3.15 Parks, Recreation, and Open Space

3.15.1 Introduction

This section of the Project EIR/EIS discusses parks, recreation, and open space resources. Because of their importance to the communities' quality of life where they are found, NEPA and CEQA require consideration of environmental effects on parks, recreation, and open space. This section describes the regulatory setting; the affected environment; the environmental consequences that would likely result from the project; and the mitigation measures that would reduce project-related environmental consequences on parks, recreation, and open space. The current HST System design reflects the application of 2005 *Final Program EIR/EIS for the Proposed California HST System* (Authority and FRA 2005) commitments to follow engineering best practices along the existing transportation corridors that would avoid impacts on parks, recreation, and open space; to follow design practices that would minimize impacts on these resources; and to engage in construction practices that would reduce the impacts on these resources in areas where construction impacts would be unavoidable.

Section 3.2, Transportation; Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; Section 3.11, Safety and Security, and Section 3.16, Aesthetics and Visual Quality, provide additional information about issues related to potential parks, recreation, and open space impacts. Section 3.12 Socioeconomics, Community Resources, and Environmental Justice discusses impacts on community resources, including museums.

Federal regulations specifically protect parklands through 49 U.S.C. 303, commonly known as Section 4(f), which applies to transportation projects that may receive federal funding and/or discretionary approvals. FRA may not approve the use of a Section 4(f) property, which includes publicly owned land of parks, recreational areas, and wildlife refuges and historic sites, unless it determines there is no feasible and prudent avoidance alternative to the use of the land, and the action includes all possible planning to minimize harm to the property resulting from such use, or the project has a *de minimis* impact according to 49 U.S.C. 303(d).

Section 6(f) properties are recreation resources funded by the Land and Water Conservation Fund Act of 1965. Roeding Regional Park (Roeding Park) is the only Section 6(f) property in the project study area. Land purchased with these funds cannot be converted to a non-recreation use without coordination with the National Park Service (NPS) and mitigation that includes replacement of the quality and quantity of land used. Chapter 4 evaluates the project's use of Section 4(f) and Section 6(f) properties based on the impacts analyzed in this section and in Section 3.17, Cultural and Paleontological Resources.

3.15.2 Laws, Regulations, and Orders

This section identifies the relevant federal, state, regional, and local regulations, laws, and orders that apply to parks, recreation, and open space. The Authority and FRA will comply with all federal and state regulations. The HST alternatives would be compatible with local plans and policies where policies allow converting of public park land to transportation uses with appropriate replacement of converted land or other compensation consistent with the California Public Park Preservation Act.

3.15.2.1 Federal

Section 4(f) of the Department of Transportation Act (49 U.S.C Section 303)

Compliance with Section 4(f) is required for transportation projects that are undertaken by an operating administration of the U.S. Department of Transportation or that may receive federal funding and/or discretionary approvals. Section 4(f) protects publicly owned land of parks, recreational areas, and wildlife refuges. Section 4(f) also protects historic sites of national, state, or local significance located on public or private land. FRA's Procedures for Considering Environmental Impacts (64 FR 25445, May 26, 1999) contains FRA process and protocols for analyzing the potential use of Section 4(f) protected

properties. In addition, although not subject to the Title 23, Section 774 regulations regarding Section 4(f) for highway and transit projects, FRA uses these regulations as additional guidance regarding the requirements established in 49 U.S.C. 303.

FRA may not approve the use of a Section 4(f) property, as defined in 49 U.S.C. 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. 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 not prudent, the FRA may consider if the alternative will result in any of the following:

- Compromising the project to a degree that is unreasonable for proceeding with the project in light of its stated purpose and need;
- Unacceptable safety or operational problems;
- After reasonable mitigation, 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;
- Additional construction, maintenance, or operational costs of an extraordinary magnitude;
- Other unique problems or unusual factors; or
- Multiple factors that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

If there is both the use of a Section 4(f) property and FRA determines that there is no prudent and feasible alternative, the project must include all possible planning to minimize harm to the site, which includes all reasonable measures to minimize harm or mitigate impacts (49 U.S.C. 303(c)(2)).

After making a Section 4(f) determination and identifying the reasonable measures to minimize harm, if there is more than one alternative that would result in the use of a Section 4(f) property, FRA may also compare the alternatives to determine which alternative has the potential to cause the least overall harm. 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 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 alternatives.

Section 4(f) Use Definition

Permanent Use

A permanent use of a Section 4(f) resource occurs when property is permanently incorporated into a proposed transportation facility. This might occur as a result of partial or full acquisition, permanent easements, or temporary easements that exceed limits for temporary use, as noted below.

Temporary Use

A temporary use of a Section 4(f) resource occurs when there is a temporary occupancy of property that is considered adverse in terms of the preservationist purposes of the Section 4(f) statute. A 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 work must be minor, with only minimal changes to the protected resource.
- There must be no permanent adverse physical impacts on 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 prior to the proposed project.
- There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the foregoing requirements.

Constructive Use

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (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 diminished. This determination is made through the following:

- 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.

In addition, it is important to note that erecting a structure over a Section 4(f) property, and thus requiring an air lease, does not in and of itself constitute a use unless a constructive use is present.

De Minimis Impact

According to 49 U.S.C. 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 a transportation project will 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, there must be:
  - Public notice and opportunity for public review and comment

- Written concurrence received from the officials with jurisdiction over the property.

For a historic site, a *de minimis* impact determination may be made only if, in accordance with the Section 106 process of the National Historic Preservation Act (NHPA), it is found that the transportation program or project will have no effect or no adverse effect on historic properties and FRA has received written concurrence from the SHPO.

Section 6(f) Land and Water Conservation Fund Act of 1965 (Public Law 88-578, 16 U.S.C Section 460l–4 – 460l–11)

The purpose of the LWCF Act is to assist in preserving, developing, and ensuring accessibility to outdoor recreation resources as to strengthen the health and vitality of the citizens of the United States by providing funds, planning, acquisition, and development of facilities. Recreation facilities awarded such funds are subject to the provisions of this Act. The LWCF's most important tool for ensuring 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. Conversion of property acquired or developed with assistance under the program requires approval of the NPS and substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

National Park Service Organic Act (16 U.S.C. Sections 1 to 4)

This act created the NPS, an agency within the Department of the Interior, to administer the nation's national parks, which are areas of national significance afforded special recognition and protection in accordance with various acts of Congress. This act also sets the purpose of the park system as follows: "The fundamental purpose of the parks is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The NPS is required to keep park units in an unimpaired state in perpetuity and to provide the highest quality of use and enjoyment of the entire system by today's visitors as well as those in the future. Areas in parks designated as natural zones must be managed to ensure that natural ecological processes operate unimpaired unless otherwise specifically provided for in the law creating them, and the NPS is required to manage native animal life for its essential role in natural ecosystems. Historic zones must be managed to provide full protection for cultural resources.

Wilderness Act (16 U.S.C. Sections 1131 to 1136)

This act establishes a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas." Congress administers the system for the use and enjoyment of the American people in such manner as will leave those areas unimpaired for future use (for example, wilderness) and to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.

3.15.2.2 State

California Public Park Preservation Act (California Public Resources Code Sections 5400 to 5409)

This act provides that a public agency that acquires public parkland for non-park use must either pay compensation that is sufficient to acquire substantially equivalent substitute parkland or to provide substitute parkland of comparable characteristics. If less than 10% of the parkland, but not more than 1 acre is acquired, the operating entity may improve the portion of the parkland and facilities not acquired using the funds received.

California Department of Fish and Game Ecological Reserves (California Fish and Game Code Section 1580 et seq.), California Code of Regulations, Title 14, Division 1, Chapter 11, Section 630)

This legislation specifies areas as ecological reserves and establishes protections for resources in these areas. If necessary, ecological reserve property would be obtained by agreement with the jurisdictional owner.

3.15.2.3 Regional and Local

Table 3.15-1 lists the county and city general plans (including appropriate general plan elements such as open space and conservation), parks and recreation master plans, municipal codes, and maps reviewed to identify parks, recreation, and open space regulations, plans, and policies that were considered as part of analysis. There are no regional plans for parks, recreation, and open space.

Table 3.15-1
Local Jurisdiction Plans and Policies

Jurisdiction	Document	Adoption/ Document Date
Merced County	General Plan, Section 6, Open Space/Conservation (Merced County 1990)	December 1990
	Municipal Code	July 2009
City of Atwater	General Plan, Section 2, Land Use, Public Facilities and Community Infrastructure, and Section 4, Open Space and Conservation (City of Atwater 2000)	July 2000
	Code of Ordinances	June 2009
City of Merced	Vision 2015 General Plan, Chapter 7, Open Space, Conservation, and Recreation (City of Merced 1997)	April 1997
	Vision 2030 General Plan, Chapter 7, Open Space, Conservation, and Recreation (City of Merced 2012)	January 2012
	Park and Open Space Master Plan (City of Merced 2003)	December 2003
	Municipal Code	October 2009
Madera County	General Plan, Section 4, Recreational and Cultural Resources (Madera County 1995)	October 1995
	Municipal Code	August 2009
City of Chowchilla	General Plan Update, Public Review Draft, Open Space Element (City of Chowchilla 2011)	May 2011
	Municipal Code	January 2009
City of Madera	General Plan, Parks, and Recreation Element (City of Madera 2009a)	October 2009
	Parks and Recreation Master Plan Draft (City of Madera 2009b)	June 2009
	Municipal Code	July 2009
Fresno County	General Plan Open Space and Conservation Element (Fresno County 2000)	October 2000
City of Fresno	General Plan, Section E, Public Facilities Element, and Section F, Open Space/Recreation Element (City of Fresno 2002)	November 2002
	Municipal Code and Charter	August 2009

3.15.3 Methods for Evaluating Impacts

Data collection for parks, recreation, and open space consisted of a review of the plans and policies referenced in Table 3.15-1, interviews with local planning organizations, and the use of GIS data banks. The cities and counties provided the boundaries for parks, recreation, and open space properties within 1,000 feet of the alignment, 0.5 mile to an HST station, 0.5 mile to an HMF, and 1,000 feet of any road construction required to implement the HST System in GIS data format and in adopted plans.

Construction impacts are determined using the following methods:

- GIS spatial analysis to determine the distance of parks, recreation, and open space facilities from the project and the amount of park, recreation, or open space land that would be required and facilities and functions that would be affected as a result of project construction.
- Review and analysis of the design and the proposed construction right-of-way to determine if there are temporary changes to access and reduction in parking capacity for parks, recreation, and open space resources.
- Examination of the potential disruption of established community and visitor use of parks, recreation, and open space resources because of temporary construction easements and general construction activity.
- Review and analysis of other Project EIR/EIS sections, including Section 3.2, Transportation; 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; Section 3.11, Safety and Security, and Section 3.16, Aesthetics and Visual Resources, to determine if there would be any indirect impacts on parks, recreation, and open space resources as a result of project construction.

Operation impacts of the proposed HST alternatives are determined using the following methods:

- Review and analysis of the design and location of project elements to determine if any barriers to park access and use would be created or changes in access and parking for parks, recreation, and open space resources would occur.
- GIS analysis to determine the distance of park, recreation, and open space facilities from the project and the amount of land that would be required, as well as facilities and functions that would be permanently affected.
- Review and analysis of the other EIR/EIS sections, including Section 3.3, Air Quality and Global Climate Change; Section 3.4, Noise and Vibration; and Section 3.16, Aesthetics and Visual Resources, to determine if there would be any indirect impacts on parks, recreation, and open space resources as a result of project operation.
- Review and analysis of Section 3.13, Station Planning, Land Use, and Development, to determine if there would be any project-related increase in the use of parks, recreation, and open space resources such that substantial physical deterioration of the resource would occur or be accelerated.

3.15.3.1 Methods for Evaluating Effects under NEPA

Pursuant to NEPA regulations (40 CFR 1500-1508), project effects are evaluated based on the criteria of context and intensity. Context means the affected environment in which a proposed project occurs. Intensity refers to the severity of the effect, which is examined in terms of the type, quality, and sensitivity of the resource involved, location and extent of the effect, duration of the effect (short- or long-term), and other considerations. Beneficial effects are identified and described. When there is no measurable effect, an impact is found not to occur. The intensity of adverse effects is the degree or magnitude of a potential adverse effect, described as negligible, moderate, or substantial. Context and intensity are considered together when determining whether an impact is significant under NEPA. Thus, it

is possible that a significant adverse effect may still exist when the intensity of the impact is determined to be negligible or even if the impact is beneficial.

For parks, recreation and open space, impacts with a *negligible* intensity are defined as indirect impacts that would be measurable but not perceptible to park users. Impacts with *moderate* intensity are defined as indirect impacts on parks that would not change the overall character and/or setting. Impacts with *substantial* intensity result in one or more of the following impacts: park acquisition; indirect impacts (i.e., noise and visual) that change the character and/or setting of the park; and closure of all or part of the park during construction.

3.15.3.2 CEQA Significance Criteria

CEQA significance criteria define the following effects as significant:

- Prevents the use of an established or planned park, recreation, or open space.
- Acquires an open space resource that would result in a diminished capacity to use that resource or a substantially reduced value of that resource.
- Creates a physical barrier (or a perceived barrier) to the access to or established use of any park, recreation, or open space areas.
- Results in acquisition of a recreation resource that would result in a diminished capacity to use the resource for specific and defined recreational activities. Thresholds of significance for indirect impacts on community facilities are defined in other sections such as Section 3.2, Transportation; Section 3.4, Noise and Vibration; and Section 3.16, Aesthetics and Visual Resources.
- Increases the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Results in the physical alteration of the existing facilities or a need to provide new parks or other recreation facilities—the construction of which could cause significant environmental impacts—to maintain acceptable service ratios or other performance objectives.

3.15.3.3 Study Area

The study area for this resource—in the cities of Atwater, Merced, Chowchilla, Madera, and Fresno and in Merced County and Madera County—includes parks, recreational facilities, and open space that vary in size, type, and function. The study area for parks, recreation, and open space is defined as 1,000 feet on either side of the north-south alignments and the wyes and 0.5 mile around the station areas, HMFs, and support facilities, with one exception: in areas where an existing transportation corridor, for example SR 99 and the UPRR right-of-way, separates parks, recreational facilities, and open space from project components, the 1,000-foot study area does not extend beyond these transportation rights-of-way because they provide a barrier to potential impacts on park and recreation resources.

3.15.4 Affected Environment

This section describes the parks, recreation, and open space resources located within the study area for the HST alternatives. This defined affected environment is used to describe the context by which an evaluation will be made to determine whether an impact is significant under NEPA. These resources are publicly owned properties used for recreation and include one or more of the following: public parks and open spaces, including greenbelts, pedestrian and bicycle trails, playfields, and school district play areas available for public use during nonschool hours. Other than the school district properties, the cities of Atwater, Merced, Madera, and Fresno or the counties of Merced and Madera own and maintain most study area resources. The California Department of Fish and Game and the San Joaquin River and Conservation Trust in Fresno own or operate other properties. Figures 3.15-1 through 3.15-4 depict the location of parks, recreation, and open space resources within each project vicinity.

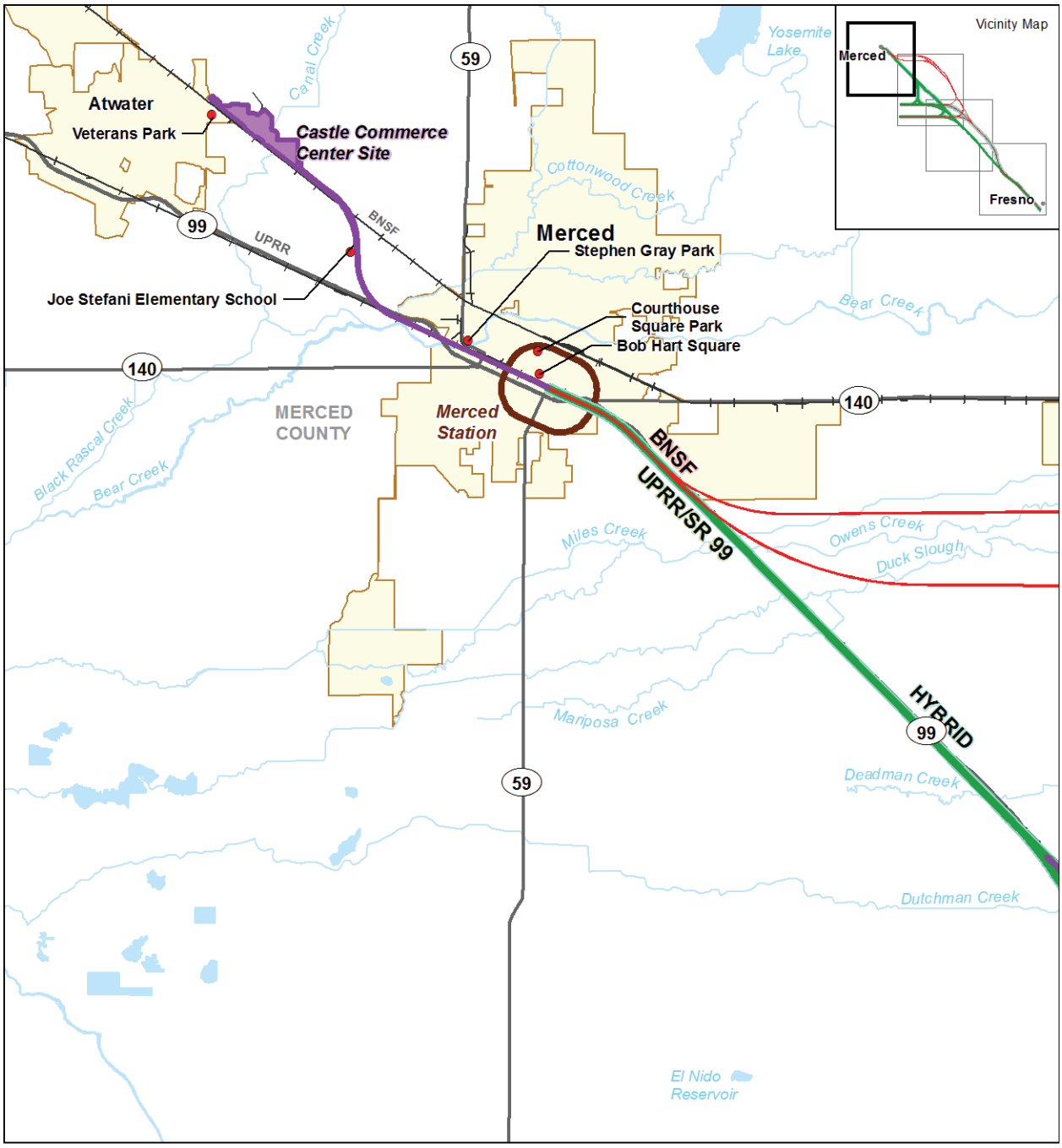
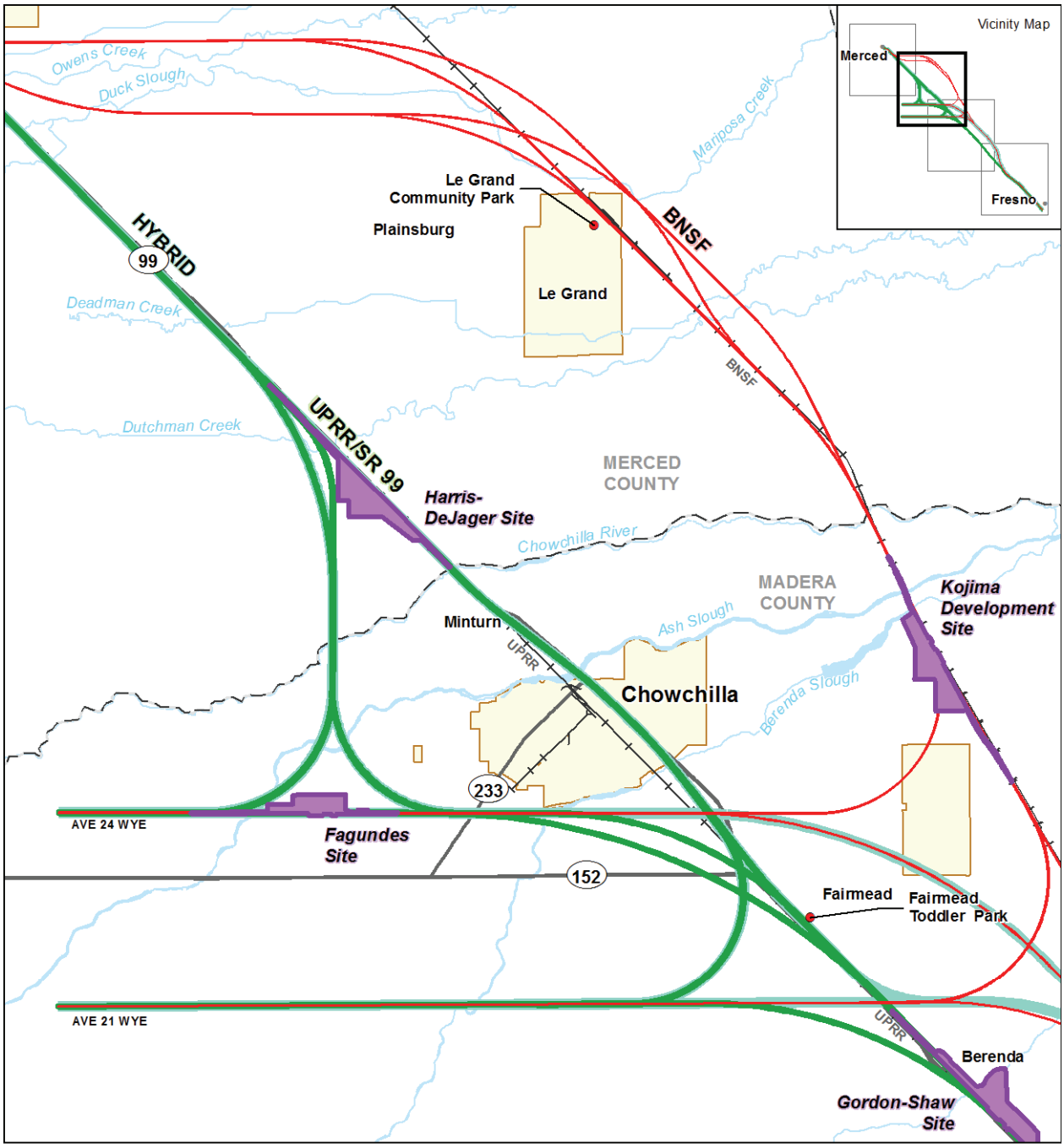


Figure 3.15-1
Parks, Recreation, and Open Space in the Merced Project Vicinity



Source: City of Chowchilla (2009).

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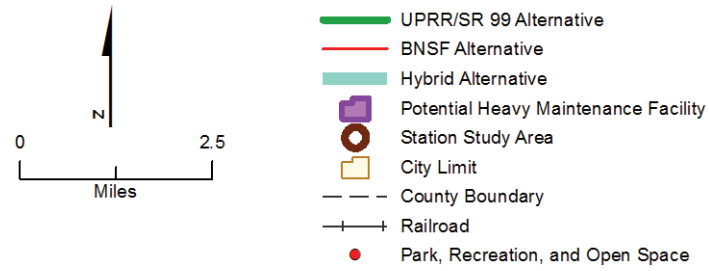
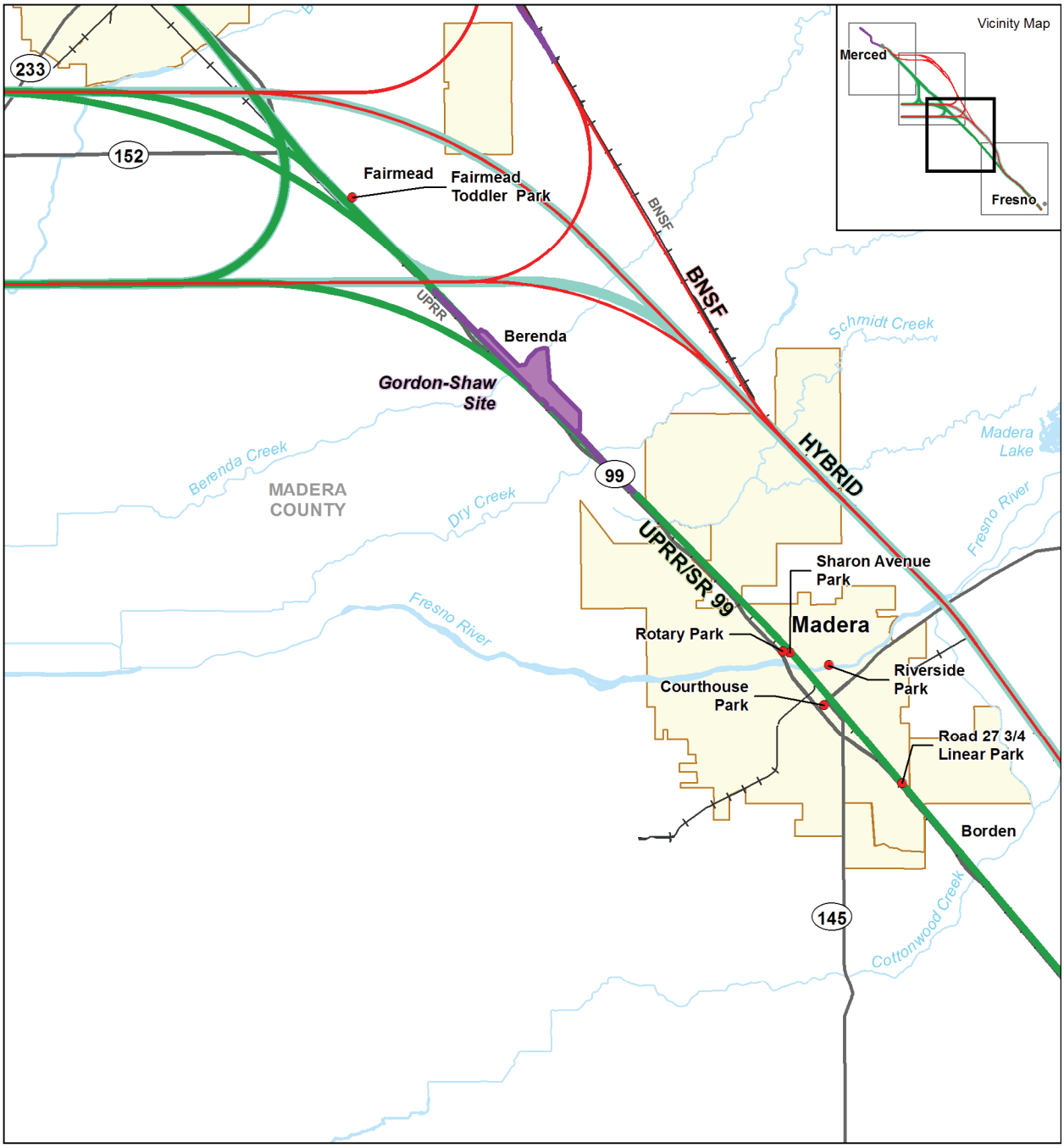
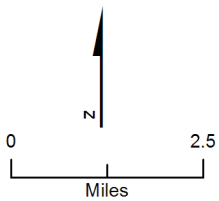


Figure 3.15-2
Parks, Recreation, and Open Space in the Chowchilla Project Vicinity



Source: City of Atwater (2000); City of Merced (1997, 2003, 2004); Merced County (1990). MF_EIS_PR_01-04_c Jun 03, 2011



- UPRR/SR 99 Alternative
- BNSF Alternative
- Hybrid Alternative
- Potential Heavy Maintenance Facility
- Station Study Area
- City Limit
- County Boundary
- Railroad
- Park, Recreation, and Open Space

Figure 3.15-3
Parks, Recreation, and Open Space in the Madera Project Vicinity

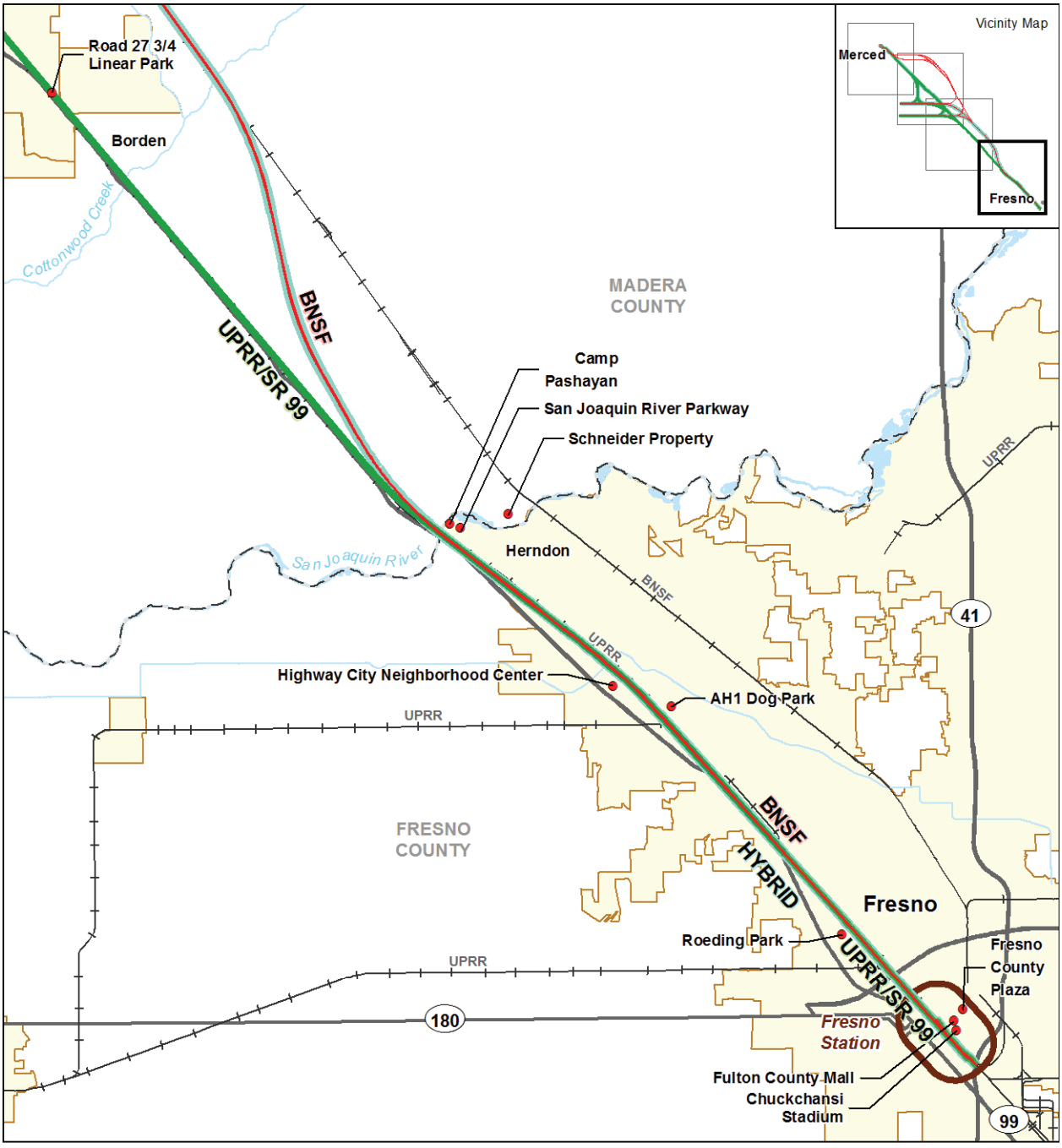


Figure 3.15-4
Parks, Recreation, and Open Space in the Fresno Project Vicinity

This section does not contain a discussion of on-street bicycle trails, planned parks, or the area along the Ave 21 Wye for the following reasons:

- **Bicycle Trails –** On-street bicycle routes, unless otherwise identified by the Parks and Recreation departments, are transportation facilities and therefore not considered a recreational route. Section 3.2, Transportation, covers the impacts on these facilities. None of the local jurisdictions identified on-street bicycle routes as a trail facility and; therefore; this section excludes them.
- **Current Parks –** This analysis does not discuss the Ave 21 Wye because no parks, recreation, or open space resources lie within the Wye study area boundaries.

Table 3.15-2 identifies the parks, recreation, and open space resources falling within the study area. Project construction and operation would have the most impacts on these parks, particularly those less than 100 feet from the project. Table 3.15-2 also shows the parks located within 1,000 feet of the HST alignment.

- **Planned Parks –** Based upon a review of the local jurisdiction plans identified in Table 3.15-1, there is one planned, approved, and reasonably foreseeable parks/recreation/ open space resource within the study area. The City of Madera's Parks and Community Services Department plans to construct a paved pathway that would extend the existing Vern McCullough River Trail from its current terminus at the trail-head at Rotary Park underneath Gateway Avenue and the UPRR to the intersection of Riverside and the Sharon Avenue Linear Parks (to be funded with $500,000-plus from the Congestion Mitigation and Air Quality [CMAQ], Bicycle Transportation Account [BTA], and Local Transportation Fund [LTF] programs). This proposed trail expansion appears in the *City of Madera Draft General Plan Update* as Policy PR-19: "Priority shall be given to the expansion of the Vern McCullough Fresno River Trail and the Cottonwood Creek Trail." (City of Madera 2009. p. PR-20)

Table 3.15-2
Parks, Recreation, and Open Space Resources within the HST Alternatives Study Area

Resource Name	Location	Amenities	HST Alternative			Size	Distance from Alignment/ Project Component
			UPRR/ SR 99	BNSF	Hybrid		
Le Grand Park	Merced County	Benches, picnic tables, and barbecues.		X		1.0 acres	900 feet
Fairmead Toddler Park	Madera County	Playground equipment for toddlers.	X		X[a]	0.2 acres	600 feet

Resource Name	Location	Amenities	HST Alternative			Size	Distance from Alignment/ Project Component
			UPRR/ SR 99	BNSF	Hybrid		
Rotary Park	Madera	Softball field, soccer field, children's play structure area, water play feature, horseshoe pavilion, skate park, dog park, open green space, passive recreation area, volleyball courts, restroom facilities, covered picnic shelter sites, and an exterior walking path that connects to the western segment of the Vern McCullough River Trail.	X			9.7 acres	100 feet
Sharon Avenue Linear Park	Madera	Paved pathway and benches.	X			1.5 acres	30 feet
Riverside Park	Madera	Paved pathway, benches, landscaped area, and large turf area used for passive recreation.	X			3.3 acres	0 feet
Courthouse Park	Madera County	Gazebos, picnic areas, war memorial, and artillery gun.	X			3.3 acres	300 feet
County Road 27¾ Linear Park	Madera	Linear park with sidewalk and landscaping.	X			2.8 acres	0 feet
Vern McCullough Fresno River Trail	Madera	Proposed paved pathway that would extend the existing Vern McCullough River Trail from its current terminus at the trail-head at Rotary Park underneath Gateway Avenue and the UPRR to the intersection of Riverside and the Sharon Avenue Linear Parks.	X			0.20 linear miles	0 feet

Resource Name	Location	Amenities	HST Alternative			Size	Distance from Alignment/ Project Component
			UPRR/ SR 99	BNSF	Hybrid		
Camp Pashayan	Fresno	Part of the San Joaquin River Parkway. Picnic areas, fishing, boating access facilities, nature trails. Admission fee for vehicles.	X	X	X	31.0 acres	0 feet
San Joaquin River Parkway	Fresno	Part of the San Joaquin River Parkway owned by the San Joaquin River Parkway and Conservation Trust.	X	X	X	11.0 acres	0–20 feet
Highway City Neighborhood Community Center	Fresno	Basketball court, playground, picnic tables and barbecues, programs and activities.	X	X	X	2.0 acres	1,000 feet
Basin AH1 Dog Park	Fresno	Open May through November; includes open space and wading pool for dogs.	X	X	X	1.5 acres	800 feet
Roeding Park	Fresno	Tennis and handball courts, soccer field, dog park, play area, dance platform, Japanese-American WWII Memorial, and numerous barbecues and picnic tables. Picnic shelters available for rent, Storyland and Playland attractions, and boat rentals available on Lake Washington in the park (shallow cement pond). Vehicles required to pay a fee to park inside park. Includes Fresno Chaffee Zoo, home to 125 species, and requires a paid admission. Land and Water Conservation Fund funding used for park development.	X	X	X	159.0 acres	20

Resource Name	Location	Amenities	HST Alternative			Size	Distance from Alignment/ Project Component
			UPRR/ SR 99	BNSF	Hybrid		
Total within 1,000 feet			**11**	**6**	**5-6**	NA	NA
Total within 300 feet of construction footprint			**8**	**3**	**3-4**	NA	NA
Total within 100 feet of construction footprint			**7**	**3**	**3**	NA	NA

[a]Fairmead Toddler Park only affected by the Hybrid Alternative with the Ave 24 Wye

Source: City of Merced (2004), City of Chowchilla (2009), City of Madera (2009b), City of Fresno (2009), Madera County (1995), Merced County (1990), San Joaquin River Parkway and Conservancy Trust (2007).

Table 3.15-3 identifies parks lying within the Castle Commerce Center HMF study area. Of the three parks within the study area, two lie within 300 feet of the HMF site, and one park lies within 1,000 feet of the trackway. Project construction and operation would have the most impacts on these parks, particularly those less than 100 feet from the project.

Table 3.15-3
Parks, Recreation, and Open Space Resources within Castle Commerce Center HMF Study Area

Resource Name	Location	Amenities	Size	Distance from Alignment/ Project Component
Veterans Park	Atwater	Baseball, basketball, football/soccer field, picnic and barbecue areas, playground equipment, and a BMX track. Castle Youth Center provides after-school programs in an 11,000-square-foot facility that includes a gymnasium.	17.9 acres	300 feet
Stephen Gray Park	Merced	Basketball court, playground equipment, and picnic tables.	2.5 acres	520 feet
Joe Stefani Elementary School	Merced County	Baseball, basketball, football/soccer field, and playground equipment.	5.4 acres	0 feet

Source: City of Atwater (2000) and Merced City School District (2011).

3.15.4.1 UPRR/SR 99 Alternative

Table 3.15-2 shows 11 parks, recreation, and open space resources lying within 1,000 feet of the UPRR/SR 99 Alternative:

- Five parks in Madera (one owned and operated by Madera County)
- One park in Madera County
- Five parks in Fresno

Most of the identified parks have easy vehicular and pedestrian access to attract users from the surrounding area. These parks are generally small neighborhood parks or urban open spaces. Riverside Park, Sharon Avenue Linear Park, and County Road 27¾ Linear Park in Madera also serve as important pedestrian and bicycle transportation connections. Camp Pashayan, which falls east of the UPRR bridge on the south side of the San Joaquin River in Fresno, is a California Department of Fish and Game (CDFG) property managed by the San Joaquin River Parkway and Conservation Trust and is part of a designated Ecological Reserve. Ecological Reserves are protected by the California Fish and Game Code. San Joaquin River Parkway and Conservation Trust owns the adjacent property, also part of the San Joaquin River Parkway. If necessary, ecological reserve property would be obtained under agreement with the CDFG.

Roeding Park, a regional park and the first park in the City of Fresno, includes the Fresno Chaffee Zoo, Rotary Storyland and Playland, picnic shelters, folk dance platforms, and a Japanese-American World War II Memorial. The City of Fresno prepared the Final EIR for the master plans for Roeding Regional Park and Fresno Chaffee Zoo (City of Fresno 2011). Projects identified in the Final EIR include a zoo expansion in the southeast park quadrant and the addition of a park entrance from Golden State Boulevard with a relocated water feature. Fresno currently has a deficit of regional parks according to its 2025 General Plan. The City used Land and Water Conservation Funds (Section 6(f)) for development and redevelopment of portions of Roeding Park. Refer to Chapter 4.0, Section 4(f)/Section 6(f) Evaluation, for more information.

Roeding Park is a historic recreational facility in the City of Fresno dating to the early twentieth century. The resource appears to meet Criterion A for its association with important development patterns in Fresno and Criterion C for its architectural and landscape design merit. For a property to be eligible for the National Register, it must meet at least one of the four National Register main criteria. With Criterion A, "Event," the property must make a contribution to the major pattern of American history. Criterion C, "Design/Construction," concerns the distinctive characteristics of the building by its architecture and construction, including having great artistic value or being the work of a master.

The park was recommended eligible (but not concurred with) as a historic district for the NRHP and the CRHR as a significant example of an early twentieth century municipal park. The park is recommended eligible as a district in the Fresno Local Register of Historic Resources for its design and association with George C. Roeding and the Roeding family, who made significant contributions to the development of Fresno in the early 20th century. This resource is located adjacent to the proposed alignment.

Downtown Merced Station

As described in Table 3.15-4 and shown on Figure 3.15-1, there are two park resources located within the study area of the Downtown Merced Station. The parks identified in Table 3.15-4 have easy vehicle and pedestrian access and on-street parking.

Table 3.15-4
Parks, Recreation, and Open Space Resources in the Downtown Merced Station Study Area – Common to all HST Alternatives

Resource Name	Amenities	Size	Distance from Station (feet)
Bob Hart Square	Primarily paved plaza for public gatherings that includes a kiosk, clock, and benches.	0.4 acres	1,100
Courthouse Square Park	Playground, picnic tables, barbecues, Merced County museum, and library.	8 acres	2,500
Source: City of Merced (2011).			

Downtown Fresno Station

Table 3.15-5 describes the three resources located within the study area of the Downtown Fresno Station. Figure 3.15-4 shows these parks' locations, which are all outside the immediate station vicinity and have easy pedestrian and residential access. Chukchansi Park is a baseball stadium and event center privately managed on city property. Park use generally requires an entrance fee for events and a rental fee for event sponsors. Chukchansi Park lies approximately 70 feet from the proposed Downtown Fresno Station and has easy access for pedestrians and vehicles.

Table 3.15-5
Parks, Recreation, and Open Space Resources in the Downtown Fresno Station Study Area – Common to all HST Alternatives

Resource Name	Amenities	Size	Distance from Station (feet)
Fresno County Plaza	Benches, ballroom for rent.	2.4 acres	975
Chukchansi Park	Baseball stadium and event center, 12,500-seat capacity.	11.0 acres	70
Fulton Mall	Public open-space area with benches and pedestrian walkway.	25.0 acres	450
Source: City of Fresno (2009).			

3.15.4.2 BNSF Alternative

Table 3.15-2 describes the six park resources within 1,000 feet of the BNSF Alternative as follows:

- One park in Merced County
- Five parks in Fresno

All of these resources also fall within the UPRR/SR 99 and Hybrid alternatives study areas, except for Le Grand Park in Merced County. The BNSF Alternative includes the same parks identified for the Downtown Merced Station and Downtown Fresno Station study areas under the UPRR/SR 99 Alternative. Most have easy vehicular and pedestrian access to attract users from the surrounding area.

The study areas for the Mission Ave and Mariposa Way design options include Le Grand Park in the unincorporated community of Le Grand in Merced County. The Mission Ave East of Le Grand and Mariposa Way East of Le Grand design options shift the alignment farther to the north (Figure 3.15-2); the study areas do not include Le Grand Park. With these two design options, seven parks lie within the BNSF Alternative study area.

3.15.4.3 Hybrid Alternative

Table 3.15-2 describes the six parks within 1,000 feet of the Hybrid Alternative as follows:

- One park in Madera County
- Five parks in Fresno

The Hybrid Alternative includes the same parks identified for the Downtown Merced Station and Downtown Fresno Station study area under the UPRR/SR 99 Alternative.

3.15.4.4 Heavy Maintenance Facility Alternatives

Table 3.15-3 provides information on the three parks—Veterans Park in Atwater, Stephen Gray Park in Merced, and Joe Stefani Elementary School in Merced County—that are located within the study area of the Castle Commerce Center HMF site (Stephen Gray Park and Joe Stefani Elementary School are both associated with the access tracks to the HMF). According to staff from the Merced County Parks and Recreation Department, the amenities at Joe Stefani Elementary School include ball fields, basketball courts, and a playground that serve as an open public park and a recreational resource and are considered a significant recreation facility by Merced County (Vejar 2011). Figures 3.15-1 through 3.15-3 show the locations of the HMFs proposed for the Merced to Fresno Section of the HST System alignments.

3.15.5 Environmental Consequences

3.15.5.1 Overview

This section describes the construction and operation impacts associated with the HST alternatives being considered as they relate to parks, recreation, and open space. Due to the UPRR/SR 99 Alternative's urban setting, impacts would generally be greater for that alternative than for the BNSF and Hybrid alternatives.

Temporary construction impacts include noise, dust, and visual degradation. Temporary construction impacts within 300 feet of a park, recreational resource, or open space have the greatest impact. Parks located farther than 300 feet from construction are sufficiently remote to remain comparatively unaffected. The UPRR/SR 99 Alternative would require closure of two parks during construction—Sharon Avenue Linear Park and County Road 27¾ Linear Park, both in the City of Madera, and partial closure of Riverside Park in the City of Madera and Camp Pashayan in the City of Fresno because of the temporary property acquisitions and the proximity of the construction activities to the remaining park area. Depending on the HST construction schedule, the UPRR/SR 99 Alternative may also require closure or disruption of use of the planned extension of the Vern McCullough Fresno River Park. No parks would be closed during construction with either the BNSF or Hybrid alternatives. Construction of an at-grade trackway to the Castle Commerce Center HMF would necessitate the full acquisition of Joe Stefani Elementary School.

Temporary construction impacts associated with the HST alternatives, such as temporary property use, noise, dust, and visual degradation, that do not diminish capacity are considered an impact with moderate intensity under NEPA and a less than significant impact under CEQA, depending on the park's location and features. Full or partial park closures during the construction period are considered impacts with substantial intensity under NEPA. They are considered significant impacts under CEQA if they would prevent the functions of the park from continuing or would diminish the ability of people to use the park.

Project construction would require the permanent acquisition of 2.0 acres for the UPRR/SR 99 Alternative, 0.6 acre for the BNSF and Hybrid alternatives, and 14.5 acres for the Castle Commerce Center HMF because of the full acquisition of Joe Stefani Elementary School. Without mitigation, the permanent impacts caused by these acquisitions are considered to have substantial intensity under NEPA and would be significant under CEQA.

As discussed in Section 3.4, Noise and Vibration, the HST operations would increase noise levels at the eastern portion of Roeding Park to severe levels. The impact on the park as a Category 3 land use and as a historic resource would have substantial intensity under NEPA and would be significant under CEQA. Discussions with the City of Fresno are under way to determine to what extent the noise would affect park uses. Mitigation could include construction of an aesthetically treated sound barrier.

HST Project operations would permanently affect the character of parks and open space resources, depending on the location and amount of land acquired. There are four parks that the UPRR/SR 99 Alternative would pass through or over (Sharon Avenue Linear Park, Riverside Park, County Road 27¾

Linear Park, and Camp Pashayan), one park for both the BNSF Alternative and the Hybrid Alternative (Camp Pashayan), and one for the Castle Commerce Center HMF (Joe Stefani Elementary School) that would be affected due to property acquisitions. These impacts are considered to have moderate to substantial intensity under NEPA and to be less than significant to significant under CEQA.

3.15.5.2 No Project Alternative

The No Project Alternative would not directly increase population above regional population projections accounted for in regional and local land use plans. Those plans and related county and city ordinances contain provisions for funding, acquiring, and maintaining public parks and recreation facilities adequate to meet the needs of future planned population growth. Therefore, the No Project Alternative would not increase the use of existing neighborhood and regional parks or other recreation facilities such that substantial physical deterioration of the facility would occur or be accelerated. The No Project Alternative would not conflict with established or planned open space, parks, or recreational use of the project vicinity.

Future developments planned under the No Project Alternative would require individual environmental review, including an analysis of their impacts on parks, recreation, and open space resources, and the environmental impacts of acquiring new parks and constructing new recreation facilities necessary to meet acceptable service ratios. The planned addition of auxiliary lanes to SR 99 between Clinton Avenue and Fresno Street may require encroachment into Roeding Park. Otherwise, the No Project Alternative would not result in the physical alteration of existing parks or other recreational facilities, nor result in a need to provide new parks or other recreation facilities, the construction of which could cause environmental impacts to maintain acceptable service ratios or other performance objectives. Because the No Project Alternative would exceed the significance criteria for this resource area if the SR 99 project required the acquisition of a portion of Roeding Park, the impacts of this alternative would have substantial intensity under NEPA and would be significant under CEQA. If there is no park acquisition, the No Project Alternative would have no effect under NEPA and no impact under CEQA.

3.15.5.3 High-Speed Train Alternatives

The following sections discuss the direct and indirect impacts of the HST alternatives. Except where specifically noted, the wyes, HMFs, and design options would have no impacts or no impacts other than those described for UPRR/SR 99, BNSF, and Hybrid alternatives. Figures 3.15-5 through 3.15-18 show the locations of all the parks in the HST alternative study area.

Construction Period Impacts

Construction impacts are defined as impacts that would not permanently convert parks or recreational facilities to another use.

Common Parks, Recreation, and Open Space Impacts

All three HST alternatives have construction impacts on parks, recreation, and open space facilities. These impacts include increased noise and dust caused by the operation of equipment and visual changes caused by construction activities, exposed earth, and stockpiled materials.

UPRR/SR 99 Alternative

Construction activities for the UPRR/SR 99 Alternative would pass within 1,000 feet of 15 existing parks, including the HST stations. Of these 15 existing parks, 10 are within 300 feet of the construction activities and would have the most effects because of the close proximity of construction to the park and park users. A description of the direct and indirect impacts from construction on each of the parks follows. The UPRR/SR 99 Alternative would also pass within 300 feet of a proposed trail facility (the Vern McCullough Fresno River Trail).

Sharon Avenue Linear Park (City of Madera) – The UPRR/SR 99 Alternative would require temporary use of 0.7 acre of the park for construction of the adjacent HST guideway east of Sharon

Avenue, as shown in Figure 3.15-5. Temporary access restrictions from construction of the HST alignment and the relocation of Sharon Avenue to the east would affect the park, but the park would be closed during construction. Because the park would be closed during construction and the trail severed (and therefore unavailable for use in this vicinity for the approximately 2 to 4 years of construction), the iimpact and duration of this effect would have substantial intensity under NEPA, and it would be a significant impact under CEQA.

Riverside Park (City of Madera) – The UPRR/SR 99 Alternative would require temporary use of 0.3 acre at the west end of Riverside Park, as shown in Figure 3.15-5, for construction of the adjacent HST guideway east of Sharon Avenue. Noise, dust, visual changes, temporary access restrictions from construction of the HST alignment, and the relocation of Sharon Avenue to the east would affect the park; however, the remainder of Riverside Park would remain open during construction. Because part of the park would be closed during construction, this would result in an impact with substantial intensity under NEPA. Because the construction period requires closure of only part of the park and does not prevent the functions of the park from continuing or diminish the ability of people to use the park, the impact would be less than significant under CEQA.

Fairmead Toddler Park (Madera County), Rotary Park (City of Madera), and Courthouse Park (Madera County) – All three parks would experience indirect construction impacts from noise, dust, and visual change. Project construction would not diminish the recreational value of Fairmead Toddler Park because of its suburban character, the distance of the park from the alignment (600 feet), and separation by existing houses, as shown in Figure 3.15-6. Rotary Park, which is 100 feet from the alignment, and Courthouse Park, which is 300 feet from the alignment, are adjacent to existing major transportation facilities. Rotary Park, shown in Figure 3.15-5, and Courthouse Park, shown in Figure 3.15-7, are separated from the alignment by major transportation facilities, including UPRR and Gateway Boulevard. Courthouse Park, which is within the City of Madera and owned and operated by Madera County, is also separated from the project by a block that includes buildings and a parking lot; therefore, the construction impacts would not substantially reduce the value of these resources. Because standard construction practices would mitigate construction impacts to being imperceptible to park users and the impact would not prevent the functions of the park from continuing or diminish the ability of people to use the resource, the effect of construction impacts on Fairmead Toddler Park, Rotary Park, and Courthouse Park would be an impact with negligible intensity under NEPA and would be a less than significant impact under CEQA.

County Road 27¾ Linear Park (City of Madera) – Guideway construction for the UPRR/SR 99 Alternative would cross over this linear park between E Almond Avenue and Road 28, as shown in Figure 3.15-8. This would require the temporary use of 1.8 acres of parkland, and the park would be closed during construction. Relocating the park east of Road 27¾ to accommodate the HST alignment would provide additional acreage for possible expansion of the park. Because the park would be closed during construction and the trail severed (and therefore unavailable for use in this vicinity for the approximately 2 to 4 years of construction), the duration of this impact would have a substantial intensity under NEPA and would be a significant impact under CEQA.

Camp Pashayan (City of Fresno) – Visual changes at Camp Pashayan caused by the presence of construction equipment and the removal of vegetation would decrease the visual buffer from the adjacent UPPR right-of-way. After construction, the construction areas would be replanted, but the visual changes would remain until the vegetation matures, which could require several years to a decade, depending on vegetation type. The area between the HST alignment and the existing UPRR corridor, as shown in Figure 3.15-9, would not be accessible during construction. However, this area does not include recreational facilities for activities that require the use of equipment or designated facilities, courses, or fields; most of Camp Pashayan would remain accessible. The project would result in noise and dust during the construction period.

There would be no temporary closures of existing paved vehicular/bicycle/pedestrian access entry points to the park; access points would remain open during construction because project construction would only take place along the very southern boundary of the park. The paved access entry points for vehicles,

bicycles, pedestrians, and boats are north of the construction zone. Therefore, visitors would continue to be able to access the park as they do currently. Only the southern end of the park in the construction zone (the area that would be beneath the HST structure) would be access-restricted to such recreational users as hikers, swimmers, and fishermen during construction, for safety purposes (due to overhead work). The area under the elevated tracks would be available for recreational activities after construction (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security). Although area of the park that would be affected does not include recreational facilities for activities that require the use of equipment or designated facilities, courses, or fields, the area that would be affected is an area that can currently be actively used and would be completely closed to visitor use for a period of approximately 2 to 4 years while construction takes place in the vicinity of the park. Therefore, the duration of this impact would have a substantial intensity under NEPA and it would be a significant impact under CEQA.

Camp Pashayan is owned by the state of California and managed by the Department of Fish and Game. Because the Authority is also a state agency, the Authority can enter into an agreement with the Department of Fish and Game regarding the use, control, and possession of any portion of the property. In order to construct the elevated structure supported by columns across the property, the Authority may need to obtain easement rights through the property to construct the columns and the bridge structure.

San Joaquin River Parkway and Conservation Trust (City of Fresno) – Construction on the adjacent Camp Pashayan property would affect this park because of visual impacts from construction equipment, vegetation removal, noise, and dust at the western edge of the property (see Figure 3.15-9). These effects would result in minor disruptions to normal use of the immediate area, but would not disrupt the recreational functions of the park. Because this park would remain open to the public and the construction impacts, though perceptible to users, would not prevent the functions of the park from continuing or diminish the ability of people to use the resource, these effects would have moderate intensity under NEPA and would be less than significant impacts under CEQA.

Planned Facility: Vern McCullough Fresno River Trail (City of Madera) – Guideway construction for the UPRR/SR 99 Alternative would cross over this planned linear trail (see Figure 3.15-5). The City of Madera's Parks and Community Services Department plans to construct a trail undercrossing that would extend the existing Vern McCullough River Trail from its current terminus at the trail-head at Rotary Park underneath Gateway Avenue and the UPRR to the intersection of Riverside and the Sharon Avenue Linear Parks. During construction, the UPRR/SR 99 Alternative could jeopardize the construction project timeline for the planned extension of the Vern McCullough Fresno River Trail extension or result in closure or disruption of use. If the trail extension were built before the HST project, the trail would need to be closed for safety purposes (due to overhead work); this effect would have substantial intensity under NEPA and would be a significant impact under CEQA. However, at this time, is not certain whether the trail extension or the HST guideway would be constructed first. The Authority would coordinate closely with the City of Madera regarding the timing of construction of both projects so as to allow for a suitable arrangement that would allow this planned trail extension to be built.

Figure 3.15-5
Rotary Park, Sharon Avenue Linear Park, Riverside Park, and Vern McCullough Fresno River Trail, City of Madera

Source: Greer (2010).

MF_EIS_PR_11 Feb 24, 2012

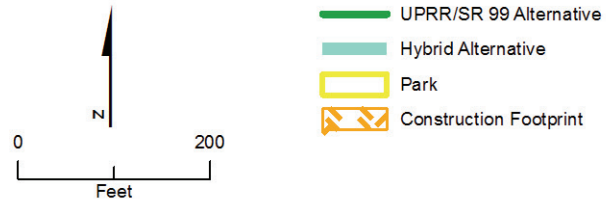


Figure 3.15-6
Fairmead Toddler Park,
Madera County

Source: City of Fresno (2002).

MF_EIS_PR_18 Feb 09, 2012

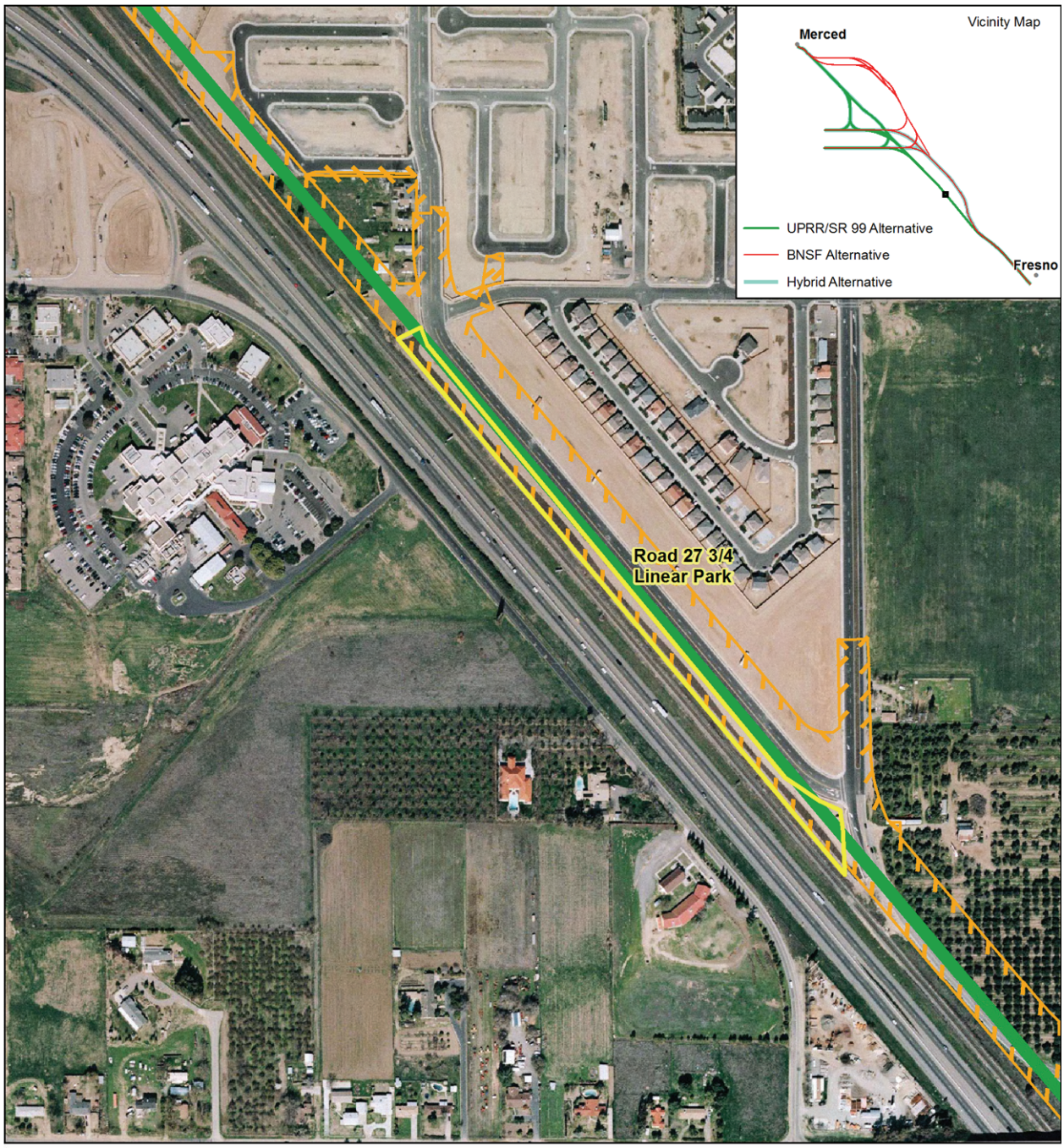
UPRR/SR 99 Alternative
Park
Construction Footprint

N

0 300

Feet

Figure 3.15-7
Courthouse Park,
City of Madera



Source: Greer (2010).

MF_EIS_PR_16 Feb 09, 2012

UPRR/SR 99 Alternative
Park
Construction Footprint

N

0 500

Feet

Figure 3.15-8
County Road 27¾ Linear Park,
City of Madera

Source: Fresno County (2000).

MF_EIS_PR_06 Feb 09, 2012

UPRR/SR 99, BNSF and Hybrid Alignment
Park
Construction Footprint

N
0 500
Feet

Figure 3.15-9
Camp Pashayan and San Joaquin River Parkway, City of Fresno

Source: City of Fresno (2002).

MF_EIS_PR_05 Feb 09, 2012

UPRR/SR 99, BNSF and Hybrid Alignment
Park
Construction Footprint

N
0 1,000
Feet

Figure 3.15-10
Roeding Park,
City of Fresno

Source: City of Fresno (2002).

MF_EIS_PR_17 Feb 09, 2012

UPRR/SR 99, BNSF and Hybrid Alignment
Park
Construction Footprint

N
0 500
Feet

Figure 3.15-11
Highway City Neighborhood Community Center, City of Fresno

Figure 3.15-12
Basin AH1 Dog Park,
City of Fresno

Source: City of Merced (1997, 2003, 2004).

MF_EIS_PR_13 Feb 09, 2012

UPRR/SR 99, BNSF and Hybrid Alignment
Park
Construction Footprint

N

0 500
Feet

Figure 3.15-13
Bob Hart Square and Courthouse Square Park,
City of Merced

Source: City of Fresno (2002).

MF_EIS_PR_19 Feb 09, 2012

UPRR/SR 99, BNSF and Hybrid Alignment
Park
Construction Footprint

N
0 750
Feet

Figure 3.15-14
Chukchansi Park Stadium and Fresno County Plaza, City of Fresno

Source: County of Merced (1990). MF_EIS_PR_09 Feb 09, 2012

Potential Heavy Maintenance Facility Trackway
Park
Construction Footprint

N
0 200
Feet

Figure 3.15-15
Stephen Gray Park,
City of Merced

Figure 3.15-16
Le Grand Park,
Merced County

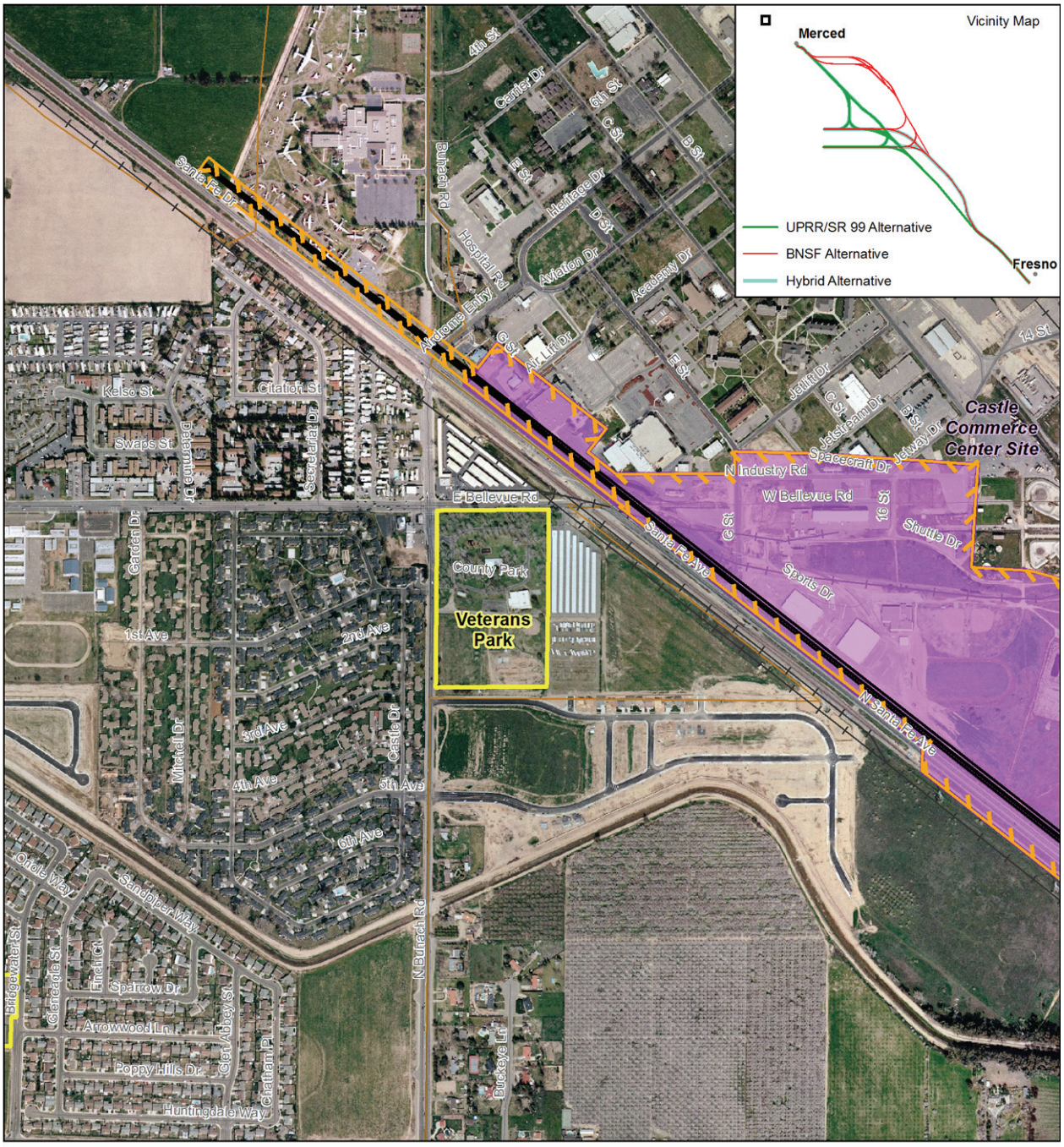


Figure 3.15-17
Veterans Park, City of Atwater

Figure 3.15-18
Joe Stefani Elementary School, Merced County

Roeding Park (City of Fresno) – Construction activities would occur adjacent to the eastern boundary of Roeding Park, but no temporary use of parkland for construction purposes is anticipated. Temporary construction impacts such as noise and dust, would be minor and would not substantially reduce the value of the resource. Because this park would remain open to the public and the construction period impacts, though perceptible to users, would not prevent the functions of the park from continuing or diminish the ability of people to use the resource, these effects would have moderate intensity under NEPA and would be less than significant impacts under CEQA.

Other Parks – Two other study area parks in Fresno, the Highway City Neighborhood Community Center (shown in Figure 3.15-11) and Basin AH1 Dog Park (shown in Figure 3.15-12), are more than 800 feet from the project and are separated by numerous buildings, parking lots, and a road. In addition, Golden State Boulevard also separates the dog park from the construction area; therefore, these parks are not likely to be affected by construction.

Downtown Merced Station

Bob Hart Square – This park (see Figure 3.15-13) would experience indirect impacts such as noise, dust, and visual change from construction of the Downtown Merced Station. Because of the existing urban nature of this park, its distance from the HST alignment, and its separation from the alignment by a parking lot, SR 140, a large building, and the UPRR corridor, these impacts would not substantially impair protected activities, features, or resource attributes. Therefore, these effects would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Courthouse Square Park – This park would not experience any construction impacts because the park is located approximately 2,500 feet from the station and three full blocks of multistory buildings and urban development separate the park from the station area. Therefore, these effects would would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Downtown Fresno Station

Chukchansi Park Stadium – This facility is located within 70 feet of the station construction area (see Figure 3.15-14), and noise, dust, and visual change could indirectly affect the stadium. However, these indirect impacts are not anticipated to substantially affect normal use because of the existing urban nature of the facility; therefore, the effects of the project would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Fulton Mall – This mall would not experience any direct or indirect construction impacts because of the distance between the mall and the station area (approximately 450 feet) and the buildings that separate the two areas. Therefore, these effects would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Fresno County Plaza – There would not be any direct or indirect construction period impacts on this plaza, because of the distance from the plaza to the station (approximately 1,575 feet), several multistory buildings, and a parking lot that separate the plaza from the HST station (see Figure 3.15-14). Therefore, these effects would have negligible intensity under NEPA and would be a less than a significant impact under CEQA.

BNSF Alternative

The UPRR/SR 99 Alternative and the BNSF Alternative have the same north-south alignment from immediately north of the San Joaquin River to Fresno and the same Downtown Merced Station and Downtown Fresno Station. Therefore, the impacts on parks in these areas would be the same (see Figures 3.15-9 to 3.15-14).

Because the BNSF Alternative avoids Fairmead and the City of Madera, there would be no construction impacts on Fairmead Toddler Park, Rotary Park, Sharon Avenue Linear Park, Riverside Park, Courthouse Park, or County Road 27¾ Linear Park. Construction activities under the BNSF Alternative would be within 1,000 feet of the following park.

Le Grand Park (City of Le Grand) – This park is more than 800 feet from the proposed HST alignment and is separated from the alignment by two blocks with numerous buildings (see Figure 3.15-16). Therefore, the BNSF Alternative would have no direct or indirect construction impacts.

Hybrid Alternative

The Hybrid Alternative would have the same effects on parks as those previously described under the UPRR/SR 99 and BNSF alternatives for the north-south alignment immediately north of the San Joaquin River to Fresno and within the Downtown Merced and Downtown Fresno station areas. The Hybrid Alternative avoids Fairmead and the City of Madera; therefore, it would have no construction effects on Fairmead Toddler Park, Rotary Park, Sharon Avenue Linear Park, Riverside Park, Courthouse Park, or County Road 27¾ Linear Park. The Hybrid Alternative also avoids Le Grand and would have no construction effects on Le Grand Park.

Heavy Maintenance Facility Alternatives

Of the five proposed HMF sites, only the Castle Commerce Center HMF has any parks, recreation, and open space resources within the study area. Construction of an HMF at Castle Commerce Center would potentially affect Veterans Park, Stephen Gray Park, and Joe Stefani Elementary School.

Veterans Park (City of Atwater) – This park lies within the study area for the Castle Commerce Center HMF. Construction of an HMF at Castle Commerce Center, which is associated with all three HST alternatives, would have no direct impacts, and would not likely result in indirect impacts, on Veterans Park. Because the HMF would be 300 feet from the park, and existing transportation facilities and commercial uses separate the park from the proposed HMF site (see Figure 3.15-17), construction period effects on the park would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Stephen Gray Park (City of Merced) – Indirect impacts on Stephen Gray Park would include noise, dust, and visual change. These impacts would likely not reduce the recreational value of the park or substantially affect normal use, because the park is more than 525 feet from the proposed access tracks associated with the Castle Commerce Center HMF. Therefore, the effect would have negligible intensity under NEPA and would be a less than significant impact under CEQA.

Joe Stefani Elementary School (Merced County) – The construction of the access tracks associated with the Castle Commerce Center HMF site would require the permanent acquisition and relocation of the entire Joe Stefani Elementary School property (see Figure 3.15-8). Because the school would be closed and relocated prior to construction no direct or indirect construction impacts are associated with the school property.

Project Impacts

Common Parks, Recreation, and Open Space Impacts

Impacts on parks, recreation, and open space resources during operation would include direct impacts associated with the acquisition of park resources. Indirect impacts relate to the distance between an HST alternative and the potentially affected park or recreation and open space resource. Indirect impacts include increased noise levels, changes in access, degradation of the visual setting, or changes in the surrounding land uses. Park users would most notice these impacts at facilities within 300 feet of the HST alignment. Parks located within 100 feet of the HST alternatives would have the most effects. After mitigation, none of the HST alternatives would have traffic impacts on intersections near parks.

Section 3.2, Transportation, and Section 3.3, Noise and Vibration, provide analyses of traffic and noise impacts, respectively.

Acquisition of Park Resources

The following subsections describe the acquisition of park resources for the HST alternatives. The UPRR/SR 99 Alternative would result in the greatest amount of park acquisition.

UPRR/SR 99 Alternative

The UPRR/SR 99 Alternative would be located along existing vehicle and rail transportation corridors to minimize potential impacts on adjacent properties, including parks, recreation, and open space resources (Authority and FRA 2008). Although the Authority made attempts to avoid and minimize property impacts, the UPRR/SR 99 Alternative would require portions of three parks: 0.4 acre at Riverside Park (see Figure 3.15-5); 1.0 acre at County Road 27¾ Linear Park (see Figure 3.15-8); and 0.6 acre at Camp Pashayan (see Figure 3.15-9). This would result in a total impact of 2.0 acres. Table 3.15-6 shows the acreage of the acquisitions. Where the HST alignment is elevated over park resources, the acquisition numbers in Table 3.15-6 reflect a "worst-case" scenario and include the park area under the elevated guideway. Most of the park land would remain available for park/trail use (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security). Because the UPRR/SR 99 Alternative would acquire land from Riverside Park, County Road 27¾ Linear Park, and Camp Pashayan, the effects at each of these parks would have substantial intensity under NEPA and would be a significant impact under CEQA.

Table 3.15-6
Parks, Recreation, and Open Space Resources Permanent Acquisition Acreage

Resource Name	North-South Alignment	Downtown Merced Station	Downtown Fresno Station
UPRR/SR 99 Alternative			
Riverside Park[a]	0.4	0	0
County Road 27¾ Linear Park[a]	1.0	0	0
Camp Pashayan[a]	0.6	0	0
Total Acres Affected	**2.0**	**0**	**0**
BNSF Alternative			
Camp Pashayan[a]	0.6	0	0
Total Acres Affected	**0.6**	**0**	**0**
Hybrid Alternative			
Camp Pashayan[a]	0.6	0	0
Total Acres Affected	**0.6**	**0**	**0**
Castle Commerce Center HMF			
Joe Stefani Elementary School[b]	14.5	0	0
Total Acres Affected	**14.5**	**0**	**0**

Note: Construction footprint impacts include the permanent acquisition area as well as a buffer area around the right-of-way assumed for temporary acquisition during construction.

[a]The amount of land impacted may be overstated where the HST guideway is elevated, depending upon whether the resource land underneath the proposed elevated structure can continue to be used in its current usage. For the purposes of this analysis, it is assumed that resource land under the HST alignment right-of-way will indeed be incorporated into a transportation use by the HST Project.

[b] Impacts at Joe Stefani Elementary School are from the Castle Commerce HMF access tracks.

BNSF Alternative

The BNSF Alternative north-south alignment would have the same property acquisition impacts on Camp Pashayan as the UPRR/SR 99 Alternative, as shown in Table 3.15-6 and Figure 3.15-9. This results in a total impact of 0.6 acre for this HST alignment, including the wye. The effect at this park would have substantial intensity under NEPA and would be significant under CEQA.

Hybrid Alternative

The Hybrid Alternative north-south alignment would have the same property acquisition impacts on Camp Pashayan as the UPRR/SR 99 Alternative, resulting in a total impact of 0.6 acre as shown in Table 3.15-6. The effect at this park would have substantial intensity under NEPA and would be a significant under CEQA.

Castle Commerce Center HMF

The Castle Commerce Center HMF is the only HMF site that would result in property acquisitions that affect open space. The entire parcel associated with Joe Stefani Elementary School (14.5 acres) would need to be acquired to construct the guideway (see Table 3.15-6 and Figure 3.15-8). The impact would affect the open space and facilities at the school, which are considered a park. The effect at this park would have substantial intensity under NEPA and would be significant under CEQA.

Change in Park Character

The following sections describe indirect impacts on parks located in close proximity to the HST alternatives such as noise impacts and changes to park character (such as visual changes and changes to the setting or character of the park).

UPRR/SR 99 Alternative

As discussed earlier, the UPRR/SR 99 Alternative would lie along existing vehicle and rail transportation corridors to minimize potential impacts on adjacent properties, including parks, recreation, and open space resources (Authority and FRA 2008). However, because the UPRR/SR 99 Alternative would traverse a more urbanized area than the other two HST alternatives, it would have the greatest impact on the park's character.

Sharon Avenue Linear Park – This linear park is urban in character and people use it as a pedestrian or bicycle connection between the residential areas and nearby commercial areas. The elevated guideway associated with the UPRR/SR 99 Alternative would be approximately 60 feet high adjacent to Sharon Avenue Linear Park resulting in a change in the park setting. For the following reasons, the effect at Sharon Avenue Linear Park would have moderate intensity under NEPA and would be less than significant under CEQA:

- No park land would be acquired by the project.
- Although the HST guideway would constitute a visual change and add an elevated visual component adjacent to Sharon Avenue Linear Park, it would be consistent with the area's urban nature, which includes the UPRR railway along the park's western boundary, and the corridor's transportation function.
- After project construction, the area under the HST guideway would be replanted with vegetation, where applicable, and could be used to extend the park and provide a shaded area during the hot summer months (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security).
- Noise levels would increase but would be mitigated by the implementation of noise abatement features.

Riverside Park – Riverside Park is a linear park that is urban in character and is used as a pedestrian or bicycle connection between adjacent residential areas and nearby commercial areas. The UPRR/SR 99

Alternative would cross over Riverside Park in an elevated profile, and a column may be placed inside Riverside Park. The project would introduce visual change to Riverside Park, with the elevated guideway crossing the park at its western end. However, project placement at the park's western end, adjacent to an existing roadway and the UPRR corridor, would minimize the impact, and the existing pedestrian and bicycle connection would not be eliminated. The area under the elevated guideway could be used to extend the park and provide a shaded area during the hot summer months (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security). Noise levels would increase, but would be mitigated by the implementation of noise abatement features. Because property acquisition would be required, there would be an effect with substantial intensity at Riverside Park under NEPA. Because the installation of the project would not prevent the functions of the park from continuing or diminish the ability of people to use the park, the impact would be less than significant under CEQA.

Fairmead Toddler Park – Operation of the UPRR/SR 99 Alternative would indirectly affect the Fairmead Toddler Park (Figure 3.15-6) in Madera County. Fairmead Toddler Park is in a suburban setting and intended for active use. The HST would be approximately 600 feet from the park, and Fairmead Boulevard would be relocated approximately 70 feet east of its current location. For the following reasons, the effect at Fairmead Toddler Park would have negligible intensity under NEPA and would be less than significant under CEQA:

- The UPRR/SR 99 Alternative would not diminish the capacity to use the park or substantially reduce its value.
- Although the elevated guideway would result in visual change, there are residences that would block the view and the area's overall visual character would not substantially change because the alternative is consistent with the character of the nearby existing transportation facilities.
- Noise levels near the park would increase, but would be mitigated by the implementation of noise abatement features.

Rotary Park and Courthouse Park – The UPRR/SR 99 Alternative would include an elevated guideway that would be located approximately 200 to 300 feet from each of the two resources in Madera—Rotary Park (Figure 3.15-5) and Courthouse Park (Figure 3.15-7). For the following reasons, the effect at both Rotary Park and Courthouse Park would have negligible intensity under NEPA and would be less than significant under CEQA:

- Rotary Park and Courthouse Park are in an urbanized area adjacent to the existing major transportation facilities of the UPRR and Gateway Boulevard, which would shield the parks from the proposed alignment.
- Although the elevated guideway would result in visual change, the project would not diminish the capacity to use the parks or substantially reduce their value.
- Noise levels near the parks would increase, but would be mitigated by the implementation of noise abatement features.

County Road 27¾ Linear Park – Although the HST guideway would constitute a visual change and add an elevated visual component adjacent to this linear park (Figure 3.15-8), it would be consistent with the area's urban nature, which includes the UPRR railway on retained fill along the park's western boundary, and the corridor's transportation function. Noise levels near the park would increase, but would be mitigated by the implementation of noise abatement features. After construction, the area under the guideway would be restored and available again for park use. The elevated guideway over the park would be a substantial visual change, but the guideway would provide shade during the hot summer months (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security). Because property will be acquired, there will be a substantial effect at County Road 27¾ Linear Park under NEPA. Because the installation of the project would not prevent the

functions of the park from continuing or diminish the ability of people to use the park, the impact would be less than significant under CEQA.

Planned Facility: Vern McCullough Fresno River Trail (City of Madera) – Under the UPRR/SR 99 Alternative, the elevated HST guideway would cross over this planned linear trail. The City of Madera's Parks and Community Services Department plans to construct a trail undercrossing that that would extend the existing Vern McCullough River Trail from its current terminus at the trail-head at Rotary Park underneath Gateway Avenue and the UPRR to the intersection of Riverside and the Sharon Avenue Linear Parks. It is not anticipated that construction of the trail extension, nor the connectivity and use of the trail post-HST project completion, would be impacted. At this time, is not certain whether the trail extension or the HST guideway would be constructed first. The Authority will coordinate closely with the City of Madera regarding the timing of construction of both projects so as to allow for a suitable arrangement that would allow this planned trail extension to be built. Based on this assessment, project impacts on the planned extension of the Vern McCullough Fresno River Trail would have moderate intensity under NEPA and would be less than significant under CEQA.

Camp Pashayan and San Joaquin River Parkway – All of the HST alternatives would be elevated approximately 60 feet above the park and the alignment would be designed to lie as close to the UPRR corridor as possible (Figure 3.15-9). The view of the elevated tracks from Camp Pashayan would appear in front of and seem taller than either of the two existing bridges (UPRR and SR 99). Much of the vegetation that obstructs views of portions of the existing bridges would also obstruct portions of the HST bridge, although the new structure would appear more dominant in views from this location of Camp Pashayan than the existing bridges. The HST would be consistent with the character of this area, which contains two bridges that cross the San Joaquin River. It would change the existing view with the addition of one bridge adjacent to the existing bridges and because viewers from this location within Camp Pashayan already see two existing bridges, the visual effects would have moderate intensity under NEPA and would be less than significant under CEQA. Noise levels would moderately increase and because of the increase the effects would have moderate intensity under NEPA and would be less than significant under CEQA. However, because property acquisition would be required, there would be an effect with substantial intensity at Camp Pashayan under NEPA.

The columns placed within Camp Pashayan would require the acquisition of Camp Pashayan property. The area under the elevated guideway could be used as parkland after construction (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security). There would be no closures of existing paved vehicular/bicycle/pedestrian access entry points to the park.

Roeding Park – Effects on Roeding Park are discussed below with respect to its function as a park as well as its status as a historic resource recommended eligible for listing on the NRHP and CRHR (see Section 3.17, Cultural and Paleontological Resources). Potential effects on Roeding Park would include visual effects and noise effects. As shown in Figure 3.15-10, the HST alignment would be constructed at-grade adjacent to the eastern boundary of Roeding Park. Along the southern portion of Roeding Park, the tracks would descend below ground into a retained cut to cross under SR 180.

- The HST Project would not affect either the existing or planned pond locations in the park.
- *Access.* All HST alternatives would eliminate Golden State Boulevard; because of this impact, the planned new park entrance from Golden State Boulevard would no longer be possible. However, the city has agreed to the use of Belmont Avenue as an alternative new access to the park (due to the loss of access from Golden State Boulevard).
- *Visual Effects.* As viewed from Roeding Park (looking east, see Figure 3.16-16), trees along the eastern boundary of the park would partially block views of the HST at-grade guideway. Because the changes would not be easy to see, the character of the eastern part of the park would not change as a result of the guideway being adjacent to the park. No effects on Fresno Chaffee Zoo or Rotary

Storyland and Playland, both of which are located inside Roeding Park approximately 1,000 feet from the HST alignment, are anticipated.

- *Noise Effects.* FRA guidance (High-Speed Ground Transportation Noise and Vibration Impact Assessment [FRA 2005]) groups noise-sensitive land uses into categories depending on the sensitivity to noise. Roeding Park is considered a Category 3 land use, which does not take into account nighttime noise sensitivity. Category 3 land uses are not as stringent as categories 1 and 2, and Category 3 allows for a higher increase in project noise levels before an impact is identified. A comparison of two measurements of existing noise to projected noise indicates that noise impacts on the eastern side of the park would be severe:
  - Existing noise levels (measured as equivalent continuous noise level L_{eq}) are 60 dBA at the Japanese-American WWII Memorial (20 feet from the edge of the park) and 55 dBA at 250 feet from the edge of and park noise thresholds. Noise measurements take into account noise from Golden State Boulevard and the UPRR railway.
  - Operation of the HST Project would result in severe noise impacts at both of these locations along the eastern boundary of Roeding Park. Based upon the noise modeling performed at the two distances, noise levels would increase by the following:
- 20 feet from the edge of the park: an increase of 12 dB to 72 dBA (the threshold for Category 3 land use at this location is 68 dBA)
- 250 feet from the edge of the park: an increase of 14 dB to 69 dBA (the threshold for Category 3 land use at this location is 67 dBA)
  - *Noise Impacts on the Park*. At locations further from the tracks, the projected noise levels would be lower, but there would still be substantial portions of the park with severe impact. Under FRA guidance, the projected noise increase on Roeding Park as a Category 3 land use would be an effect with substantial intensity under NEPA and a significant impact under CEQA.
  - *Noise Impacts on the Park as a Historic Resource.* In accordance with the Criteria of Adverse Effect defined in 36 CFR 800.5, an "adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." Application of the criteria of adverse effect is largely an assessment of an undertaking's impacts on the historic integrity of a historic property and how an undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. With all HST alternatives, Roeding Park would be adversely affected under Section 106.
  - *Noise/Vibration Effects on Zoo Animals.* With regard to potential noise and/or vibration impacts to zoo animals, the FRA addresses impacts on wildlife (all mammals and birds) and domestic animals. The FRA High Speed Ground Transportation Noise and Vibration Impact Assessment Manual (2005) considers a Sound Exposure Level (SEL) (the cumulative noise exposure from an event and the total A-weighted sound experienced by a receiver during a noise event, normalized to a 1-second interval) of 100 dBA the most appropriate threshold for disturbance effects, such as startling, on wildlife and livestock of all types. The criteria adopted by FRA to determine animal impacts are based on the limited research that exists for noise effects on animals. Noise exposure limits for wildlife and livestock are an SEL of 100 dBA from passing trains, which criterion is the threshold value used for all animal impacts. This noise descriptor is used to assess effects on all wildlife and domestic animals.

    A screening assessment determined typical and maximum distances from the HST tracks at which this limit may be exceeded. Project analysts computed train pass-by SELs for two conditions: at-grade and on a 60-foot-high elevated guideway. To provide a conservative estimate, in each case the HST maximum operating speed of 220 mph was used, and no shielding from intervening

structures or terrain was assumed. Analysis indicated that along at-grade sections, the screening distance for a single-train pass-by SEL of 100 dBA would be approximately 100 feet from the track centerline. This assumes the presence of a safety barrier on the edge of the guideways, 3 feet above the top of rail height, as detailed in typical cross sections. In the case of the HST segment near Roeding Park, there would be the installation of intervening structures (a noise wall), and therefore the distance at which an SEL of 100 dBA would emanate would be substantially less. As noted in EIR/EIS Section 3.15.5.3, at 20 feet from the edge of the park, the HST would increase dBA from 12 to 72 dBA, and at 250 feet from the edge of the park, the HST would increase dBA from 14 to 69 dBA. These levels are below the noise threshold levels for animals, so no negative impacts to zoo animals from the HST would be anticipated.

There would be no vibration impacts under the UPRR/SR 99 or Hybrid alternatives because of the limited propagation of vibration through the soils in the project corridor, the low vehicle input force, and the presence of elevated structures, which substantially attenuate vibration levels in heavily populated areas where vibration-sensitive receivers are primarily located. Projected vibration levels are lower than the impact threshold at the closest receivers for these HST alternatives and all proposed HMF sites. Additionally, at this time, there is no conclusive evidence of vibration decreasing production in livestock or affecting animal breeding habits.

The assessment of effects must follow the directions stated in 36 CFR 800.4(a)(2), as shown in Table 3.15-7.

Table 3.15-7
Examples of Adverse Effects Provided in 36 CFR 800.5(a)(2)

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

An adverse effect would occur under Criterion (v) for "the introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." The project would increase noise levels substantially, adjacent to contributing features on the property for which quiet settings are important (the memorial, for example). Substantial increases in noise levels could be perceived as a detriment to users of the facility in these locations because of the relatively quiet nature of this part of the resource. The effect on Roeding Park as a historic resource would have substantial intensity under NEPA and would be significant under CEQA. Mitigation measures address the noise impacts (see Section 3.15.6).

Highway City Neighborhood Community Center and Basin AH1 Dog Park lie approximately 1,000 and 800 feet from the alignment, respectively. Therefore, no direct or indirect impacts would occur and the project would not affect these parks.

Downtown Merced Station

The Downtown Merced Station would not result in any direct or indirect impacts that would operationally affect any park, recreation, or open space resources that lie within a 0.5-mile radius of the proposed station, as shown in Figure 3.15-13. The only resources present within the study area are Bob Hart Square, which is relatively urban and is separated from the alignment by a parking lot; SR 140; a large building; the UPRR corridor; and Courthouse Park, which is located towards the northern edge of the study area.

Downtown Fresno Station

The Downtown Fresno Station would not result in any direct or indirect impacts that would operationally affect the Chukchansi Park stadium, shown in Figure 3.15-14. The stadium lies on the north side of H Street across from a potential parking facility for the proposed HST station. The station and parking facility would not directly influence the enjoyment and use of the stadium. Stadium uses include various commercial and private events such as minor league baseball games, soccer games, concerts, supercross/monster truck shows, and trade shows. Although ample parking is available in the area, the proposed alignment would displace existing surface parking at H Street and Inyo Street that is currently used for event parking. The HST Project and Downtown Fresno Station could potentially provide a benefit by improving regional access to the stadium.

Fulton Mall – The Fulton Mall is located approximately 450 feet from the proposed Downtown Fresno Station and is separated by a number of multistory buildings. The proposed station and alignment would not diminish the capacity of the open space or substantially reduce its value, or result in any direct or indirect impacts that would affect the mall. This resource could experience increased use due to the improved access provided by HST, but this increased use would most likely enhance the commercial enterprise.

Fresno County Plaza – The Fresno County Plaza lies more than 1,575 feet from the proposed Downtown Fresno Station, and several multistory buildings and a parking lot would separate the plaza from the station, as shown in Figure 3.15-14. The proposed station and alignment would not diminish the capacity of the open space or substantially reduce its value, or result in any direct or indirect impacts that would impact the plaza. This resource could experience increased use due to the improved access provided by HST, but this increased use would most likely enhance the commercial enterprise.

BNSF Alternative

The BNSF Alternative would have similar operational impacts along the north-south alignment as the UPRR/SR 99 Alternative from north of the San Joaquin River to Fresno, and in the Downtown Merced Station and Downtown Fresno Station study areas (Figure 3.15-13 and Figure 3.15-14, respectively). The BNSF Alternative would avoid operational impacts on Fairmead Toddler Park, Rotary Park, Sharon Avenue Linear Park, Riverside Park, Courthouse Park, and County Road 27¾ Linear Park.

Le Grand Park – This park falls over 900 feet from the alignment; therefore, no direct impacts would occur, and the project would not affect the park. Noise levels would moderately increase; because of the increase, the effects would have moderate intensity under NEPA and would be less than significant under CEQA.

Hybrid Alternative

The Hybrid Alternative's operational impacts along its north-south alignment would be the same as those for the UPRR/SR 99 and BNSF alternatives from north of the San Joaquin River to Fresno. Operational impacts on parks in the Downtown Merced Station study area and the Downtown Fresno Station study area would also be the same. The Hybrid Alternative with the Ave 24 Wye would result in the same impacts on Fairmead Toddler Park as the UPRR/SR 99 Alternative. Similar to the BNSF Alternative, the

Hybrid Alternative would avoid Rotary Park, Sharon Avenue Linear Park, Riverside Park, Courthouse Park, and County Road 27¾ Park. The Hybrid Alternative would also avoid Le Grand Park.

Heavy Maintenance Facility Alternatives

Of the five proposed HMF sites within the study area, only the Castle Commerce Center HMF site would potentially affect parks, recreation, and open space resources, as listed below.

Stephen Gray Park – The character of this park would not be impacted by the potential installation of access tracks between the Downtown Merced Station and the Castle Commerce HMF site because it is 525 feet from the proposed tracks. At this distance, no direct impacts are expected because of the distance and the park's close proximity to SR 59, but noise levels would moderately increase. Because of the increase, the effects would have moderate intensity under NEPA and would be less than significant under CEQA.

Veterans Park – Operation of the Castle Commerce Center HMF, which is associated with all of the HST alternatives, would not affect the visual character of Veterans Park. This park lies in an urbanized area that is commercial/industrial to the north and east as well as near the existing railroad corridor. Because the HMF would not substantially change the area's existing visual character and the project would not diminish the park's capacity for the intended active uses or diminish its value, the effect is determined to have negligible intensity under NEPA and to be less than significant under CEQA.

Joe Stefani Elementary School – As previously described under construction impacts, construction of the access tracks between the Downtown Merced Station and the Castle Commerce Center HMF site would require the permanent acquisition of the entire school property. Because the school would need to be relocated, there would be no indirect impacts, but because property acquisition would be required, there would be an effect with substantial intensity under NEPA and a significant impact under CEQA.

Conflicts with Plans and Policies

The City of Fresno adopted the *Roeding Regional Park and Fresno Chaffee Zoo Facility Master Plans* in June 2011 (City of Fresno 2011). The plans (and associated Final EIR) provide the entitlements and approvals necessary for several projects proposed for Roeding Park, Fresno Chaffee Zoo, and Rotary Storyland and Playland.

The proposed projects described in the master plans would not conflict with the adjacent HST alternatives, except for the new park boulevard entrance and exit at Golden State Boulevard. The other proposed projects could proceed as designed. Regarding Golden State Boulevard, the *Roeding Regional Park and Fresno Chaffee Zoo Facility Master Plans* identifies a new boulevard through the middle of the park connecting with a new entrance and exit on Golden State Boulevard. However, Golden State Boulevard would be closed under the HST Project (i.e., the project would require the closure of Golden State Boulevard east of Roeding Park, precluding a direct connection). Accordingly, construction of the boulevard as contemplated in the master plan is not reasonably foreseeable and would conflict with the HST design. The Authority is working with the City of Fresno to resolve this planning conflict. Roeding Park has two existing entrance and exit points (Olive Avenue and Belmont Avenue), which would remain under the master plan scenario. Moreover, the HST Project would construct new overcrossings at Olive Avenue and Belmont Avenue to carry traffic over the HST guideway, which would facilitate continued access to these existing entrance and exit points. Nevertheless, given that the master plans were recently adopted and the Final EIR was certified (June 23, 2011), resolution of this planning conflict is not reasonably foreseeable. If the master plan(s), the HST design, or both require modification, such modification would be subject to environmental review.

3.15.5.4 Section 4(f) and 6(f) Uses

Federal legislation protects some of the parks and recreation resources in the project study area. The Draft Section 4(f) Evaluation, provided as Chapter 4 to this EIR/EIS, evaluates the use of Section 4(f) properties, which include publicly owned parks, recreation areas, or wildlife and waterfowl refuges or

properties, in accordance with Section 4(f) of the U.S. Department of Transportation Act. The mitigation section of the Draft Section 4(f) Evaluation also notes specific Section 4(f) avoidance alternatives and measures to minimize harm as required by 49 U.S.C. 303(c)(2) that could be incorporated in the HST Project to address impacts on Section 4(f) resources for which the HST Project would have a use.

Chapter 4 also assesses potential impacts on any Section 6(f) properties, which are park properties that have been improved with funds from the Land and Water Conservation Fund (LWCF) grant program.

3.15.6 Mitigation Measures

Since publication of the Statewide Program EIR/EIS (Authority and FRA 2005) and the Bay Area to Central Valley Program EIR/EIS (Authority and FRA 2008), planning refinements have minimized potential impacts on parks, recreation, and open space resources. Many related impacts in other resources have mitigation measures that work to reduce further the likelihood for impacts on park resources. For example, Section 3.2.6 describes mitigation measures for impacts during construction for transportation and access; Section 3.3.6 describes construction dust effects on air quality; Section 3.11 addresses safety and security; Section 3.12 addresses acquisitions of community facilities; Section 3.16.6 describes shielding staging areas during construction and visual degradation (such as decorative barriers, landscaping, or architectural lighting); and Section 3.18.6 addresses incremental effects of growth. Chapter 4 (the Draft Section 4(f) Evaluation) addresses measures to minimize harm in accordance with the requirements of the Department of Transportation Act. The project development will continue to engage the local jurisdictions on continued planning and mitigation for impacts on parks, recreation, and open space resources using the optional mitigation measures listed below to reduce substantial, adverse environmental impacts resulting from implementing the HST Project. Mitigation measures are listed first for construction and then for operation of the HST alternatives.

3.15.6.1 Construction Period

PK-MM#1: Compensate for Staging in Park Property for Construction. The Authority will coordinate with the respective jurisdictions to establish appropriate compensation in terms of allowance or additional property to accommodate for displaced park use during construction. Options will 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 the alternative public recreational opportunities. Alternative parks and recreational resources will include the installation of recreational facilities, trails, and landscaping on lands currently owned by the city but not already developed, or it will include temporary park development on open lands until the park can be reopened. Landscaping replacement will include replacement grass areas, tree replacement on a ratio of two 5-inch caliber trees for every tree removed and two shrubs for every shrub removed. All other facilities will be replaced or moved on a one-for-one ratio, including play equipment, benches, and the like.

The above construction mitigation measure for parks is consistent with mitigation measures for similar scale transportation projects and has proven to be effective in minimizing impacts noted above.

3.15.6.2 Project

PK-MM#2: **Acquire Park Property**. Mitigation will include providing financial compensation for purchase and development of replacement park property of at least equivalent value with the property acquired or, where appropriate, enhancement of the existing facility.

PK-MM#3: Improve Area under Elevated Structure over Park. Where the project is elevated over Sharon Avenue Linear Park, County Road 27¾ Linear Park, Riverside Park, and the planned extension of the Vern McCullough Fresno River Trail, mitigation will include installation of landscaping and lighting in consultation with the City of Madera and per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security.

Where the project is elevated over the three aforementioned parks and Camp Pashayan, the area under the elevated tracks will remain available for park use (per the Authority's policy on air-rights consistent with restrictions related to HST operations, maintenance, and security).

PK-MM#4: Acquire Property for Camp Pashayan. Final design will continue to seek to minimize right-of-way impacts and pier placement in Camp Pashayan. Mitigation will include in-lieu fee for property impacts associated with pier installation as well as revegetation of disturbed areas with native plantings (consistent the CDFG vegetation/landscaping plans for the reserve). CDFG agreed to a Resolution of Necessity on March 2, 2012, to accommodate the HST Project under Title 14 (Gibson 2012).

PK-MM#5: Address Noise at Roeding Park with City of Fresno. The Noise and Vibration Mitigation Guidelines state that the Authority will consider "mitigation measures that are reasonable, physically feasible, practical, and cost-effective." Criteria for reasonableness include community acceptance. Furthermore, with respect to historic resources, the Guidelines state, "… Section 106 properties with severe or moderate noise impacts may require mitigation, may not be subject to these guidelines, and will be evaluated on a case-by-case basis."

The Authority will work with the City of Fresno as the resource owner to address noise impacts. It is possible that the City of Fresno would view the projected noise levels as acceptable and preferable to the implementation of mitigation measures. In this case, the impacts on Roeding Park, both as a park and a historic resource, would remain substantial in intensity under NEPA and significant under CEQA.

To mitigate the noise impacts, a sound barrier approximately 2,800 feet in length will be constructed. It is assumed that a sound barrier will be 10 to 14 feet tall and have aesthetic treatment. A 10-foot-high sound barrier will reduce noise to 64 dBA at 250 feet inside the park and residual noise effects will occur. A 14-foot-high sound barrier will reduce noise effects to within 1 dB of no impact. The sound barrier will result in visual effects, but would not change the existing visual quality. KVP 16 is the view from inside the eastern edge of Roeding Park, approximately 300 feet from Golden State Boulevard, where the HST alignment would replace the roadway. As viewed from KVP 16, trees closer to the viewpoint would partially block views of the sound barrier (Figure 3.15-19). Although the changes will not be easy to see from this location, the visual character of the eastern part of the park will change as one moves closer to the edge of the park. The sound barrier will block the views toward the existing UPRR corridor and N Weber Avenue (neither of which adds aesthetic value to the park's setting). The landscape character at the park's edge will change with the presence and bulk of the sound barrier compared to the existing chain link fence, flat roadway, and open views. However, the sound barrier (with aesthetic treatment of shrubs located along the park side of the wall) will improve the park's visual quality and setting by blocking views of the existing transportation facilities outside the park that detract from its setting. Aesthetic treatment of the sound barrier will be selected with input from the community. Based upon the rating system used for the visual quality analysis in Section 3.16, Aesthetics and Visual Quality, the existing visual quality category of moderate will not change. The level of change in visual quality from the project with a sound barrier, combined with the level of viewer sensitivity, will result in an impact with negligible intensity under NEPA and in a less than significant impact under CEQA.

With aesthetic treatment, the sound barrier will not result in an adverse effect on Roeding Park as a historic resource.

The mitigation measures will not result in secondary effects. The mitigation measures will involve further development in consultation with the owners and maintenance keepers of the park and recreational facilities. It is anticipated that through further discussions with the local owners, all park impacts can be mitigated.

The above project mitigation measures for Parks are consistent with mitigation measures for similar scale transportation projects and have proven to be effective in minimizing impacts noted above.

KVP 16 Existing View

KVP 16 Simulated View with Sound Barrier

Figure 3.15-19
KVP 16 Existing and Simulated Views
Top Left, Existing View: View to the east from within Roeding Park in the City of Fresno. Golden State Boulevard and the existing UPRR tracks are visible beyond the eastern edge of the park.
Top Right, Simulated View: The at-grade HST guideway with a sound barrier (community input would influence aesthetic treatments) would appear outside the eastern boundary of Roeding Park.

3.15.7 NEPA Impacts Summary

This section summarizes impacts identified in Section 3.15.5, Environmental Consequences, and evaluates whether they are significant according to NEPA. Under NEPA, project effects are evaluated based on the criteria of context and intensity. The following NEPA impacts were identified under the No Project Alternative and the HST Project alternatives.

Because local regulations generally require development of parkland for approval of residential projects, the No Project Alternative would have no direct or indirect impacts on existing parks, recreation, or open space.

Temporary construction impacts such as noise, dust, and visual degradation are anticipated for all the HST alternatives. According to the NEPA assessment of the UPRR/SR 99 Alternative, four park resources would incur construction impacts with substantial intensity because of park closures during construction: Sharon Avenue Linear Park, Riverside Park, County Road 27¾ Linear Park, and Camp Pashayan. After mitigation, the impacts on these parks would still have substantial intensity because the temporary use would require the partial or full closure of the parks during construction for a duration of up to 4 years; therefore, limiting access to these parks and recreational uses within the context of the local region would be a significant impact under NEPA. With the UPRR/SR 99 Alternative, construction impacts on the San Joaquin River Parkway and Roeding Park would be moderate in intensity; but access to these parks would still be maintained and would not disrupt the recreational functions of the parks. Because these park would remain open to the public and the construction impacts are moderate in intensity, the project impacts at both of these parks would not be significant under NEPA.

The BNSF and Hybrid alternatives would have the same construction period impacts as the UPRR/SR 99 Alternative at Camp Pashayan, San Joaquin River Parkway, and Roeding Park.

The entire Joe Stefani Elementary School property would be acquired for the installation of access tracks for the Castle Commerce Center HMF site, so there are no particular construction period-only impacts.

During construction, the UPRR/SR 99 Alternative could jeopardize the construction project timeline for the planned extension of the Vern McCullough Fresno River Trail extension or result in closure or disruption of use. If the trail extension were built before the HST Project, the trail would need to be closed for

safety purposes (due to overhead work); this effect would be substantial under NEPA. However, at this time, is not certain whether the trail extension or the HST guideway would be constructed first. The Authority will coordinate closely with the City of Madera regarding the timing of construction of both projects so as to allow for a suitable arrangement that would allow this planned trail extension to be built.

According to the NEPA assessment of the UPRR/SR 99 Alternative, three park resources would incur substantial project impacts because of permanent property acquisitions: Riverside Park, County Road 27¾ Linear Park, and Camp Pashayan; loss of these protected resources within the context of the local region would be a significant impact under NEPA. Mitigation would reduce the direct and indirect project impacts related to the UPRR/SR 99 Alternative to moderate intensity at Sharon Avenue Linear Park; therefore, the impacts on this park would not be significant NEPA.

HST operations would increase noise levels along the eastern portion of Roeding Park to severe levels. The impact on the park function and the park as a historic resource because of the increased noise levels would have substantial intensity; as a federally-protected resource, this impact on Roeding Park would be significant under NEPA. Discussions with the City of Fresno are underway to determine to what extent the noise would affect park uses. Mitigation could include construction of an aesthetically treated sound barrier, which would reduce the effect related to noise from substantial to moderate in intensity. Implementation of such measure would restore the park function and protect its value as a historic resource, and no significant impact on Roeding Park would remain under NEPA.

NEPA impacts from the BNSF and Hybrid alternatives would be the same at Camp Pashayan and Roeding Park, because in Fresno, the alignment is identical for the three alternatives.

With an HMF at Castle Commerce Center, project effects on the Joe Stefani Elementary School would have substantial intensity under NEPA, because the entire school property would need to be acquired. After mitigation, the effects would still have substantial intensity because the park acquisition would result in recreation facilities on the school property having to be relocated elsewhere in the surrounding area; therefore, the impact on Joe Stefani Elementary School, which is a public recreational facility protected by federal legislationwould besignificant under NEPA.

3.15.8 CEQA Significance Conclusion

Table 3.15-8 provides a summary of impacts, associated mitigation measures, and the level of significance after mitigation.

Table 3.15-8

Summary of Significant Parks, Recreation and Open Space Impacts and Mitigation Measures

Resource/Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
Construction Period			
PK#1 Sharon Avenue Linear Park (City of Madera) Temporary Closure. At Sharon Avenue Linear Park, the UPRR/SR 99 Alternative would require temporary closure of the park during construction, including temporary access restrictions.	Significant	**PK-MM#1:** Compensate for Staging in Park Property for Construction	Significant

Resource/Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
PK#2 County Road 27¾ Linear Park (City of Madera) Construction Use. At Road 27¾ Linear Park, the UPRR/SR 99 Alternative would require temporary closure of the park during construction.	Significant	**PK-MM#1:** Compensate for Staging in Park Property for Construction	Significant
PK#3 Vern McCullough Fresno River Trail (City of Madera) Construction Use. During construction, the UPRR/SR 99 Alternative could jeopardize the construction project timeline for the planned extension of the Vern McCullough Fresno River Trail extension or result in closure or disruption of use. If the trail extension were built before the HST Project, the trail would need to be closed for safety purposes (due to overhead work); this effect would be significant under NEPA. However, at this time, is not certain whether the trail extension or the HST guideway would be constructed first. The Authority will coordinate closely with the City of Madera regarding the timing of construction of both projects so as to allow for a suitable arrangement that would allow this planned trail extension to be built.	Significant	**PK-MM#1:** Compensate for Staging in Park Property for Construction	Less than significant
PK#4 Camp Pashayan (City of Fresno). At Camp Pashayan, all three HST alternatives would (1) require temporary use during construction, (2) result in similar visual changes because of the use of construction equipment, (3) decrease the visual buffer from the adjacent UPPR right-of-way because of the removal of vegetation, and (4) generate similar noise and dust, and possible access restrictions because of construction activities in adjacent areas of the park.	Significant	**PK-MM#1:** Compensate for Staging in Park Property for Construction	Significant

Resource/Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
Project Impacts			
PK#5 Riverside Park (City of Madera). At Riverside Park, the UPRR/SR 99 Alternative would permanently acquire 0.4 acre of area at the west end of the park.	Significant	**PK-MM#2:** Acquire Park Property	Less than Significant
PK#6 County Road 27¾ Linear Park (City of Madera). At County Road 27¾ Linear Park, the UPRR/SR 99 Alternative would acquire 1.0 acre of area for the alignment.	Significant	**PK-MM#2:** Acquire Park Property	Less than Significant
PK#7 Camp Pashayan Park. At Camp Pashayan, all three HST alternatives would acquire 0.6 acre of park area for support columns and easement for elevated structure.	Significant	**PK-MM#4:** Acquire Property for Camp Pashayan	Less than Significant
PK#8 Roeding Park (City of Fresno). At Roeding Park, all three alternatives would have noise impacts on the eastern portions of the park.	Significant	**PK-MM#5:** Address Noise at Roeding Park with City of Fresno	Less than Significant It is possible that the City of Fresno would view the projected noise levels as acceptable and preferable to the implementation of mitigation measures. In this case, the impacts on Roeding Park would remain significant.
PK#9 Joe Stefani Elementary School. At Joe Stefani Elementary School, an HMF at Castle Commerce Center would require the acquisition of the entire school property (14.5 acres) for project construction.	Significant	**PK-MM#2:** Acquire Park Property	Significant