	<p>Use or <i>de minimis</i> finding for 16 resources:</p> <ul style="list-style-type: none"> ▪ Reed Street Dog Park ▪ Los Gatos Creek Trail and Park ▪ Guadalupe River Trail, Reach 6 ▪ Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)* ▪ Sunlite Baking Company* ▪ Coyote Creek Parkway ▪ Coyote Creek Trail ▪ Stevens/Fisher House* ▪ Barnhart House* ▪ Morgan Hill Community and Cultural Center ▪ San Martin Winery* ▪ IOOF Orphanage Home* ▪ Live Oak Creamery* ▪ Cottonwood Creek Wildlife Area ▪ Cozzi Family Property* 	<p>Use or <i>de minimis</i> finding for 12 resources:</p> <ul style="list-style-type: none"> ▪ Reed Street Dog Park ▪ Los Gatos Creek Trail and Park ▪ Guadalupe River Trail, Reach 6 ▪ Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)* ▪ Sunlite Baking Company* ▪ Coyote Creek Parkway ▪ Coyote Creek Trail ▪ Stevens/Fisher House ▪ San Martin Winery* ▪ Cottonwood Creek Wildlife Area ▪ Cozzi Family Property* 	<p>Use or <i>de minimis</i> finding for 9 resources:</p> <ul style="list-style-type: none"> ▪ Los Gatos Creek Trail and Park ▪ Southern Pacific Depot (Diridon Station/Hiram Cahill Depot)* ▪ Fuller Park ▪ Coyote Creek Parkway ▪ Madrone Underpass* ▪ San Martin Winery ▪ Live Oak Creamery* ▪ Cottonwood Creek Wildlife Area ▪ Cozzi Family Property*
Factor 1: The ability to mitigate adverse impacts on each Section 4(f) property (including any measures that result in benefits to the property)	<p>Los Gatos Creek Trail, Guadalupe River Trail, Reach 6; and Coyote Creek Parkway and Trail: A <i>de minimis</i> impact is anticipated; measures to minimize harm would maintain access to the trails and parks.</p> <p>Cottonwood Creek Wildlife Area: A <i>de minimis</i> impact is anticipated; measures to minimize harm would avoid disruption to wildlife dependent on streamflow.</p> <p>Southern Pacific Depot (Diridon Station/Hiram Cahill Depot), Sunlite Baking Company, San Martin Winery, Live Oak Creamery, and Cozzi Family Property:* Impacts for structure demolition or demolition of contributing features cannot be mitigated.</p> <p>Stevens/Fisher House: A <i>de minimis</i> impact is anticipated and therefore no mitigation is proposed.</p>	<p>Alternative 2 would affect the same resources in the same manner as described for Alternative 1, with the following additional resources affected.</p> <p>Reed Street Dog Park: A <i>de minimis</i> impact is anticipated; measures to minimize harm would maintain access to the park.</p> <p>Morgan Hill Community and Cultural Center: A <i>de minimis</i> impact is anticipated; measures to minimize harm would reduce construction noise impacts and maintain access.</p> <p>Stevens/Fisher House, and Barnhart House:* Impacts of structure demolition cannot be mitigated.</p> <p>IOOF Orphanage Home:* Impact from changes to historic setting and feeling cannot be mitigated.</p>	<p>Alternative 3 would affect the same resources in the same manner as described for Alternative 1, except Live Oak Creamery would not be affected under Alternative 3, and with the following additional resource affected.</p> <p>Reed Street Dog Park: A <i>de minimis</i> impact is anticipated; measures to minimize harm would maintain access to the park.</p>	<p>Alternative 4 would affect the same resources in the same manner as described for Alternative 1, except Guadalupe River Trail, Reach 6 and Coyote Creek trail would not be affected under Alternative 4, and with the following additional resources affected:</p> <p>Fuller Park: A <i>de minimis</i> impact is anticipated; measures to minimize harm would maintain access to the park.</p> <p>Madrone Underpass:* Impacts of structure demolition cannot be mitigated.</p>

Least Harm Factor	Alternative 1	Alternative 2	Alternative 3	Alternative 4
<p>Factor 2: The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection</p>	<p>Los Gatos Creek Trail, Guadalupe River Trail, Reach 6, and Cottonwood Creek Wildlife Area: The relative severity of harm would be the same under all project alternatives; therefore, severity is not a differentiating factor related to these trails.</p> <p>Southern Pacific Depot (Diridon Station/Hiram Cahill Depot), Sunlite Baking Company, San Martin Winery, Live Oak Creamery, and Cozzi Family Property:* Mitigation would not reduce overall harm to the structure or contributing features because part of it would be demolished.</p> <p>Coyote Creek Parkway and Trail: Impact would be slightly more under Alternatives 1 and 3 than under Alternative 2 and would not interfere with the protected activities, attributes, or features of the park.</p> <p>Stevens/Fisher House: A <i>de minimis</i> impact would not result in the loss of integrity that qualifies the resources for protection.</p>	<p>Alternative 2 would affect the same resources in the same manner as described for Alternative 1, with the following additional resources affected.</p> <p>Reed Street Dog Park: The relative severity of harm would be the same for Alternatives 2 and 3; therefore, severity is not a differentiating factor related to Reed Street Dog Park.</p> <p>Stevens/Fisher House and Barnhart House:* Mitigation would not reduce overall harm to the structure because part of it would be demolished.</p> <p>Morgan Hill Community and Cultural Center: Only Alternative 2 would affect this resource; therefore, severity is not a differentiating factor related to this resource.</p> <p>IOOF Orphanage Home:* Only Alternative 2 would affect this resource; therefore, severity is not a differentiating factor related to this resource.</p>	<p>Alternative 3 would affect the same resources in the same manner as described for Alternative 1, except Live Oak Creamery would not be affected under Alternative 3, and with the following additional resource affected.</p> <p>Reed Street Dog Park: The relative severity of harm would be the same for Alternatives 2 and 3; therefore, severity is not a differentiating factor related to Reed Street Dog Park.</p>	<p>Alternative 4 would affect the same resources in the same manner as described for Alternative 1, except Guadalupe River Trail, Reach 6 and Coyote Creek trail would not be affected under Alternative 4, and with the following additional resources affected:</p> <p>Fuller Park: Only Alternative 4 would affect this resource; therefore, severity is not a differentiating factor related to this resource.</p> <p>Madrone Underpass:* Mitigation would not reduce overall harm to the structure because it would be demolished.</p>
<p>Factor 3: The relative significance of each Section 4(f) property</p>	<p>Los Gatos Creek Trail and Guadalupe River Trail, Reach 6: Significant recreational resource to the City of San Jose. They are considered high-value resources for the purposes of Section 4(f).</p> <p>Southern Pacific Depot (Diridon Station/Hiram Cahill Depot):* The Southern Pacific Depot, also known as Diridon Station, is listed on the NRHP and is a City of San Jose landmark. The site has six extant contributing features. The depot was restored to SOI's standards in 1994, and continues to function as a rail station as it did historically, serving Amtrak, Caltrain, ACE, and VTA light rail. Additionally, multiple bus lines are serviced from the depot, retaining and expanding its function as a transportation hub. The depot remains an important resource and landmark in San Jose and is considered a high-value resource for the purposes of Section 4(f).</p> <p>Sunlite Baking Company:* The Sunlite Baking Company is eligible for listing on the NRHP as a distinctive example of Art Moderne architecture interpreted for an industrial production facility. Prior to 2016, AT&T operated out of the building, but in late 2016 an investment firm, Rhyolite Enterprises LLC, bought the parcel, likely to develop the area to complement San Jose's real estate boom. It is unclear what the property is used for currently, but it is likely vacant or being rented for industrial purposes, inconsistent with its historic use. Considering there are additions outside the period of the significance and the property is in fair condition, it is considered a moderate-value resource for the purposes of Section 4(f).</p> <p>Coyote Creek Parkway and Trail: Significant recreational resource to the County of Santa Clara. The affected portion is less significant than other sections of the park because it is on the periphery. It is considered a high-value resource for the purposes of Section 4(f).</p> <p>Stevens/Fisher House: The Stevens/Fisher House is a privately owned Queen Anne-style residence. It was</p>	<p>Alternative 2 would affect the same resources in the same manner as described for Alternative 1, with the following additional resources affected.</p> <p>Reed Street Dog Park: Recreational resource in San Jose. The affected portion is less significant than other portions of the park because it is on the periphery. It is considered a high-value resource for the purposes of Section 4(f).</p> <p>Barnhart House:* The Barnhart House is a privately owned residential property. It was determined eligible for the NRHP for its intact display of the Craftsman, Prairie, and Colonial Revival architecture. One modern structure as well as a modern vineyard, paved driveway and nonhistoric landscape features are deviations from its historic configuration. However, its setting remains rural, and the property is still in use as a residence. For the purposes of Section 4(f) it is considered to be a resource of moderate value.</p> <p>Morgan Hill Community and Cultural Center: Recreational and community resource in Morgan Hill. The affected portion is less significant than other portions of the center because it is on the periphery. For the purposes of Section 4(f) it is considered to be a resource of high value.</p> <p>IOOF Orphanage Home:* The IOOF Orphanage Home was found eligible for listing on the NRHP as a prominent example of the work of the IOOF, and as a distinctive example of Spanish Revival-style architecture. The subject property is currently operated by Rebekah Children's Services, a nonprofit organization that provides foster care and adoption services, mental health resources, and other programs for at-risk children. The site has experienced some expansion and infill not related to its period of significance, but it has operated continuously as an orphanage and foster care center since it was opened. It remains the last operating Odd Fellows children's home in the United States and is the last active expression of the IOOF child care programs of the early 19th century. For the purposes of Section 4(f) it is considered to be a resource of high value.</p>	<p>Alternative 3 would affect the same resources in the same manner as described for Alternative 1, except Live Oak Creamery would not be affected under Alternative 3, and with the following additional resource affected.</p> <p>Reed Street Dog Park: Recreational resource in San Jose. The affected portion is less significant than other portions of the park because it is on the periphery. It is considered a high-value resource for the purposes of Section 4(f).</p>	<p>Alternative 4 would affect the same resources in the same manner as described for Alternative 1, except Guadalupe River Trail, Reach 6 and Coyote Creek trail would not be affected under Alternative 4, and with the following additional resources affected:</p> <p>Fuller Park: Recreational resource in San Jose. The affected portion is less significant than other portions of the park because it is on the periphery and currently contains a train control site. It is considered a moderate-value resource for the purposes of Section 4(f).</p> <p>Madrone Underpass:* The Madone Underpass is an active railroad underpass that supports the operations of Caltrain and the UPRR. It is eligible for listing on the NRHP for its association with the earliest railroad and highway traffic safety programs implemented in Santa Clara County in the 20th century. The setting of the underpass has experienced low-density residential development since the property was constructed in 1933, but the girder bridge, abutments, and pedestrian passage have not been visibly altered. Additionally, the property has been in consistent use as a railroad underpass since its construction. For the purposes of 4(f) it is considered to be a resource of moderate value.</p>

Least Harm Factor	Alternative 1	Alternative 2	Alternative 3	Alternative 4
	<p>determined eligible for the NRHP for its association with the early settlement of the Coyote Valley. There has been some infill of modern structures. Additionally, the property has been subdivided over the years, and is now adjacent to large, modern residential properties that detract from the historic feeling and setting. For the purposes of Section 4(f) it is considered to be a resource of moderate value.</p> <p>San Martin Winery:* The San Martin Winery is an active winery and is currently owned by ASV Wines, Inc. It is eligible for listing on the NRHP for its association with the re-establishment of the post-Prohibition wine industry in California, and for the main building's intact Spanish Eclectic architecture as applied to an industrial building. While the site has experienced some infill with modern buildings and vineyards not related to its period of significance, it is still an active expression of wine making in the Santa Clara Valley, and has been in consistent use as a winery as it was historically since 1933. For the purposes of Section 4(f) it is considered to be a resource of moderate value.</p> <p>Live Oak Creamery:* The Live Oak Creamery is individually listed on the NRHP. It was found to be significant for its association with early industry in Gilroy. It is vacant and has not been used as a dairy or creamery as it had been historically since the 1940s. It appears to have been vacant since the 1970s. While character-defining features such as the brick-bond walls and flat roof remain intact, the creamery is extremely deteriorated, and no attempt appears to have been made to maintain or restore the property. The southern addition has been demolished. It is considered a low-value resource for the purposes of Section 4(f).</p> <p>Cottonwood Creek Wildlife Area: Significant wildlife refuge to the California Department of Fish and Wildlife. It is considered high-value resources for the purposes of Section 4(f). Cozzi Family Property:* The Cozzi Family property is a privately owned rural residence that is eligible for listing in the NRHP for its Queen Anne and Folk Victorian-style architecture. One modern structure not related to the historic residence, as well as a new metal fencing system, is present. However, the property retains its rural feeling and character-defining features, and is therefore considered a moderate-value resource for the purposes of Section 4(f).</p>			

Least Harm Factor	Alternative 1	Alternative 2	Alternative 3	Alternative 4
<p>Factor 4: The views of the official(s) with jurisdiction over each Section 4(f) property</p>	<p>Los Gatos Creek Trail: Coordination is ongoing with the Santa Clara County Parks and Los Gatos Parks and Public Works Department.</p> <p>Guadalupe River Trail, Reach 6: Coordination is ongoing with the City of San Jose Department of Parks, Recreation & Neighborhood Services.</p> <p>Southern Pacific Depot (Diridon Station/Hiram Cahill Depot):* The property is individually listed in the NRHP, NRHP Reference No. 93000274, certified on NRHP in April 1, 1993. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Sunlite Baking Company:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Coyote Creek Parkway and Trail: Coordination is ongoing with the Santa Clara County Department of Parks and Recreation.</p> <p>Stevens/Fisher House:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of no adverse effect under Section 106.</p> <p>San Martin Winery:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Live Oak Creamery:* The property is individually listed in the NRHP, NRHP Reference No. 82002263, certified on March 11, 1982. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Cottonwood Creek Wildlife Area: Coordination is ongoing with the California Department of Fish and Wildlife.</p> <p>Cozzi Family Property:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p>	<p>Alternative 2 would affect the same resources in the same manner as described for Alternative 1, with the following additional resources affected.</p> <p>Reed Street Dog Park: Coordination is ongoing with the City of Santa Clara Parks and Recreation.</p> <p>Stevens/Fisher House:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Barnhart House:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p> <p>Morgan Hill Community and Cultural Center: Coordination is ongoing with the City of Morgan Hill Recreation and Community Services Department.</p> <p>IOOF Orphanage Home:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p>	<p>Alternative 3 would affect the same resources in the same manner as described for Alternative 1, except Live Oak Creamery would not be affected under Alternative 3, and with the following additional resources affected.</p> <p>Reed Street Dog Park: Coordination is ongoing with the City of Santa Clara Parks & Recreation.</p>	<p>Alternative 4 would affect the same resources in the same manner as described for Alternative 1, except Guadalupe River Trail, Reach 6 and Coyote Creek trail would not be affected under Alternative 4, and with the following additional resources affected:</p> <p>Fuller Park: Coordination is ongoing with the City of Santa Clara Parks and Recreation.</p> <p>Madrone Underpass:* The SHPO concurred with the NRHP eligibility of the property on July 12, 2019. Consultation with the SHPO is anticipated to yield a finding of adverse effect under Section 106.</p>
<p>Factor 5: The degree to which each alternative meets the Purpose and Need for the project</p>	<p>Meets the project Purpose and Need. Minimizes the project footprint and decreases necessary right-of-way acquisition.</p>	<p>Meets the project Purpose and Need. Most closely approximates the alignment and structure types identified in the prior program-level documents.</p>	<p>Meets the project Purpose and Need. Minimizes the project footprint through the use of viaduct and would also minimize interface with the UPRR right-of-way.</p>	<p>Meets the project Purpose and Need. Minimizes the project footprint and decreases non-transportation right-of-way acquisition by staying at grade within the existing Caltrain and UPRR right-of-way between Scott Boulevard in Santa Clara and Gilroy.</p>

Least Harm Factor	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Factor 6: After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)	<p>Third most moderate (1,444) and severe (439) noise impacts at residential locations.</p> <p>Third-greatest number (90) of waterbodies realigned, modified, or otherwise affected.</p> <p>Third-greatest number of displacements: 147 residential, 217 commercial and industrial, 49 agricultural property, and 14 community and public facility displacements.</p> <p>Second-greatest conversion of Important Farmland (1,035.5 acres).</p> <p>Third-greatest impact on jurisdictional aquatic resources (236.6 acres).</p> <p>Second-greatest impact on habitat for special-status plants (nonoverlapping) (1,629.3 acres).</p>	<p>Second-most moderate (1,740) and severe (1,092) noise impacts at residential locations.</p> <p>Greatest number (96) of waterbodies realigned, modified, or otherwise affected.</p> <p>Greatest number of displacements: 603 residential, 348 commercial and industrial, 53 agricultural property, and 16 community and public facility displacements.</p> <p>Third-greatest conversion of Important Farmland (1,181.3 acres).</p> <p>Greatest impact on jurisdictional aquatic resources (249.5 acres).</p> <p>Greatest impact on habitat for special-status plants (nonoverlapping) (1,663.4 acres).</p>	<p>Fewest moderate (1,071) and severe (276) noise impacts at residential locations.</p> <p>Second-greatest number (88) of waterbodies realigned, modified, or otherwise affected.</p> <p>Second-greatest number of displacements: 157 residential, 157 commercial and industrial, 49 agricultural property, and 10 community and public facility displacements.</p> <p>Greatest conversion of Important Farmland (1,192.5 acres).</p> <p>Second-greatest impact on jurisdictional aquatic resources (230.0 acres).</p> <p>Third-greatest impact on habitat for special-status plants (nonoverlapping) (1,648.0 acres).</p>	<p>Most moderate (895) and severe (2,580) noise impacts at residential locations.</p> <p>Least number (81) of waterbodies realigned, modified, or otherwise affected.</p> <p>Least number of displacements: 68 residential, 66 commercial and industrial, 40 agricultural property, and 2 community and public facility displacements.</p> <p>Least conversion of Important Farmland (1,024.3 acres).</p> <p>Least impact on jurisdictional aquatic resources (203.7 acres).</p> <p>Least impact on habitat for special-status plants (nonoverlapping) (1,572.6 acres).</p>
Factor 7: Substantial differences in costs among the project alternatives	Alternative 1 would have the third-highest capital costs: \$20.50 billion.	Alternative 2 would have the second-highest capital costs: \$17.74 billion.	Alternative 3 would have the highest capital costs: \$20.76 billion.	Alternative 4 would have the lowest capital costs: \$13.61 billion.
Summary	<p>Alternative 1 would result in <i>de minimis</i> impacts on five park resources and uses of eight cultural resources (six permanent uses and one <i>de minimis</i>). Of the six permanent uses, two are high value (Southern Pacific Depot, 415 Illinois Avenue), three are moderate value (Sunlite Baking Company, San Martin Winery Cozzi Family Property), and one is low value (Live Oak Creamery).</p> <p>Alternative 1 would result in the second-greatest conversion of Important Farmland and impact on habitat for special-status species and the third-greatest noise impacts on residential locations, impacts on waterbodies, displacements, jurisdictional aquatic resources, and land cover types. Alternative 1 would also have the third-highest capital costs.</p>	<p>Alternative 2 would result in <i>de minimis</i> impacts on seven park resources and permanent uses of nine cultural resources. Of the nine permanent uses, three are high value (Southern Pacific Depot, 415 Illinois Avenue, IOOF Orphanage Home), five are moderate value (Sunlite Baking Company, Stevens/Fisher House, Barnhart House, San Martin Winery, and Cozzi Family Property), and one is low value (Live Oak Creamery).</p> <p>Alternative 2 would result in the greatest impacts on waterbodies, displacements, jurisdictional aquatic resources, and habitat for special-status plants, but the second-greatest number of noise impacts on residential locations and the third-greatest conversion of Important Farmland. It would have the second-highest capital costs.</p>	<p>Alternative 3 would result in <i>de minimis</i> impacts on six park resources and uses of six cultural resources (five permanent uses and one <i>de minimis</i>). Of the five permanent uses, two are high value (Southern Pacific Depot, 415 Illinois Avenue) and three are moderate value (Sunlite Baking Company, San Martin Winery, and Cozzi Family Property).</p> <p>Alternative 3 would result in the least number of noise impacts on residential locations, and second-greatest impacts on waterbodies, displacements, and impacts on jurisdictional aquatic resources. It would result in the third-greatest impact on habitat for special-status plants and the greatest conversion of Important Farmland. It would also have the highest capital costs.</p>	<p>Alternative 4 would result in <i>de minimis</i> impacts on four park resources and uses of five cultural resources (four permanent uses and one <i>de minimis</i>). Of the four permanent uses, one is high value (Southern Pacific Depot), two are moderate value (Madrone Underpass and Cozzi Family Property), and one is low value (Live Oak Creamery).</p> <p>Alternative 4 would result in the most noise impacts on residential locations, but the least impacts on waterbodies, displacements, Important Farmland, jurisdictional aquatic resources, and land cover types. It would also have the lowest capital costs.</p>

Resources **bolded with an asterisk (*)** indicate a full Section 4(f) use, while non-bolded resources indicate a *de minimis* finding.

- ACE = Altamont Corridor Express
- IOOF = Independent Order of Odd Fellows
- NRHP = National Register of Historic Places
- SHPO = State Historic Preservation Officer
- SOI = Secretary of the Interior
- VTA = Santa Clara Valley Transit Authority
- UPRR = Union Pacific Railroad

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4.9.2 Net Harm to Section 4(f) Property

Factors one through four in Table 4-11 consider the net harm that each alternative would cause to a Section 4(f) property. Overall, Alternative 4 would affect the fewest Section 4(f) resources (9), compared to Alternatives 1 and 3 (12), and Alternative 2 (16). Alternative 4 would affect the fewest park, recreation, and open-space resources (four), compared to five resources under Alternative 1, seven resources under Alternative 2, and six resources under Alternative 3. All impacts would be *de minimis*. The severity of the other impacts on park, recreation, and open-space resources would be similar under all project alternatives, and so is not a differentiating factor.

Regarding historic properties, all four project alternatives would result in the permanent use and demolition of two resources or contributing features to these resources: Southern Pacific Depot (Diridon Station/Hiram Cahill Depot) and Cozzi Family Property. Impacts on these two properties are the same under all project alternatives and so are not differentiating factors among the project alternatives and are not discussed further.

In addition to these two resources, each alternative would affect other Section 4(f) resources in which the relative value of each resource should be considered. Alternative 1 would result in a permanent use of the Sunlite Baking Company, San Martin Winery, and Live Oak Creamery because of structure demolition, and *de minimis* impacts at Stevens/Fisher House because of minor property acquisitions. Live Oak Creamery is considered a low-value resource because it is currently unused and surrounded by chain-link fencing, has been neglected for many years, and is in an advanced state of disrepair. Sunlite Baking Company and Stevens/Fisher House are both resources of moderate value. Sunlite Baking Company was purchased in late 2016 by an investment firm, Rhyolite Enterprises LLC, likely in order to develop the area to complement San Jose's real estate boom. It is currently vacant or being rented for industrial purposes, inconsistent with its historic use, but the property is in fair condition. Stevens/Fisher House has experienced infill of modern structures, subdivision over the years, and is now adjacent to large, modern residential properties that detract from the historic feeling and setting. However, Alternative 1 would only result in *de minimis* impacts at Stevens/Fisher House because of minor property acquisitions, which would not result in the loss of the resources. San Martin Winery is also a resource of moderate value because it is still an active expression of wine making in the Santa Clara Valley, and has been in consistent use as a winery as it was historically since 1933.

Alternative 2 would result in permanent uses at Sunlite Baking Company, Stevens/Fisher House, Barnhart House, San Martin Winery, IOOF Orphanage Home, and Live Oak Creamery because of structure demolition or property acquisitions. Live Oak Creamery is considered a low-value resource and was discussed in the preceded paragraph. Sunlite Baking Company, Stevens/Fisher House, Barnhart House, and San Martin Winery are moderate-value resources; Sunlite Baking Company, Stevens/Fisher House, and San Martin Winery were discussed in the preceding paragraph. Barnhart House is a moderate-value resource because there have been deviations from its historic configuration, but its setting remains rural, and the property is still in use as a residence. IOOF Orphanage Home is considered a high-value resource because it remains the last operating Odd Fellow children's home in the United States; however, Alternative 2 would not cause any structure demolition of any of the buildings on the property.

Alternative 3 would have the same 4(f) impacts as Alternative 1, except Alternative 3 would not require demolition of Live Oak Creamery, a low-value resource.

Alternative 4 would result in permanent uses at Madrone Underpass and Live Oak Creamery, and *de minimis* impacts at San Martin Winery. Live Oak Creamery is a low-value resource discussed under Alternatives 1 and 2. San Martin Winery is a moderate-value resource discussed under Alternative 1; however, Alternative 4 would only result in *de minimis* impacts on the winery because of minor property acquisitions, which would not result in the loss of the resource. Madrone Underpass is a moderate-value resource because the girder bridge, abutments, and pedestrian passage have not been visibly altered, and the property has been in consistent use as a railroad underpass since its construction.

In total, Alternative 1 would affect one low-value resource and three moderate-value resources; Alternative 2 would affect one low-value resource, five moderate-value resources, and one high-value resource; Alternative 3 would affect three moderate-value resources; and Alternative 4 would affect one low-value resource, and two moderate-value resources. Therefore, after considering the relative value of these resources, Alternative 2 would have the greatest impacts on Section 4(f) resources, while Alternative 4 would result in the least impacts on Section 4(f) resources.

4.9.3 Impacts on Environmental Resources Outside of Section 4(f) Uses

Factors five through seven in Table 4-11 show a comparison with non-Section 4(f) considerations and are helpful in determining overall least harm where the impacts on the Section 4(f) qualifying attributes of the resources do not provide a clear distinction. As shown in Table 4-11, while all four project alternatives are consistent with the project's Purpose and Need, each would result in different comparative impacts on the other resource areas. For example, Alternative 2 would result in the greatest number of displacements; impacts on habitat for special-status plants, jurisdictional aquatic resources, and waterbodies; and the largest conversion of Important Farmland. Alternative 4 would have the lowest capital costs and would result in the least number of impacts on waterbodies, displacements, Important Farmland, jurisdictional aquatic resources, and land cover types. Impact on jurisdictional aquatic resources and habitat for special-status plants are the primary considerations of the USACE in its determination of the Least Environmentally Damaging Practicable Alternative. Alternative 1 would result in the second-greatest conversion of Important Farmland and impacts on habitat for special-status species, and the third-greatest displacements, noise impacts on residential locations, and impacts on waterbodies, jurisdictional aquatic resources, and land cover types. Alternative 1 would also have the third-highest capital costs. Alternative 3 would result in the second-greatest impacts on waterbodies, displacements, and impacts on jurisdictional aquatic resources. It would result in the third-greatest impact on habitat for special-status plants and the greatest conversion of Important Farmland. It would also have the highest capital costs.

Based on this information, while each of the project alternatives would cause impacts on resources not protected by Section 4(f), Alternative 4 would cause the least amount of impacts on non-Section 4(f) resources compared to Alternatives 1, 2, and 3.

4.10 Section 6(f)

There are four Section 6(f) properties within the RSA: Guadalupe River Park, Guadalupe Gardens (part of Guadalupe River Park), San Luis Dinosaur Development (part of San Luis Reservoir State Recreation Area), and the Cottonwood Creek Wildlife Area (NPS 2016). Table 4-12 shows the Section 6(f) resources and potential impacts on these resources. As shown in Table 4-12, the project alternatives would not require permanent or temporary acquisition of land from any of the Section 6(f) properties. In addition, construction activities would not occur within any of the resources. While construction of the tunnel underneath Cottonwood Creek Wildlife Area may result in the lowering of groundwater due to tunnel inflows, mitigation measures BIO-MM#9 and HYD-MM#1 would avoid affecting wildlife function. Therefore, no impacts on Section 6(f) resources would occur.

Table 4-12 Section 6(f) Resources and Findings

Section 6(f) Resource	Section 6(f) Fund Details	Project Impacts	Finding
Guadalupe River Park	1992: LWCF development grant developed 2.33 acres of the park, including trails, open turf area, outdoor events area, and support facilities	No land would be permanently or temporarily acquired from Guadalupe River Park under any of the project alternatives. No construction activities would occur within the park boundaries, and operation of the project alternatives would have no effect on the park. Construction activities would temporarily block two of many access points at Coleman Avenue and Autumn Street, diminishing but not eliminating access. Incorporation of project features and mitigation measures would maintain access to the park. Therefore, none of the project alternatives would endanger the federal investment made in this park.	No impact on Section 6(f) resource
Guadalupe Gardens (part of Guadalupe River Park)	2003: LWCF development grant for site preparation, irrigation, and planting of grasses for a 4-acre open turf area	No land would be permanently or temporarily acquired from Guadalupe Gardens under any of the project alternatives. No construction activities would occur within the park boundaries and operation of the project alternatives would have no effect on the park. Construction activities would temporarily block two of many access points at Coleman Avenue and Autumn Street, diminishing but not eliminating access. Incorporation of project features and mitigation measures would maintain access to the park. Therefore, none of the project alternatives would endanger the federal investment made in this park.	No impact on Section 6(f) resource
Cottonwood Creek Wildlife Area	1978: Grant to acquire two parcels totaling 6,136 acres	No land would be permanently or temporarily acquired from Cottonwood Creek Wildlife Area under any of the project alternatives. Permanent tunnel easements below the wildlife area would be purchased by the Authority. Although these easements would grant the Authority the right to construct and operate the HSR in tunnels below the wildlife area, they would not impose restrictions on the Section 6(f) property owners to use the property or otherwise grant future right of access to the Authority, such as for the purposes of routine maintenance. While the subsurface area would be technically considered permanently incorporated into the transportation facility, none of the surface would be breached and therefore none of the features that make Cottonwood Creek Wildlife Area a 6(f)-protected property would be impacted. Accordingly, no use would result from the purchasing of tunnel easements beneath Cottonwood Creek Wildlife Area. No construction staging or construction easement would be required from the Cottonwood Creek Wildlife Area. Construction work would take place primarily underground using tunnel boring machinery. Construction of the tunnel may result in the lowering of groundwater due to tunnel inflows which may disrupt surface water hydrology within the area. A reduction in streamflow could result in wildlife disruption. However, mitigation measures to address this hydrologic effect	No impact on Section 6(f) resource

Section 6(f) Resource	Section 6(f) Fund Details	Project Impacts	Finding
		include the provision of water to maintain the hydroperiod, as necessary, to avoid affecting wildlife function (BIO-MM#9 and HYD-MM#1). With implementation of these mitigation measures, the disruption to wildlife dependent on streamflow would be avoided. Accordingly, this disruption would not be of a severity that the protected activities, features, or attributes that qualify Cottonwood Creek Wildlife Area for protection under Section 6(f) would be substantially impaired. Therefore, none of the project alternatives would endanger the federal investment made in this wildlife area.	
San Luis Dinosaur Development (part of San Luis Reservoir State Recreation Area)	1980: Grant for boating and support facilities, including construction of a high pool ramp and parking for 170 cars and trailers, middle pool ramp and parking for 100 cars and trailers, low pool ramp and parking for 100 cars and trailers, and an entrance road	No land would be permanently or temporarily acquired from San Luis Dinosaur Development under any of the project alternatives. No construction activities would occur within the park boundaries and operation of the project alternatives would have no effect on the park. Therefore, none of the project alternatives would endanger the federal investment made in this park.	No impact on Section 6(f) resource

Source: NPS 2016

FRA = Federal Railroad Administration

HSR = high speed rail

LWCF = Land and Water Conservation Fund