Appendix AFinal Section 4(f) De MinimisFinding(s) and ResourcesEvaluated Relative to theRequirements of Section 4(f)No Use

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

A.1 Project Description

The California Department of Transportation (Caltrans), in cooperation with the Orange County Transportation Authority (OCTA), is proposing to widen I-5 between I-405 and SR-55 (Figure A-1, Project Location). The project objectives are to increase the mainline capacity within the project limits along the I-5 corridor, improve the capacity of the ramps within the project limits along the I-5 corridor, improve operational deficiencies of merge and diverge areas within the project limits along the I-5 corridor, improve the existing auxiliary lanes operations, and optimize access of the existing high-occupancy vehicle (HOV) lanes. The goal of the proposed project is to also minimize environmental impacts as well as right-of-way acquisitions within the project limits. The project limits on I-5 extend from approximately 0.4 mile (mi) north of the I-5/I-405 interchange (Post Mile [PM] 21.3) to 0.2 mi south of

SR-55 (PM 30.3). The proposed project will add one general purpose lane in each direction on I-5, reestablish existing auxiliary lanes and construct new auxiliary lanes, improve several existing on- and off-ramps, and widen and/or replace several structures.

The No Build Alternative and the Build Alternative were evaluated as a part of the Initial Study/Environmental Assessment (IS/EA). The project alternatives are described below.

A.1.1 **Project Alternatives**

A.1.1.1 Alternative 1 (No Build)

The No Build Alternative proposes no improvements to I-5, maintaining the existing four general-purpose lanes and one HOV lane throughout the project limits in the northbound and southbound directions. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction.

A.1.1.2 Alternative 2

Alternative 2 proposes to remove the existing paved outside shoulders of the I-5 freeway and construct new traveled way and new shoulder pavement to the outside of the northbound and southbound lanes to accommodate one additional general-purpose lane in each direction from just north of I-405 to just south of SR-55.

The existing HOV lane would be converted to a continuous access HOV lane throughout the project limits. The existing centerline will not be shifted; rather, the widening and addition of lanes will occur on both sides of the existing travel way.

Auxiliary Lanes

Existing and new auxiliary lanes would be constructed. Existing auxiliary lanes throughout the project limits are proposed to be reestablished, and new auxiliary lanes will be constructed at the following locations:

- Northbound from Culver Drive to Jamboree Road
- Southbound from Jeffrey Road to Sand Canyon Avenue

Ramp Improvements

Ramps within the project limits would be modified where needed in order to accommodate the additional general-purpose lane, as indicated in Table A.1, below.

Ramp Metering

All the existing on-ramps on the I-5 project limits are currently metered; those ramps would continue to be metered under the Build Alternative.

Other Improvements

Stormwater Best Management Practices (BMP) are proposed at locations along the corridor from Alton Parkway to north of Tustin Ranch Road.

Ramp	Existing Condition	Build Alternative
NB Sand Canyon Avenue	One shared lane with one-lane	Limited length (generally 300-foot)
On-ramp	exit	auxiliary lane
SB Sand Canyon Avenue Off-ramp	One shared lane with one-lane exit	Two-lane exit from one auxiliary lane
NB Jeffrey Road On-ramp	One-lane entrance	Limited length (generally 300-foot) auxiliary lane
NB Jeffrey Road Loop On-ramp	One-lane entrance	Limited length (generally 300-foot) auxiliary lane
SB Jeffrey Road On-ramp	One-lane entrance	Two-lane entrance
SB Culver Drive On-ramp	One lane entrance	Limited length (generally 300-foot) auxiliary lane
NB Jamboree Road Off-ramp	One auxiliary lane with one-lane exit	Two-lane exit from two auxiliary lanes
NB Tustin Ranch Road Off-ramp	One auxiliary lane with one-lane exit	Two-lane exit from one auxiliary lane
SB Tustin Ranch Road On-ramp	One-lane entrance to one auxiliary lane	Two-lane entrance
NB Red Hill Avenue Off-ramp	One auxiliary lane with one-lane exit	Two-lane exit from one auxiliary lane

Table A.1: Ramp Modifications Under the Build Alternative

I-5 = Interstate 5

NB = northbound

SB = southbound SR-55 = State Route 55

A.1.1.3 Design Variation A (Alternative 2A)

This section describes features related to Alternative 2A. Alternative 2A includes the improvements described above under Alternative 2

Structures

Structures are proposed to be widened and/or replaced at the following locations:

- Alton Parkway Overcrossing (55-0629) Replacement
- Irvine Overhead (55-0002) Widening
- Sand Canyon Avenue Undercrossing (55-0201) Widening
- Jeffrey Road Overcrossing (55-0215) Replacement
- Yale Avenue Overcrossing (55-0638) Tie-Back Walls

- Culver Drive Undercrossing (55-0197) Widening
- Peters Canyon Channel (55-0663) Widening
- I-5/SR-261 Separation (55-0688) Widening
- Jamboree Road off-ramp Overcrossing (55-0763S) Widening
- Jamboree Road Undercrossing (55-0656) Widening
- El Modena Irvine Channel (55-0655) Widening
- Red Hill Avenue Undercrossing (55-0193) Widening
- Newport Avenue Undercrossing (55-0940) Widening

A.1.1.4 Design Variation B (Alternative 2B [Preferred Alternative])

This section describes features related to Alternative 2B. Alternative 2B includes the improvements described above under Alternative 2.

Structures

Alternative 2B does not require replacement of any structures. Existing structures are proposed to be widened and/or improved at the following locations:

- Alton Parkway Overcrossing (55-0629) Tie-Back Walls
- Irvine Overhead (55-0002) Widening
- Sand Canyon Avenue Undercrossing (55-0201) Widening
- Jeffrey Road Overcrossing (55-0215) Tie-Back Walls
- Culver Drive Undercrossing (55-0197) Widening
- Peters Canyon Channel (55-0663) Widening
- I-5/SR-261 Separation (55-0688) Widening
- Jamboree Road Undercrossing (55-0656) Widening
- El Modena Irvine Channel (55-0655) Widening

A.1.1.5 Design Option 3

One design option, Design Option 3 is being considered (Design Option 1 is incorporated as part of the base alternative). The following are the improvements being considered under Design Option 3:

- Braid the northbound Sand Canyon Avenue on-ramp and southbound SR-133/ northbound I-5 connector with the northbound Jeffrey Road off-ramp.
- Construct a new Jeffrey Road off-ramp separation.

A.2 Requirements of Sections 4(f) and 6(f)

A.2.1 Section 4(f)

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amended Section 4(f) legislation at 23 USC 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the United States Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. The Federal Highway Administration (FHWA) final rule on Section 4(f) *de minimis* determinations is codified in 23 Code of Federal Regulations (CFR) Sections 774.3 and 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) property that may be affected by a project action.

A.2.2 Section 6(f)

State and local governments can obtain grants through the Land and Water Conservation Fund (L&WCF) Act to acquire land for or make improvements to public parks and recreation areas. Section 6(f) of the L&WCF Act prohibits the conversion of property acquired or developed with these grants to a non-recreation or non-parkland purpose without the approval of the DOI National Park Service. Section 6(f) directs the DOI to ensure that replacement lands of equal value, location, and usefulness are provided as conditions to the conversion of lands acquired or developed with L&WCF Act funds to non-parkland uses. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacement of the affected land is required.

A.3 Definitions of Permanent Incorporation, Temporary Occupancy, and Constructive Use of Section 4(f) Properties

As defined in 23 CFR 774.17, the "use" of a Section 4(f) property occurs when:

- Land is permanently incorporated into a transportation facility (i.e., permanent incorporation);
- There is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose of Section 4(f) (i.e., temporary occupancy/temporary use) or as determined by the criteria in Section 774.13(d); or
- There is a constructive use of a Section 4(f) property as determined by the criteria in Section 774.15.

These uses under Section 4(f) are described in detail in the following sections.

A.3.1 Permanent Use/Incorporation

A permanent use of a Section 4(f) property 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 the conditions for temporary occupancy.

A.3.2 Temporary Use/Occupancy

A temporary use of a Section 4(f) property occurs when a temporary occupancy 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) property when the criteria in Section 774.13(d) are satisfied.

Section 774.13(d) indicates that temporary occupancies of land that are so minimal as to not constitute a use within the meaning of Section 4(f) are exceptions to the requirement for Section 4(f) approval. Specifically, for the purposes of Section 4(f), such temporary occupancy of a Section 4(f) property does not normally constitute use if each of the following five conditions is met (23 CFR 774.13(d)):

- a. Duration must be temporary (i.e., less than the time needed for construction of the project), and there should be no change in ownership of the land;
- b. Scope of the work must be minor (i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal);
- c. There are no anticipated permanent adverse physical impacts, nor would there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- d. The land being used must be fully restored (i.e., the property must be returned to a condition that is at least as good as that which existed prior to the project); and
- e. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) property regarding the above conditions.

A.3.3 Constructive Use

A constructive use of a Section 4(f) property occurs when a transportation project does not permanently incorporate property from a protected property, but the proximity of a transportation facility results in impacts that are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the property are substantially diminished.

A.4 Identification of Section 4(f) Properties

Section 4(f) applies to "... publicly owned land of a public park, recreation areas or wildlife and waterfowl refuge, or land of an historic site of national, state, or local significance." Publicly owned land is considered to be a park, recreation area, or wildlife and waterfowl refuge when the land has been officially designated as such or when the federal, state, or local officials having jurisdiction over the land determine that one of its major purposes or functions is for park, recreation, or refuge purposes (FHWA Section 4(f) Policy Paper, July 2012). Any part of a publicly owned park, recreation area, refuge, or historic site is presumed to be significant unless there is a statement of insignificance relative to the whole park by the federal, state, or local official having jurisdiction of that property.

With respect to historic properties, for purposes of Section 4(f), a historic site is significant only if it is in or eligible for listing in the National Register, unless the FHWA determines that the application of Section 4(f) is otherwise appropriate (FHWA Section 4(f) Policy Paper).

A.4.1 Section 4(f) Study Areas

The following study areas were used for the identification of Section 4(f) properties:

• The area within 0.5 mi of the maximum disturbance limits (project footprint) for Alternatives 2A and 2B was used to define the Study Area for existing publicly owned recreation and park properties, including local, regional, state, and federal properties; existing play and sports fields of public schools with public access, publicly owned wildlife and water fowl refuges and conservation areas; and existing off-street public bicycle, pedestrian, and equestrian trails (Figure A-2, Section 4(f) Properties). The Study Area was defined to identify an area large enough to assess the potential for the Build Alternative to result in direct and indirect impacts on Section 4(f) properties. • The *Historic Property Survey Report* (HPSR, March 2017) identified properties listed, eligible for listing, or determined eligible for listing in the National Register within the Area of Potential Effects (APE). The APE was developed as part of the HPSR and was used as the Study Area for the Section 4(f) analyses for historic properties. Additional discussion regarding the development of the APE is provided in the HPSR.

A.4.1.1 Publicly Owned Parks, Recreation Resources, and Wildlife and Waterfowl Refuges

The first step of the identification process consisted of reviewing various available technical and public documents, including websites to identify resources in the Section 4(f) Study Area that might qualify for protection under Section 4(f).

A.4.1.2 Publicly Owned Parks, Recreation Resources, and Wildlife and Waterfowl Refuges in the Study Area

Two public parks and four off-street trails in the Study Area were determined to trigger the requirements for Section 4(f) protection as a result of implementation of the Build Alternative (Alternatives 2A and 2B). The off-street trails in the Study Area are open to both bicyclists and pedestrians. Those resources are described in Table A.2 and shown on Figure A-2, Section 4(f) Properties.

Property Name	Description	Official with Jurisdiction	Distance from Project Footprint
Sand Canyon Trail	Location: Parallel to Sand Canyon Avenue from Portola Parkway in the north to I-405 in the south	City of Irvine	Crosses the project footprint
	Size: 4 miles long		
	Features: Class I (off-street) trail		
Jeffrey Open Space Trail	Location: Parallel to Jeffrey Road from Portola Parkway in the north to the Quail Hill open space in the south	City of Irvine	Crosses the project footprint
	Size: 5 miles long		
	Features: Open space corridor with a Class I (off-street) trail		

Table A.2: Properties Determined to Trigger the Requirements forProtection Under Section 4(f)

Property Name	Description	Official with Jurisdiction	Distance from Project Footprint
Orchard Park	Location: 1 Van Buren, Irvine, CA 92620	City of Irvine	Partially in project footprint
	Size: 6 acres		
	Features: Green space with two playgrounds, two basketball courts, one unlighted ball diamond, one unlighted soccer field, restrooms, picnic areas, and on-site parking.		
Heritage Park	Location: 14301 Yale Avenue, Irvine, CA 92604	City of Irvine	Partially in project footprint
	Size: 36.5 acres		
	Features: Green space with two multi-use buildings, two child play areas, an amphitheater, a lake/pond, four restrooms, two concession stands, barbecues, a group picnic area, three pools, three lighted soccer fields, twelve lighted tennis courts, three lighted basketball courts, one volleyball court, two lighted racquetball courts, two lighted ball diamonds, and on-site parking.		
Peters Canyon Regional Trail and Bikeway	Location: Along the west side of the Peters Canyon Wash Channel from the City of Orange and extends south through Cities of Tustin, Irvine, and Newport Beach and ends in the Upper Newport Bay Size: 4.6 miles long	County of Orange	Crosses the project footprint
	Features: Class I (off-street) trail		
Peters Canyon Off-Street Bikeway	Location: Along the east side of the Peters Canyon Wash Channel from the City of Orange and extends from Portola Parkway to Edinger Avenue	City of Irvine	Crosses the project footprint
	Size: 3.5 miles long		
	Features: Class I (off-street) trail		

Table A.2: Properties Determined to Trigger the Requirements forProtection Under Section 4(f)

Source: LSA Associates, Inc. (2017).

No wildlife refuges or open space areas were identified in the Study Area. Therefore, these types of resources are not discussed further.

There are 28 parks, recreation resources, and/or school play areas in the Section 4(f) Study Area that would not experience a permanent, temporary, or constructive use under Section 4(f). These resources are discussed later in Section A.11, Other Resources Evaluated Relative to the Requirements of Section 4(f) and Resources That Do Not Trigger the Requirements for Protection under Section 4(f), and are shown on Figure A-13.

A.4.2 National Register of Historic Places Listed and Eligible Properties

Because this project is a federal undertaking, it must also comply with the National Historic Preservation Act (NHPA). The NHPA implementing regulations at CFR Title 36, Part 800.4(a)(1) require the establishment of an APE. The APE is the geographic area or areas within which an undertaking may directly or indirectly alter the character or use of historic properties, if any such properties exist. As described earlier, the APE serves as the Study Area for Section 4(f) historic properties that are listed, eligible for listing, or assumed eligible for listing in the National Register for this undertaking. The APE for the project is shown in the HPSR.

A.4.2.1 Area of Potential Effects

Historic architectural properties identified in the HPSR as within the APE include all properties that contain buildings, structures, objects, sites, landscapes, and districts more than 50 years of age at the time the cultural resources survey for this project was conducted.

The APE for this project extends nine mi from I-405 (PM 21.3) to SR-55 (PM 30.3) and varies in width from approximately 300–400 ft, except in areas near major intersections (Tustin Ranch Road, Jamboree Road, Culver Drive, Jeffrey Road, and Alton Parkway) where the APE widens to as much as 600–800 ft or more to encompass ramp and street areas. The APE was established as the minimum part of Caltrans freeway right-of-way and adjacent roadway necessary to construct the lanes, ramps, and retaining walls/noise barriers for this project. The project APE totals 906.7 acres (ac), of which the Direct APE comprises 476.4 ac.

The Direct APE includes areas where physical impacts from the project will occur. These are generally limited to the project's proposed and existing right-of-way and include the horizontal and vertical limits associated with ground-disturbing activities. The vertical APE extends to a maximum depth of over 100 ft. Specifically, construction of the travel lanes, shoulders, and retaining walls/noise barriers will extend to depths of 5–10 ft, while some over/undercrossing cast-in-drilled-holes extend as deep as 100 or more feet. Areas of indirect effects extend beyond those of direct effects and include areas that may be indirectly affected by visual, noise, and other effects. Areas of indirect effects generally include all parcels directly adjacent to the proposed right-of-way unless they are undeveloped or unless potential effects will be unlikely due to sufficient distance between the construction footprint and any development.

A.4.2.2 National Register Listed and Eligible Properties in the APE

The HPSR determined there are no National Register listed or eligible historic properties in the APE for Alternatives 2A and 2B. Therefore, there are no National Register listed or eligible cultural resources that would trigger the requirements for protection under Section 4(f), and no further discussion of those types of resources is provided in this evaluation.

A.5 Identification of Section 6(f) Properties

Properties in which Section 6(f) funds were used can be identified through the L&WCF website under the "Detailed Listing of Grants Grouped by County" link.¹ Review of this list confirmed there is one Section 6(f) property in the Study Area: Santa Ana Zoo at Prentice Park.

A.6 Section 4(f) Properties

Use assessments under Section 4(f) for the park and recreation resources relative to Alternatives 2A and 2B are discussed in this section. Previously referenced Figure A-2 show the location of those Section 4(f) properties. Figure A-2 shows the entire project footprint, the Section 4(f) Study Area, and the Section 4(f) properties discussed in this section. As shown in Table A.1 and described below, two public parks and three off-street trails in the Study Area were determined to trigger the requirements for protection under Section 4(f) by Alternatives 2A and/or 2B.

¹ United States Department of the Interior, National Park Service, Land & Water Conservation Fund. "Detailed Listing of Grants Grouped by County." Website. http://waso-lwcf.ncrc.nps.gov/public/index.cfm (accessed May 2017).

A.6.1 Sand Canyon Trail (City of Irvine)

A.6.1.1 Description of Sand Canyon Trail

The Sand Canyon Trail is a Class I (off-street) trail parallel to Sand Canyon Avenue in the City of Irvine, however, portions are located on-street for bicyclists and on a sidewalk for pedestrians. The north-south trail is approximately four mi long and extends from Portola Parkway in the north to I-405 in the south. The trail is a continuous access trail and can be accessed from various intersections along its alignment. The entire trail is open for public use.

A.6.1.2 Use of Sand Canyon Trail

Permanent Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The Sand Canyon Trail is perpendicular to the project limits and crosses under the I-5 at Sand Canyon Avenue as an on-street trail for bicyclists and on a sidewalk for pedestrians. I-5 would be widened over the Sand Canyon Avenue Undercrossing as part of the Build Alternative. Although a portion of this trail would be temporary closed intermittently for up to 18 months, there would be no permanent use of this facility.

Temporary Use/Temporary Occupancy

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

As shown on Figures A-3 and A-4, construction of the Build Alternative could require a temporary closure of the Sand Canyon Trail during construction of the bridge widening (abutment and column bent) for I-5 over Sand Canyon Avenue. While most of the trail in the temporarily impacted area is on-street, approximately 30 ft of the trail is part of the off-street trail on the east side of I-5. Although it is possible that bicyclists could share the travelled way lane with automobiles, only one side of Sand Canyon Avenue will be closed at a time, which would still maintain pedestrian access via the sidewalks on Sand Canyon Avenue. Closures would only occur when construction activity occurs in the vicinity of the trail. At these times, the trail would be temporarily detoured for bicyclists who do not wish to mix with auto traffic. Southbound trail users continue to the Class I (off-street) Cypress Village Trail and travel north toward Jeffrey Road. Trail users could then turn left at Jeffrey Road and travel south on the Jeffrey Open Space Trail (JOST). The trail user would turn left and head south on the Walnut Trail. The Walnut Trail will lead trail users back to Sand Canyon Avenue. This detour would be available for both northbound and southbound trail users (refer to Figure A-4). At the completion of construction, the trail segment at this location would be restored to its original alignment and to a

condition as good as or better than prior to the project. For the purposes of Section 4(f), such temporary occupancy of a Section 4(f) property does not normally constitute use if each of the five conditions listed in 23 CFR 774.13(d) are met. Temporary use for the construction of the project has been evaluated against the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction for the I-5 overcrossing at Sand Canyon Avenue and in the vicinity of the trail would not exceed the overall construction period for Alternatives 2A and 2B. Full closures, with detours provided, however, detouring of the Sand Canyon Trail could be required intermittently for approximately 6 to 18 months. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work on the trail would be limited to the closure of the trail during widening of the I-5 overcrossing. The Build Alternative would not result in permanent changes to the trail.
- The widening of the I-5 overcrossing would maintain the existing trail. Detours around the planned closures would ensure connectivity of the trail during construction. Project features, provided in Section A.7.1.3, would ensure that the proposed trail detours will address the effects of the temporary closure of the Sand Canyon Trail on users. Therefore, no permanent adverse physical impacts to the Sand Canyon Trail would interfere with the protected activities, features, or attributes of the trail on either a temporary or permanent basis.
- The trail segments temporarily closed during the widening of the I-5 overcrossing would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of the Build Alternative.
- The City of Irvine Parks and Recreation Department (the official with jurisdiction over the trail) concurred on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for the segment of the Sand Canyon Trail within the project disturbance limits. On June 3, 2019, the City of Irvine provided written concurrence on the *de minimis* finding for this resource. Section 4(f) consultation correspondence between the project proponent (Caltrans/OCTA) and official with jurisdiction is included in Attachment C.

In summary, based on the analysis provided above, the temporary occupancy of the Sand Canyon Trail would constitute a temporary use under Section 4(f) for the Build Alternative due to the potential length of the potential detouring of the Sand Canyon Trail.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The potential for the Build Alternative to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Sand Canyon Trail for protection under Section 4(f) was evaluated as follows:

- Access: Pedestrian access to this trail is currently available via Sand Canyon Avenue. The trail will only be temporarily detoured during construction, and at the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Sand Canyon Avenue.
- Visual and Aesthetics: This trail is in a developed area partially within the maximum disturbance limits for the Build Alternative. Because the trail is partially within the I-5 corridor, users of the trail, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would substantively change views from the trail. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this trail.
- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.
- Noise: This trail is in a developed area adjacent to and within the I-5 corridor. Trail users would hear traffic on I-5 and Sand Canyon Avenue similar to existing conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on Sand Canyon Trail that would result in changes in the features and attributes that qualify the trail for protection under Section 4(f).

In summary, the proximity impacts of the Build Alternative on Sand Canyon Trail would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this trail.

A.6.1.3 Project Features

Project Features PF-PR-1 through PF-PR-5 are included in the Build Alternative to address the effects of the temporary occupancy of land from the Sand Canyon Trail during construction. In addition, these project features also address the effects of project construction on sidewalks in the Study Area because the measures include actions and activities that address project effects on access to/from/through the Study Area for trail closures, and detours of the trail and sidewalks on Sand Canyon Avenue. Project Features PF-PR-1 through PF-PR-5 apply to the temporary trail closures at the JOST under Alternative 2A (discussed later in Section A.7.2.2), Peters Canyon Regional Trail and Bikeway under Alternatives 2A and 2B, and Peters Canyon Off-Street Bikeway, discussed later in Section A.7.5.2.

PF-PR-1 Trail and Pedestrian Facilities Temporary Closure Plan. During final design, the a Trail and Pedestrian Facilities Temporary Closure Plan for addressing the short-term impacts to existing trails (subject to protection under Section 4(f)) and sidewalks (not subject to protection under Section 4(f)) within the construction limits of the project will be prepared and included in the Transportation Management Plan (TMP). The TMP will be incorporated into the Plans, Specifications and Estimates (PS&E) for implementation by the Construction Contractor. The Temporary Closure Plan will address the affected trail as well as sidewalks within the project limits.

Specifically, the Temporary Closure Plan will address:

- Identification of trail and pedestrian facilities that will be closed temporarily during construction;
- Public awareness and notification plan, including public notices on sidewalks and trail detours/closures, contact information for the Resident Engineer and the Construction Contractor, on-site signing, and other activities to inform the public about issues associated with the trail and sidewalks during project construction;
- Developing and implementing detours for temporarily closed trail and sidewalks;
- Phasing of trail and sidewalk closures to allow for effective detours to maintain connectivity of these facilities around the construction area;

- Coordinating the trail and sidewalk closures and detours with the local jurisdictions with authority over the sidewalks and trails;
- Criteria for identifying detour routes and facilities;
- Information signing for closures and detours;
- Requirements for compliance with the Americans with Disabilities Act during construction;
- Maintaining signing for closures and detours throughout the closure period and replacing lost or damaged signing; and
- Restoring trail and sidewalk facilities at the completion of project construction.

Prior to and during construction activities that will require the temporary closure of a trail or sidewalk, the Project Engineer will require the Construction Contractor to comply with and implement the procedures in the Temporary Closure Plan for the affected trail and sidewalk facilities.

- **PF-PR-2 Temporary Closures of Trails and Sidewalks.** Prior to any temporary closures of trails, the Project Engineer will coordinate with the Director of the City of Irvine Public Works Department, and the Parks and Recreation Department, or their representatives, regarding the location and need for each trail and sidewalk closure. Detours for each closure will be developed in consultation with the City of Irvine Public Works and Parks and Recreation Directors, or their representatives.
- **PF-PR-3** Signing for Alternative Trail Routes. The Resident Engineer will require the project Construction Contractor to develop detour signs, directing trail users to alternative routes. Appropriate directional and informational signage will be provided by the Construction Contractor prior to each closure and far enough away from the closure so that trail users will not have to backtrack to get to the detour route.
- **PF-PR-4 Contact Information at Trail Detours.** Detour signage shall include the Resident Engineer's contact information and inform trail users to contact the Resident Engineer and/or the Construction Contractor regarding upcoming or active trail closures.

PF-PR-5 Restoration of Impacted Trail Segments. The Resident Engineer will require the Construction Contractor to return trail segments closed temporarily during construction to their original, or better, condition after completion of construction, prior to their return to the City of Irvine. After project construction, the Resident Engineer will document that access to and connectivity of all trails and sidewalks have been restored.

A.6.2 Jeffrey Open Space Trail (City of Irvine)

A.6.2.1 Description of Jeffrey Open Space Trail

The JOST is an open space corridor with both Class I (off-street) trail and Class II (on-street) facility (for bicyclists) parallel to Jeffrey Road in the City of Irvine. The JOST comprises both existing and planned segments. Currently, the section from Trabuco to Irvine Boulevard (section 2) is completed. Construction of sections 1 (I-5 to Trabuco Road) and 3 (Irvine Boulevard to Portola Parkway) is currently underway. The existing JOST is a Class I facility from south of I-5 to just north of I-5 where the JOST joins an unnamed trail that serves the Cypress Village community and parallels northbound I-5. Continuing north along Jeffrey Road, the JOST is separated from the roadway and includes extensive landscaping and aesthetic treatments, grade separations, rest areas and restrooms, and connections to the Venta Spur Trail, Portola Trail, parks, and residential development. Ultimately, the JOST would extend north of Portola Parkway, into the future Gateway Park.

The City of Irvine is currently preparing design documentation for a bicycle/ pedestrian bridge overcrossing of the JOST at I-5 which are under review by Caltrans District 12. The JOST/I-5 bicycle/pedestrian bridge overcrossing project would connect this project at its northerly end to the existing JOST trail located north of I-5. Construction of the JOST/I-5 bicycle/pedestrian bridge overcrossing would close a gap in the existing trail system and complete the JOST from I-405 to Portola Parkway.

A.6.2.2 Use of Jeffrey Open Space Trail Permanent Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The JOST is perpendicular to the project limits for the Build Alternative and crosses over I-5 at Jeffrey Road as an on-road trail for bicyclists and sidewalks for pedestrians on the Jeffrey Road overcrossing. Although a portion of this trail would be temporary closed for up to 18 months, there would be no permanent use of this facility.

Temporary Use/Temporary Occupancy Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The construction of the Alternative 2A would require the temporary closure of the JOST during the construction of the replacement Jeffrey Road overcrossing (Figures A-5 and A-6).

Although it is anticipated that the new Jeffrey Road overcrossing would be constructed in stages to maintain traffic, which would still allow pedestrians access via the sidewalks on Jeffrey Road, A detour route has been identified for bicyclists who do not wish to mix with auto traffic. These closures would occur when construction activity occurs in the vicinity of the trail. At these times, the trail could be temporarily detoured. Southbound trail users would detour around the construction by continuing to the Class I (off-street) Cypress Village Trail at Jeffrey Road and travel southwest toward Sand Canyon Avenue. Trail users would then turn right at Sand Canyon Avenue and travel south on the Class I (off-street) Sand Canyon Trail. South of the Metrolink railroad tracks, the Sand Canyon Trail intersects with the Class I (off-street) Walnut Trail, the trail user would turn right and head northwest on the Walnut Trail. The Walnut Trail would lead trail users back to Jeffrey Road and the JOST. These detours would be available for both northbound and southbound trail users. The affected portion of the trail, as well as the proposed detours is shown on Figure A-6. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. The maximum length of time in which the trail segments would be temporarily closed would be less than the construction duration of the project as a whole and detours are proposed. For the purposes of Section 4(f), such temporary occupancy of a Section 4(f) property does not normally constitute use if each of the five conditions listed in 23 CFR 774.13(d) are met. If the planned JOST bicycle and pedestrian overcrossing is not operational at the time Alternative 2A is constructed, the proposed temporary closure of the trail for the construction of Alternative 2A has been evaluated against the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction for the Jeffrey Road Overcrossing and in the vicinity of the trail would not exceed the overall construction period for Alternative 2, however full closures, with detours provided, would occur intermittently for approximately 9 to 18 months. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work on the trail would be limited to the reconstructed segment of the trail on the reconstructed Jeffrey Road Overcrossing. Alternative 2A would not result in permanent changes to the cross-section of the trail.
- The replacement Jeffrey Road Overcrossing and trail would maintain the existing cross-section of the trail. Detours around the planned closures would ensure connectivity of the trail during construction. Project features, provided in Section A.7.1.3, would ensure that the proposed trail detours will address the effects of the temporary occupancy of land from the JOST on users. Therefore, no permanent adverse physical impacts to the JOST would interfere with the protected activities, features, or attributes of the trail on either a temporary or permanent basis.
- The trail segments temporarily closed during construction of the replacement Jeffrey Road Overcrossing would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of Alternative 2A. After project completion, the JOST would include the same cross-section of the facility that existed prior to construction.
- Since Alternative 2 with Design Variation A was not selected as the Preferred Alternative, there is no need for the City of Irvine Parks and Recreation Department (the official with jurisdiction over the trail) to concur on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for the segment of the JOST within the project disturbance limits.

In summary, based on the analysis provided above, if the planned JOST is not operational at the time Alternative 2A is constructed, the temporary occupancy of the JOST would constitute a use under Section 4(f) for Alternative 2A due to the potential length of the potential detouring of the JOST.

If the planned JOST bicycle/pedestrian bridge overcrossing of I-5 is operational at the time Alternative 2A is constructed, the JOST would be grade-separated from I-5 and bicycle traffic would cross over the I-5 facility independently from the Jeffrey Road Overcrossing. Therefore, the Class I (off-street) overcrossing would allow bicyclists and pedestrians to safely navigate around the construction areas for the replacement

Jeffrey Road Overcrossing. No temporary closures of the planned JOST would be required under Alternative 2A. Therefore, if planned JOST is operational at the time of construction, there would be no temporary use of the trail under Alternative 2A.

Alternative 2B (Preferred Alternative)

No temporary trail closures are proposed on the JOST under Alternative 2B. Therefore, Alternative 2B would not result in the temporary use of land from this Section 4(f) property.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

The potential for the Build Alternative to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the JOST for protection under Section 4(f) was evaluated as follows:

- Access: Pedestrian access to this trail is currently available via Jeffrey Road. The trail will only be temporarily detoured during construction, and at the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the Build Alternative. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Jeffrey Road.
- Visual and Aesthetics: This trail is in a developed area partially within the maximum disturbance limits for the Build Alternative. Because the trail is partially within the I-5 corridor, users of the trail, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would substantively change views from the trail. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this trail.
- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.
- Noise: This trail is in a developed area adjacent to and within the I-5 corridor. Trail users would hear traffic on I-5 and Jeffrey Road similar to existing

conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on the JOST that would result in changes in the features and attributes that qualify the trail for protection under Section 4(f).

In summary, the proximity impacts of the Build Alternative on the JOST would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this trail.

A.6.2.3 Project Features Alternative 2A

As described in Section A.7.1.3, Project Features PF-PR-1 through PF-PR-5 are included in Alternative 2A that will address the effects of the temporary occupancy of land from the JOST during construction of Alternative 2A. In addition, these measures also address the effects of project construction on sidewalks in the Study Area because the measures include actions and activities that address project effects on access to/from/through the Study Area for trail closures, and detours of the trail and sidewalks on the Jeffrey Road Overcrossing.

Alternative 2B (Preferred Alternative)

Under Alternative 2B, there would be no permanent, temporary, or constructive use of this trail. Therefore, no mitigation is required.

A.6.3 Orchard Park (City of Irvine)

A.6.3.1 Description of Orchard Park

Orchard Park is adjacent to the project improvements on the east side of I-5 near Yale Avenue in the City of Irvine. The neighborhood park is approximately 6 ac in size and consists of green space with two playgrounds, two basketball courts, one unlighted ball diamond, one unlighted soccer field, restrooms, picnic areas, and onsite parking. Pedestrian access to Orchard Park is available from Yale Avenue, Van Buren, and Roosevelt. Vehicular access to the park is available from Van Buren.

A.6.3.2 Use of Orchard Park

Permanent Use

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only. As shown on Figures A-7 and A-8, Alternative 2A would require a permanent easement of 35 square feet or 0.0008 ac of land (0.000048 percent) from the existing 6 ac park for maintenance of the proposed wall along the property line. The provision of a permanent easement would be located on the western edge of the resources and does not affect the attributes of the park that qualify it for protection under the provisions of Section 4(f). The permanent easement would constitute a permanent use under Section 4(f).

Alternative 2B (Preferred Alternative)

Alternative 2B would not require the permanent use of land from Orchard Park.

Temporary Use/Temporary Occupancy

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The construction of the Alternative 2A would require a 0.15 ac TCE on the western boundary of Orchard Park.

The TCE for the construction of Alternative 2A would meet the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction activities in the park would be approximately 9 to 12 months, which would not exceed the overall construction period for Alternative 2A. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work is minor and would be limited to staging of materials (such as scaffolding and masonry blocks) and construction of improvements in the vicinity of the park. Alternative 2A would not result in permanent changes to the features of the park in the TCE area.
- The use of the TCE in the park would not result in any permanent adverse physical impacts to Orchard Park and would not interfere with the protected activities, features, or attributes of the park on either a temporary or permanent basis. The construction areas would be temporarily fenced to allow for the remaining areas in the park to continue to function during the construction period. Project features, provided in Section A.7.3.3, would ensure that the areas proposed for the TCE are restored to a condition that is at least as good as that which existed prior to the project.

- The land occupied by the TCE and construction activity would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of Alternative 2A in the vicinity of Orchard Park. After project completion, the Orchard Park would include the same features that existed prior to construction in the area used for the TCE.
- Since Alternative 2 with Design Variation A was not selected as the Preferred Alternative, there is no need for the City of Irvine Parks and Recreation Department (the official with jurisdiction over the trail) to concur on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for Orchard Park within the project disturbance limits.

In summary, because all five conditions in 23 CFR 774.13(d) are met, the temporary occupancy of this park under Alternative 2A for a TCE would not constitute a use under Section 4(f).

Alternative 2B (Preferred Alternative)

No TCEs are proposed at Orchard Park under Alternative 2B. Therefore, Alternative 2B would not result in the temporary use of land from this Section 4(f) property.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The potential for the Build Alternative to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Orchard Park for protection under Section 4(f) was evaluated as follows:

- Access: Pedestrian access to this park is currently available from Yale Avenue, Van Buren, and Roosevelt. Vehicular access is available from Van Buren. None of the proposed improvements for the Build Alternative would result in permanent changes to access to this park from the adjacent streets. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Orchard Park.
- Visual and Aesthetics: This park is in a developed area adjacent to the maximum disturbance limits for the Build Alternative. Existing walls and vegetation provide a visual buffer between the park and I-5. Because the existing park is adjacent to I-5, users of the park, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would be tall enough to be visible from the park or to

substantively change views from the park. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this park.

- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.
- Noise: This park is in a developed area adjacent to I-5. Park patrons would hear traffic on I-5 similar to existing conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on Orchard Park that would result in changes in the features and attributes that qualify the park for protection under Section 4(f).
- Natural Communities, Plant Species, and Animal Species: This park includes ornamental vegetation, including existing vegetation along the western park boundary adjacent to I-5. Operation of the Build Alternative in the park vicinity would be limited to the I-5 mainline, and would not result in any direct or indirect effects on the vegetation in the park. As a result, the operation of the Build Alternative would not result in long-term impacts to the vegetation at this park.

In summary, the proximity impacts of the Build Alternative at Orchard Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this park.

A.6.3.3 Project Features Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

Project Feature PF-PR-6 is included in Alternative 2A to address the effects of the permanent use of land from at Orchard Park under Alternative 2A. Project Feature PF-PR-6 also applies to the permanent acquisition of land from Heritage Park, discussed later in Section A.7.4.2. Project Feature PF-PR-7 will address the effects of the TCE at Orchard Park under Alternative 2A.

PF-PR-6 **Permanent Acquisition of Property from Parks and Recreation Resources.** All permanent acquisition of property for the proposed project, including any federally funded improvements, will be conducted by Caltrans in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 as amended. The Uniform Act establishes minimum standards for federally funded programs and projects that require the acquisition of real property. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects. The conditions of acquisition and compensation for, or replacement or enhancement of, other park property for any park or recreation resources acquired for the project improvements will be developed by Caltrans in consultation with the Orange County Transportation Authority and the City of Irvine (official with jurisdiction of each affected property).

PF-PR-7 Temporary Use of Land from Parks During Construction:

- During final design, the Project Engineer will evaluate the proposed Temporary Construction Easements (TCEs) in Orchard Park and Heritage Park, and will identify opportunities to further reduce the size of those TCEs. The TCEs in Orchard Park and Heritage Park will be shown on the project plans and specifications and will include notes that the Construction Contractor cannot increase the sizes or change the locations of any of the TCEs without consultation with and approval by the Project Engineer.
- Access Restrictions at Temporary Construction Easements. The Project Engineer will require the Construction Contractor to fence and gate all land in Orchard Park and Heritage Park used for the TCEs. The TCEs will be appropriately signed to restrict access to the areas by park patrons. The Project Engineer will require the Construction Contractor to maintain the fencing throughout the time the TCEs are used and to remove the fencing only after all construction activity in an area is completed, the TCE is no longer needed, and the land used for the TCE is ready to be returned to the property owner.
- Signing of the Fenced Temporary Construction Easement. The Project Engineer will require the Construction Contractor to

provide signing at the TCEs in Orchard Park and Heritage Park explaining why the areas are fenced and access to the TCEs are restricted, the anticipated completion date of the use of the land for the TCEs, and contact information (for both the Project Engineer and the Construction Contractor) for the public to solicit further information regarding the TCEs and the project.

• Return of Land Used for the Temporary Construction Easement to the Property Owners. The Project Engineer will be required to coordinate the restoration of the land used for the TCEs in Orchard Park and Heritage Park with the City of Irvine to restore it to its original or better condition when construction in an area has been completed and the temporary TCEs are no longer needed.

Alternative 2B (Preferred Alternative)

There would be no permanent, temporary, or constructive use of this park under Alternative 2B. Therefore, no mitigation is required.

A.6.4 Heritage Park (City of Irvine)

A.6.4.1 Description of Heritage Park

Heritage Park is adjacent to the project improvements on the west side of I-5 between Yale Avenue and Culver Drive in the City of Irvine. The community park is approximately 36.5 ac in size and consists of green space with two multi-use buildings, two child play areas, an amphitheater, a lake/pond, four restrooms, two concession stands, barbecues, a group picnic area, three pools, three lighted soccer fields, twelve lighted tennis courts, three lighted basketball courts, one volleyball court, two lighted racquetball courts, two lighted ball diamonds, and on-site parking. Vehicular and pedestrian access to Heritage Park is available from Yale Avenue and Walnut Avenue.

A.6.4.2 Use of Heritage Park *Permanent Use*

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only. As shown on Figures A-9 and A-10, Alternative 2A would require the permanent acquisition of 0.17 ac of land (0.06 percent) from the existing 36.5 ac park that would constitute a permanent use under Section 4(f). This land consists of mainly landscaping. Additionally, a small portion (0.01 ac) of the edge of a maintenance area, maintenance shed, and lighting and landscaping will be affected. Replacement/relocation of the maintenance shed, relocation of some containers, and lighting located adjacent to the parking lot, would be required. The permanent easement would constitute a permanent use under Section 4(f).

Alternative 2B (Preferred Alternative)

Alternative 2B would not require the permanent use of land from Heritage Park.

Temporary Use/Temporary Occupancy

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The construction of Alternative 2A would require a 0.46 ac TCE on the eastern boundary of Heritage Park.

The TCE for the construction of Alternative 2A would meet the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction activities in the park would be approximately six to nine months, which would not exceed the overall construction period for Alternative 2A. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work is minor and would be limited to staging of materials and construction of improvements in the vicinity of the park. Alternative 2A would not result in permanent changes to the features of the park in the TCE area.
- The use of the TCE in the park would not result in any permanent adverse physical impacts to Heritage Park and would not interfere with the protected activities, features, or attributes of the park on either a temporary or permanent basis. The construction areas would be temporarily fenced to allow for the remaining areas in the park to continue to function during the construction period. Project features, provided in Section A.7.3.3, would ensure that the areas proposed for the TCE are restored to a condition that is at least as good as that which existed prior to the project.

- The land occupied by the TCE and construction activity would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of Alternative 2A in the vicinity of Heritage Park. After project completion, Heritage Park would include the same features that existed prior to construction in the area used for the TCE.
- Since Alternative 2 with Design Variation A was not selected as the Preferred Alternative, there is no need for the City of Irvine Parks and Recreation Department (the official with jurisdiction over the park) will need to concur on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for Heritage Park within the project disturbance limits.

In summary, because all five conditions in 23 CFR 774.13(d) are met, the temporary occupancy of this park under Alternative 2A for a TCE would not constitute a use under Section 4(f).

Alternative 2B (Preferred Alternative)

No TCEs are proposed at Heritage Park under Alternative 2B. Therefore, the Alternative 2B would not result in the temporary use of land from this Section 4(f) property.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) Under the Build Alternative, the potential to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Heritage Park for protection under Section 4(f) was evaluated as follows:

- Access: Access to this park is currently available from Yale Avenue and Walnut Avenue. None of the proposed improvements for the Build Alternative would result in permanent changes to access to this park from the adjacent streets. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Heritage Park.
- Visual and Aesthetics: This park is in a developed area adjacent to the maximum disturbance limits for the Build Alternative. Existing walls and vegetation provide a visual buffer between the park and I-5. Because the existing park is adjacent to I-5, users of the park, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would be tall enough to be visible from the park or to

substantively change views from the park. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this park.

- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.
- Noise: This park is in a developed area adjacent to I-5 under existing conditions. Park patrons would hear traffic on I-5 similar to existing conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on Heritage Park that would result in changes in the features and attributes that qualify the park for protection under Section 4(f).
- Natural Communities, Plant Species, and Animal Species: This park includes ornamental vegetation, including existing vegetation along the eastern park boundary adjacent to I-5. Operation of the Build Alternative in the park vicinity would be limited to the I-5 mainline, and would not result in any direct or indirect effects on the vegetation in the park. As a result, the operation of the Build Alternative would not result in long-term impacts to the vegetation at this park.

In summary, the proximity impacts of the Build Alternative at Heritage Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this park.

A.6.4.3 Project Features

Alternative 2A

Project Feature PF-PR-6, provided in Section A.7.3.3, is included in Alternative 2A to address the effects of the permanent use of land from at Heritage Park. Project Feature PF-PR-7 is included to address the effects of the TCE at Heritage Park associated with Alternative 2A.

A.6.5 Peters Canyon Regional Trail and Bikeway (County of Orange)A.6.5.1 Description of Peters Canyon Regional Trail and Bikeway

The Peters Canyon Regional Trail and Bikeway is a regional Class I (off-street) trail that connects the cities of Tustin, Orange, Irvine, and Newport Beach. Through the

project limits, the existing Class I (off-street) trail is on the west side of the Peters Canyon Wash Channel and crosses under I-5, within Orange County Flood Control District right-of-way. The resource is maintained by OC Parks. As shown on Figure A-2, there is currently a missing segment of the trail in the City of Tustin. The trail currently terminates at the Metrolink railroad tracks near the Tustin city limits and continues from Warner Avenue to the south to the trail's terminus and connection to the San Diego Creek Trail at Barranca Parkway in the City of Irvine. At the missing trail segment, the Peters Canyon Trail connects to two Class I (off-street) trails for the length of the missing trail segment. There are future plans for the missing trail segment in the City of Tustin. The existing off-street trail is approximately 4.6 mi long and is open for public use.

A.6.5.2 Use of Peters Canyon Regional Trail and Bikeway *Permanent Use*

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) As shown on Figures A-11 and A-12, the existing Peters Canyon Regional Trail and Bikeway alignment passes under the I-5 Peters Canyon Overcrossing. The Build Alternative would widen the Peters Canyon Overcrossing. No permanent improvements to the trail are proposed as part of the Build Alternative. When the project improvements to the overcrossing are complete, the Peters Canyon Regional Trail and Bikeway would maintain its connection to the remainder of the Class I (offstreet) trail along the Peters Canyon Wash Channel. Therefore, the Build Alternative would not result in the permanent incorporation of land or any permanent easements from this Section 4(f) property and would not result in a permanent use of this resource.

Temporary Use/Temporary Occupancy

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

Temporary trail closures during construction would be required on the segments of the Peters Canyon Regional Trail and Bikeway directly beneath the Peters Canyon bridge. These closures would only occur when construction activity is being conducted in the vicinity of the trail. It is anticipated that only one side of Peters Canyon Channel would be closed at a time, which would still maintain pedestrian access via the City of Irvine's Peters Canyon Off-Street Bikeway located on the east side of Peters Canyon Channel. However, in the event that closure of both the County of Orange and City of Irvine trails to bicyclists occurs at this location, a detour is provided for bicyclists. It is expected that pedestrian access can be maintained along one of the trails during construction. As shown on Figure A-12, northbound trail users would exit the Peters Canyon Regional Trail and Bikeway at Walnut Avenue and travel southwest toward Culver Drive. Trail users would then turn left at Culver Drive and travel northeast on the Class II (on-street) bike lane on Culver Drive. At the intersection of Culver Drive and Bryan Avenue, the trail user would turn left onto the Class II bike lane on Bryan Avenue. A left turn onto Bryan Avenue would lead trail users back to an alternate entrance to the Peters Canyon Regional Trail and Bikeway. This detour would be available for both northbound and southbound trail users. Continuous access to the trail would be maintained based on the provision of detour routes during construction. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project.

The Build Alternative would result in a temporary closure/occupancy of land on the Peters Canyon Regional Trail and Bikeway during the widening of the Peters Canyon Overcrossing. For the purposes of Section 4(f), such temporary occupancy of a Section 4(f) property does not normally constitute use if each of the five conditions listed in 23 CFR 774.13(d) are met. The temporary closure for the construction of the Build Alternative has been evaluated against the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction activities on the trail and in the vicinity of the trail would not exceed the overall construction period for the Build Alternative, and trail closures will be planned in stages to allow bicyclists and pedestrians to access the detours around the project limits. Full closures, with detours provided, would occur intermittently between approximately 12 to 18 months. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work is minor and would be limited to temporary closures. The Build Alternative would not result in permanent changes to the cross-section of the trail.
- No permanent improvements are proposed for the trail as part of the Build Alternative. The proposed trail detours around the planned closures would ensure connectivity of the trail during construction. Project features, provided in Section A.7.1.3, would ensure that the proposed trail detours will address the effects of the temporary occupancy of land from the Peters Canyon Trail on users. Therefore, no permanent adverse physical impacts to the Peters Canyon Regional Trail and Bikeway would interfere with the protected activities, features, or attributes of the trail on either a temporary or permanent basis.

- The land occupied during the temporary closure would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of the Build Alternative in the vicinity of the Peters Canyon Trail. After project completion, the Peters Canyon Regional Trail and Bikeway would include the same cross-section of the facility that existed prior to construction.
- The City of Irvine Parks and Recreation Department (the official with jurisdiction over the off-street bikeway) and the County of Orange (the official with jurisdiction over the regional trail) will need to concur on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for the segment of the Peters Canyon Regional Trail and Bikeway within the project disturbance limits. On June 3, 2019, the City of Irvine provided written concurrence on the *de minimis* finding for this resource. On June 5, 2019, the County of Orange provided written concurrence on the *de minimis* finding for this resource. Section 4(f) consultation correspondence between the project proponent (Caltrans/OCTA) and officials with jurisdiction is included in Attachment C.

In summary, based on the analysis provided above, the temporary occupancy of the Peters Canyon Regional Trail and Bikeway would constitute a use under Section 4(f) for the Build Alternative due to the potential length of the potential detouring of the Peters Canyon Regional Trail and Bikeway.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The potential for the Build Alternative to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Peters Canyon Regional Trail and Bikeway for protection under Section 4(f) was evaluated as follows:

- Access: Pedestrian access to this trail is currently available via Walnut Avenue. The trail will only be temporarily detoured during construction, and at the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Peters Canyon Regional Trail and Bikeway.
- Visual and Aesthetics: This trail is in a developed area partially within the maximum disturbance limits for the project. Because the trail is partially within

the I-5 corridor, users of the trail, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would substantively change views from the trail. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this trail.

- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.
- Noise: This trail is in a developed area adjacent to and within the I-5 corridor. Trail users would hear traffic on I-5 similar to existing conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on Peters Canyon Regional Trail and Bikeway that would result in changes in the features and attributes that qualify the trail for protection under Section 4(f).

In summary, the proximity impacts of the Build Alternative on Peters Canyon Regional Trail and Bikeway would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this trail.

A.6.5.3 Project Features

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

Under the Build Alternative, Project Features PF-PR-1 through PF-PR-5, provided in Section A.7.1.3, are included that will address the effects of the temporary occupancy of land from the Peters Canyon Trail during construction. In addition, these measures address the effects of the project construction on sidewalks in the Study Area because the measures include actions and activities that address project effects on access to/from/through the Study Area for trail closures.

A.6.5.4 Use of Peters Canyon Off-Street Bikeway Permanent Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) As shown on Figures A-11 and A-12, the existing Peters Canyon Off-Street Bikeway alignment passes under the I-5 Peters Canyon Overcrossing. The Build Alternative would widen the Peters Canyon Overcrossing. No permanent improvements to the trail are proposed as part of the Build Alternative. When the project improvements to the overcrossing are complete, the Peters Canyon Off-Street Bikeway would maintain its connection to the remainder of the Class I (off-street) trail along the Peters Canyon Wash Channel. Therefore, the Build Alternative would not result in the permanent incorporation of land or any permanent easements from this Section 4(f) property and would not result in a permanent use of this resource.

Temporary Use/Temporary Occupancy

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) Temporary trail closures during construction would be required on the segments of the Peters Canyon Off-Street Bikeway directly beneath the Peters Canyon bridge. These closures would only occur when construction activity is being conducted in the vicinity of the trail. It is anticipated that only one side of Peters Canyon Channel would be closed at a time, which would still maintain pedestrian access via the County of Orange's Peters Canyon Regional Trail and Bikeway, located on the western side of Peters Canyon Channel. However, in the event that closure of both the County of Orange and City of Irvine trails to bicyclists occurs at this location, a detour is provided for bicyclists. It is expected that pedestrian access can be maintained along one of the trails during construction. As shown on Figure A-12, northbound trail users would exit the Peters Canyon Off-Road Bikeway at Walnut Avenue and travel southwest toward Culver Drive. Trail users would then turn left at Culver Drive and travel northeast on the Class II (on-street) bike lane on Culver Drive. At the intersection of Culver Drive and Bryan Avenue, the trail user would turn left onto the Class II bike lane on Bryan Avenue. A left turn onto Bryan Avenue would lead trail users back to an alternate entrance to the Peters Canyon Off-Street Bikeway Trail. This detour would be available for both northbound and southbound trail users. Continuous access to the trail would be maintained based on the provision of detour routes during construction. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project.

The Build Alternative would result in temporary closure/occupancy of land on the Peters Canyon Off-Street Bikeway during the widening of the Peters Canyon Overcrossing. For the purposes of Section 4(f), such temporary occupancy of a Section 4(f) property does not normally constitute use if each of the five conditions listed in 23 CFR 774.13(d) are met. The temporary closure for the construction of the Build Alternative has been evaluated against the five conditions listed in 23 CFR 774.13(d) as follows:

- The duration of construction activities on the trail and in the vicinity of the trail would not exceed the overall construction period for the Build Alternative, and trail closures will be planned in stages to allow bicyclists and pedestrians to access the detours around the project limits. Full closures, with detours provided, would occur intermittently between approximately 12 to 18 months. There would be no change in the ownership of this land during the construction of the improvements.
- The scope of work is minor and would be limited to temporary closures. The Build Alternative would not result in permanent changes to the cross-section of the trail.
- No permanent improvements are proposed for the trail as part of the Build Alternative. The proposed trail detours around the planned closures would ensure connectivity of the trail during construction. Project features, provided in Section A.7.1.3, would ensure that the proposed trail detours will address the effects of the temporary occupancy of land from the Peters Canyon Off-Street Bikeway on users. Therefore, no permanent adverse physical impacts to the Peters Canyon Off-Street Bikeway would interfere with the protected activities, features, or attributes of the trail on either a temporary or permanent basis.
- The land occupied by the temporary closure would be returned to a condition that is at least as good as that which existed prior to the project at the completion of the construction of the Build Alternative in the vicinity of the Peters Canyon Trail. After project completion, the Peters Canyon Off-Street Bikeway would include the same cross-section of the facility that existed prior to construction.
- The City of Irvine Parks and Recreation Department (the official with jurisdiction over the trail) concurred on the description of the existing conditions, the analysis of project effects, the proposed mitigation, and the Section 4(f) determination for the segment of the Peters Canyon Bikeway within the project disturbance limits. On June 3, 2019, the City of Irvine provided written concurrence on the *de minimis* finding for this resource. Section 4(f) consultation correspondence

between the project proponent (Caltrans/OCTA) and official with jurisdiction is included in Attachment C.

In summary, based on the analysis provided above, the temporary occupancy of the Peters Canyon Off-Street Bikeway would constitute a use under Section 4(f) for the Build Alternative due to the potential length of the potential detouring of the Peters Canyon Off-Street Bikeway.

Constructive Use

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative])

The potential for the Build Alternative to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Peters Canyon Off-Street Bikeway for protection under Section 4(f) was evaluated as follows:

- Access: Pedestrian access to this trail is currently available via Walnut Avenue. The trail will only be temporarily detoured during construction, and at the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. As a result, the Build Alternative would not result in permanent indirect adverse effects on access to/from Peters Canyon Off-Street Bikeway.
- Visual and Aesthetics: This trail is in a developed area partially within the maximum disturbance limits for the Build Alternative. Because the trail is partially within the I-5 corridor, users of the trail, after the improvements are operational, would experience views of I-5 similar to existing conditions. The Build Alternative does not include new features that would substantively change views from the trail. As a result, the Build Alternative would not result in adverse visual or aesthetic effects on this trail.
- Water Quality: The Build Alternative would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail long-term.
- Air Quality: During operation, no avoidance, minimization, and/or mitigation measures are required, as the Build Alternative would not produce substantial operational air quality impacts. Therefore, the Build Alternative would not result in long-term adverse air quality impacts on this Section 4(f) property.

• Noise: This trail is in a developed area adjacent to and within the I-5 corridor. Trail users would hear traffic on I-5 similar to existing conditions during operation of the Build Alternative. As a result, the Build Alternative would not result in indirect noise effects on Peters Canyon Off-Street Bikeway that would result in changes in the features and attributes that qualify the trail for protection under Section 4(f).

In summary, the proximity impacts of the Build Alternative on Peters Canyon Off-Street Bikeway would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, the Build Alternative would not result in constructive use of this trail.

A.7 Section 4(f) Determinations

A.7.1 Sand Canyon Trail (City of Irvine)

The analyses described earlier support a Section 4(f) determination that the Build Alternative would result in a *de minimis* impact at the Sand Canyon Trail.

Under the Build Alternative, the temporary closure of the Sand Canyon Trail would constitute a *de minimis* impact because the features and attributes that qualify the resource for protection under Section 4(f) would not be diminished. The length of time in which the trail would be temporarily closed would be less than the total amount of time for construction, pedestrians would be able to continue to use the sidewalks during construction and bikeway users would be detoured during the temporary closure, the trail segment at this location would be restored to a condition as good as or better than prior to the Build Alternative at the completion of construction, and Project Features PF-PR-1 through PF-PR-5 will address the potential impact to the Sand Canyon Trail. Therefore, the temporary effects of the Build Alternative would not affect the activities, attributes, and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C.

There would be no permanent or constructive use of this off-street trail under the Build Alternative.

A.7.1.1 Consultation

Caltrans and OCTA have consulted with the City of Irvine Parks and Recreation Department with regard to the characterization of effects of the project in the context of this Section 4(f) evaluation, consistent with 49 U.S.C. 303(d)(3)(B). On June 3, 2019, the City of Irvine provided written concurrence on the *de minimis* finding for the Sand Canyon Trail.

A.7.2 Jeffrey Open Space Trail (City of Irvine) Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The analyses described earlier support a Section 4(f) determination that Alternative 2A would result in a *de minimis* impact at the JOST.

Under Alternative 2A, the temporary closure of the JOST would constitute a *de minimis* impact because the features and attributes that qualify the resource for protection under Section 4(f) would not be diminished. The length of time in which the trail would be temporarily closed would be less than the total amount of time for construction, pedestrian users would still be able to use sidewalks in the area, bikeway users would be detoured during the temporary closure, the trail segment at this location would be restored to a condition as good as or better than prior to the proposed project at the completion of construction, and Project Features PF-PR-1 through PF-PR-5 will address the potential impact to the JOST. Therefore, the temporary effects of Alternative 2 would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C. 303(d).

If the planned JOST overcrossing is operational at the time of construction, there would be no temporary use of the JOST under Section 4(f).

There would be no permanent or constructive use of this off-street trail under Alternative 2A.

Alternative 2B (Preferred Alternative)

There would be no permanent, temporary, or constructive use of this off-street trail under Alternative 2B.

A.7.2.2 Consultation

As the Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative, no consultation is needed with the City of Irvine with regard to the JOST.

A.7.3 Orchard Park (City of Irvine)

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The analyses described earlier support a Section 4(f) determination that Alternative 2A could result in a *de minimis* impact at Orchard Park.

The permanent use of land at Orchard Park would constitute a *de minimis* impact because the features and attributes that qualify the resource for protection under Section 4(f) would not be diminished with Alternative 2A. The active use park amenities represent the features and attributes that qualify the resource for protection under Section 4(f). The minor acquisition area (0.013 ac) along the western park boundary would not affect any active use areas in the park. In addition, this acquisition area would occupy only a small amount of the total land in the existing park (0.000048 percent). As described above, the effects of the acquisition of a permanent easement of land from the park, after incorporation of Project Feature PF-PR-6 described in Section A.7.3.3, would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C. 303(d).

During construction, Alternative 2A would result in the temporary occupancy of land in Orchard Park. As described above, the effects of the temporary occupancy of land on the park, after incorporation of Project Feature PF-PR-7 described in Section A.7.3.3, would not adversely affect the activities, features, and attributes that give this property protection under Section 4(f). As a result, it is preliminarily determined that Alternative 2A would result in a temporary occupancy of Orchard Park. All five conditions listed in 23 C.F.R. 774.13(d), discussed above, are met, and the temporary occupancy of Orchard Park does not constitute a use under Section 4(f).

There would be no constructive use of this park under Alternative 2A.

Alternative 2B (Preferred Alternative)

There would be no permanent, temporary, or constructive use of Orchard Park under Alternative 2B.

A.7.3.2 Consultation

As the Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative, no consultation is needed with the City of Irvine with regard to Orchard Park.

A.7.4 Heritage Park (City of Irvine)

Alternative 2A

The Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative and, therefore, the analysis provided below is retained for disclosure purposes only.

The analyses described earlier support a Section 4(f) determination that Alternative 2A could result in a *de minimis* impact at Heritage Park.

The permanent use of land at Heritage Park would constitute a *de minimis* impact because the features and attributes that qualify the resource for protection under Section 4(f) would not be diminished with Alternative 2A. The active use park amenities represent the features and attributes that qualify the resource for protection under Section 4(f). The minor acquisition area (0.17 ac under Alternative 2A) along the eastern park boundary would not affect any active use areas in this park. In addition, this acquisition area would occupy a small amount of the total land in the existing park (0.06 percent). The permanent acquisition of land from Heritage Park would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C. 303(d). During construction, Alternative 2A would result in the temporary occupancy of land on Heritage Park. As described above, the effects of the temporary occupancy of land on Heritage Park, after implementation of the Project Feature PF-PR-7 described in Section A.7.3.3, would not adversely affect the activities, features, and attributes that give this property protection under Section 4(f). As a result, it is preliminarily determined that Alternative 2A would result in a temporary occupancy of Heritage Park. All five conditions listed in 23 C.F.R. 774.13(d), discussed above, are met, and the temporary occupancy of Heritage Park does not constitute a use under Section 4(f).

There would be no constructive use of this park under Alternatives 2A.

Alternative 2B (Preferred Alternative)

There would be no permanent, temporary, or constructive use of Heritage Park under Alternative 2B.

A.7.4.2 Consultation

As the Build Alternative with Design Variation A (Alternative 2A) was not selected as the Preferred Alternative, no consultation is needed with the City of Irvine with regard to Heritage Park.

A.7.5 Peters Canyon Regional Trail and Bikeway (County of Orange) Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The analyses described earlier support a Section 4(f) determination that the Build Alternative could result in a *de minimis* impact at Peters Canyon Regional Trail and Bikeway.

There would be no permanent or constructive use of this off-street trail under the Build Alternative.

During construction, the Build Alternative would result in the temporary closure/ occupancy of land on the Peters Canyon Regional Trail and Bikeway. As described above, the effects of the temporary occupancy of land on the Peters Canyon Regional Trail and Bikeway, after implementation of the project features described in Section A.7.1.3, would not adversely affect the activities, features, and attributes that give this property protection under Section 4(f). Therefore, the temporary effects of the Build Alternative would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C.

A.7.5.2 Consultation

Caltrans and OCTA have consulted with the County of Orange with regard to the characterization of effects of the project in the context of this Section 4(f) evaluation, consistent with 49 U.S.C. 303(d)(3)(B). On June 5, 2019, the County of Orange provided written concurrence on the *de minimis* finding for the Peters Canyon Regional Trail and Bikeway.

A.7.6 Peters Canyon Regional Off-Street Bikeway (City of Irvine)

Build Alternative (Alternative 2A and Alternative 2B [Preferred Alternative]) The analyses described earlier support a Section 4(f) determination that the Build Alternative could result in a *de minimis* impact at Peters Canyon Regional Off-Street Bikeway.

There would be no permanent or constructive use of this off-street trail under the Build Alternative.

During construction, the Build Alternative would result in the temporary closure/ occupancy of land on the Peters Canyon Off-Street Bikeway. As described above, the effects of the temporary occupancy of land on the Peters Canyon Off-Street Bikeway, after implementation of the project features described in Section A.7.1.3, would not adversely affect the activities, features, and attributes that give this property protection under Section 4(f). Therefore, the temporary effects of the Build Alternative would not affect the activities, attributes, and features that qualify the resource for protection under Section 4(f) and, therefore, those effects would be *de minimis*, as defined by 49 U.S.C.

A.7.6.2 Consultation

Caltrans and OCTA have consulted with the City of Irvine Parks and Recreation Department with regard to the characterization of effects of the project in the context of this Section 4(f) evaluation, consistent with 49 U.S.C. 303(d)(3)(B). On June 3, 2019, the City of Irvine provided written concurrence on the *de minimis* finding for the Peters Canyon Regional Off-Street Bikeway.

A.7.7 Summary of Effects

Table A.3 summarizes the Section 4(f) determinations for the Section 4(f) properties evaluated in this report and measures to address effects of the Build Alternative on those properties.

A.8 Public Notice

This IS/EA was distributed to a number of agencies and members of the general public for review and comment. In addition, notices regarding the completion of the IS/EA in compliance with both the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) were published. The Notices of Availability of the IS/EA were distributed to interested parties.

Public circulation of the Draft IS/EA began on May 8, 2018, and ended on June 8, 2018, for a 32-day review period. A Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) and availability of the IS (and Notice of Public Hearing) was filed with the Orange County Clerk and the State Clearinghouse on May 8, 2018.

The document was also available online at: http://www.dot.ca.gov/d12/DEA/5/0K670.

	Alternative	Effects under Section 4(f)			
Property Name		Permanent Use	Temporary Use/ Temporary Occupancy	Constructive Use	Applicable Measures
Sand Canyon Trail	Alternative 2A	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
	Alternative 2B (Preferred Alternative)	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
Jeffrey Open Space Trail	Alternative 2A	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
	Alternative 2B (Preferred Alternative)	No Use	No Use	No Use	None
Orchard Park	Alternative 2A	De Minimis (35 square feet)	Temporary occupancy (No Use)	No Use	• PF-PR-6 PF-PR-7
	Alternative 2B (Preferred Alternative)	No Use	No Use	No Use	None
Heritage Park	Alternative 2A	De Minimis (0.172 ac)	Temporary occupancy (No Use)	No Use	PF-PR-6PF-PR-7
	Alternative 2B (Preferred Alternative)	No Use	No Use	No Use	None
Peters Canyon Regional Trail and Bikeway	Alternative 2A	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
	Alternative 2B (Preferred Alternative)	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
Peters Canyon Off- Street Trail Source: LSA Asso	Alternative 2A	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5
	Alternative 2B (Preferred Alternative)	No Use	De Minimis	No Use	 PF-PR-1 PF-PR-2 PF-PR-3 PF-PR-4 PF-PR-5

Source: LSA Associates, Inc. (2017)

ac = acre(s)

The distribution of the IS/EA, including this Appendix, provided agencies and members of the general public opportunities to provide comments on the IS/EA for the I-5 Widening Project from I-405 to SR-55 including the analysis in this Appendix supporting the Section 4(f) determinations for the Sand Canyon Trail, Jeffery Open Space Trail, Orchard Park, Heritage Park, and Peters Canyon Regional Trail and Bikeway, and Peters Canyon Off-Street Bikeway.

Upon receipt of comments from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration (FHWA), gave environmental approval to the project and selected the Build Alternative with Design Variation A (Alternative 2A) as the Preferred Alternative.

A.9 Consultation and Coordination with the Official with Jurisdiction

A consultation letter from Caltrans and OCTA (project proponents) to the City of Irvine (the official with jurisdiction over four Section 4(f) properties) and County of Orange (the official with jurisdiction over one Section 4(f) properties) is included in this appendix as Attachment C. The letter includes a description of the project and the potential project effect on the two parks and three off-street trails (City of Irvine), the one off-street trail (County of Orange) in the Study Area, the Section 4(f) determinations, and a request for the City of Irvine and County of Orange to conclude if the agency is in agreement with the findings. Additionally, concurrence letters from the City of Irvine and County of Orange to Caltrans/OCTA are included in Attachment C.

A.10 Other Resources Evaluated Relative to the Requirements of Section 4(f) and Resources That Do Not Trigger the Requirements for Protection under Section 4(f)

A.10.1 Other Resources Evaluated Relative to the Requirements of Section 4(f)

Tables A.4 and A.5 (provided at in Attachment B to this appendix) list and describe additional publicly owned parks and recreation resources, including off-street trails, within 0.5 mi of the project limits along I-5 that were evaluated relative to the requirements of Section 4(f). Those resources include parks and public schools with recreation facilities available for use by the public outside school hours. The locations of those resources are shown on Figure A-13.

Official with Jurisdiction	Resource			
Publicly Owned Parks and Other Recreation Resources				
City of Irvine	Orange County Great Park			
	Cypress Village Trail			
	Cypress Grove Park			
	Cypress Community Park			
	Hoeptner Park			
	Walnut Trail			
	Presley Park			
	Sycamore Park			
	Coralwood Park			
	Brywood Park			
	David Sills Lower Peters Canyon Park			
	College Park			
	Harvard Community Athletic Park			
City of Tustin	Laurel Glen Park			
	Heritage Park			
	Camino Real Park			
	Pine Tree Park			
	Frontier Park			
	Peppertree Park and Tustin Area Senior Center			
City of Santa Ana	Santa Ana Zoo at Prentice Park			
Publicly Owned Schools				
Irvine Unified School District	Jeffrey Trail Middle School			
	Irvine High School			
	College Park Elementary School			
Tustin Unified School District	Arnold O. Beckman High School			
	C.E. Utt Middle School			
	Marjorie Veeh Elementary School			
	Tustin High School Boniamin E. Bonwick Elementary School			
	Benjamin F. Beswick Elementary School			

Table A.4: List of Resources Determined Not to Trigger theRequirements for Protection Under Section 4(f)

As shown in Table A.5 (provided in Attachment B of this appendix), the potential for the following types of impacts on each property listed in Table A.4 were assessed:

- Permanent use of land from the resource
- Permanent aerial, surface, or subsurface easement at the resource
- Temporary construction easement at the resource
- Potential for short- or long-term proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the resource for protection under Section 4(f) related to access, visual and aesthetics, water quality, air quality, noise, and natural communities, plant species, and animal species.

The potential for those types of impacts assessed for the resources in Table A.4 determined based on the analysis in Table A.5, not to trigger the requirements for protection under Section 4(f).

Specifically, as discussed in Table A.5, the Build Alternative would not result in the permanent use of land from, temporary occupancies or use of land at, or permanent aerial, surface, or subsurface easements at any of the resources listed in Table A.4. The Build Alternative would not result in proximity or constructive use at any of those resources that would substantially impair the activities, features, and/or attributes that qualify the resources for protection under Section 4(f). Because the Build Alternative would not impact these resources, no mitigation is needed. As a result, as discussed in detail in Table A.5, the Build Alternative would not trigger the requirements for protection under Section 4(f) at any publicly owned parks and recreation resources, listed in Table A.4.

A.10.2 Other Resources Considered that Did Not Trigger the Requirements for Protection under Section 4(f)

In addition to the properties discussed in Section A.11.1, other resources in the Section 4(f) Study Area (within 0.5 mi of the Build Alternative) were evaluated and determined not to trigger the requirements for protection under Section 4(f). Those resources and the reasons why they did not trigger the requirements for protection under Section 4(f) are listed in Table A.6.

Why It is Not Protected under Section 4(f)		
Privately owned and operated		
Privately owned and operated		
Privately owned and operated		
Privately owned and operated		

Table A.6 Resources Not Protected under Section 4(f) and Why They
are Not Protected under Section 4(f)

Source: LSA Associates, Inc. (2017).

A.11 Section 6(f) Consideration

State and local governments can obtain grant funds through the federal Land and Water Conservation Fund Act (L&WCF Act) to acquire or make improvements to parks and recreation areas. Section 6(f) of the L&WCF Act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the DOI National Park Service.

As described later in Table A.5, the Build Alternative would not result in the permanent use of property from the Santa Ana Zoo at Prentice Park and, therefore, would also not result in the conversion of any property acquired or developed with grants provided under the L&WCF Act.

A.12 References

- City of Irvine. 688 Acres at Great Park. Website: http://www.cityofirvine.org/orangecounty-great-park/688-acres-great-park-0 (accessed May 2017).
 - City of Irvine Bikeways Map. November 2015. Website: http://legacy.city ofirvine.org/civica/filebank/blobdload.asp?BlobID=18745 (accessed June 2017).

 City of Irvine Public Park & Facilities Inventory. March 2017. Website: http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=14455 (accessed May 2017).

- ——. Cypress Community Park. Website: https://legacy.cityofirvine.org/ cityhall/cs/commparks/cparks/cypress_community_park.asp (accessed May 16, 2017).
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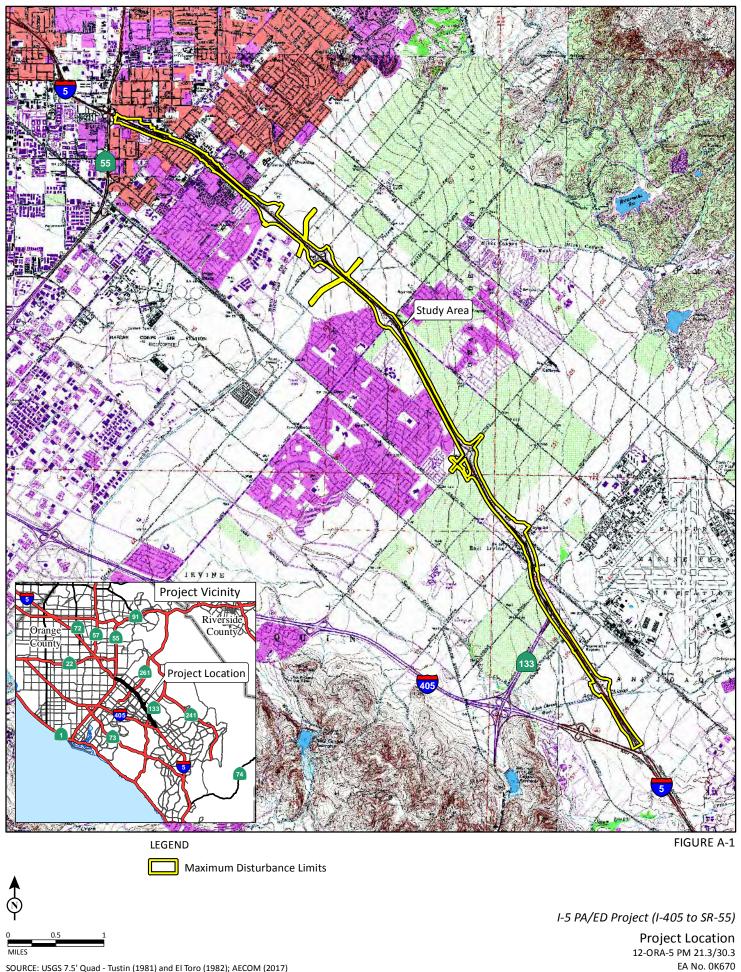
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- ———. Pine Tree Park. Website: http://www.tustinca.org/depts/parks/info/pinetree. asp (accessed June 2017).
- LSA Associates, Inc. 2017. Historic Property Survey Report. March.
- Peters Canyon Trail. TrailLink. Website: https://www.traillink.com/trail/peterscanyon-trail/ (accessed May 2017).

A.13 Attachments

- A Figures A–1 through A–13
- B Table A.5: Resources Determined Not to Trigger the Requirements for Protection Under Section 4(f)
- C Documentation of Consultation

ATTACHMENT A

FIGURES A-1 THROUGH A-13

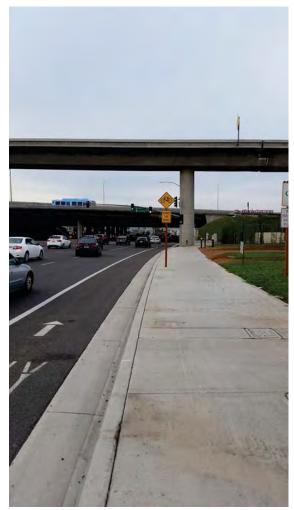


SOURCE: USGS 7.5' Quad - Tustin (1981) and El Toro (1982); AECOM (2017)

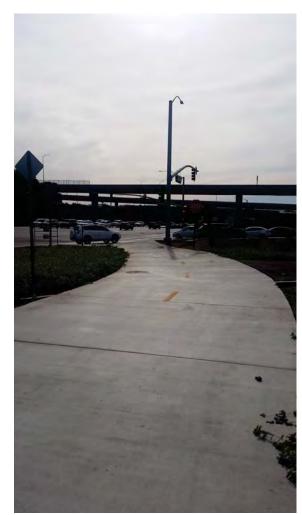
I:\URS1402\GIS\MXD\Section4f\ProjectLocation_USGS.mxd (11/2/2017)



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Sand Canyon Trail (on-street) - southbound.



Sand Canyon Trail (off-street) - southbound.

FIGURE A-3

I-5 PA/ED Project (I-405 to SR-55)

Section 4(f) Evaluation Sand Canyon Trail 12-ORA-5 PM 21.3/30/3 EA No. 0K670



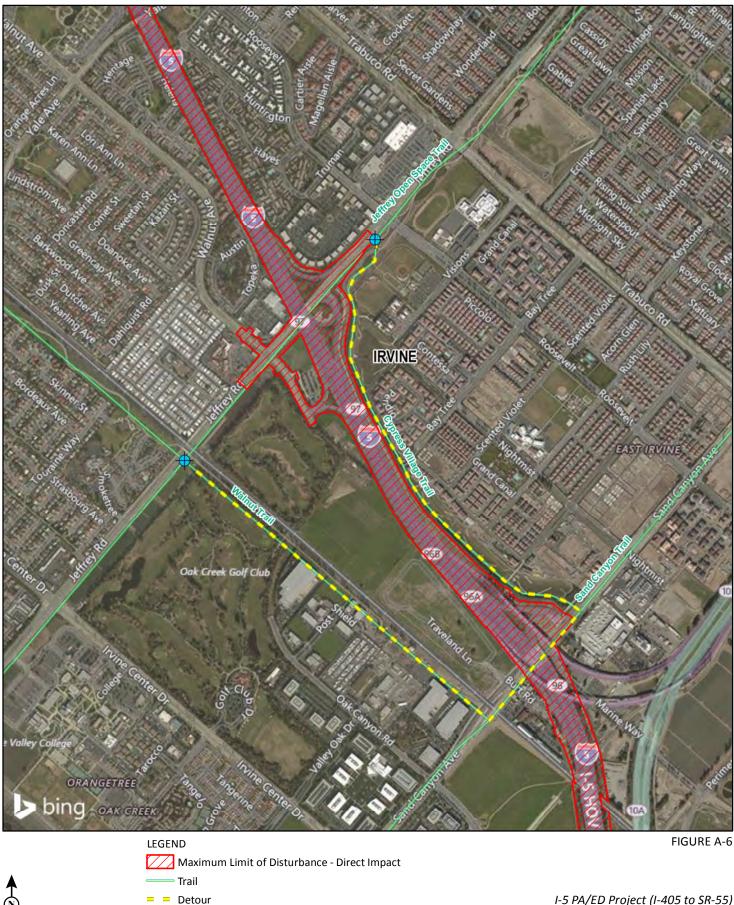
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FIGURE A-5

I-5 PA/ED Project (I-405 to SR-55)

Section 4(f) Evaluation Jeffrey Open Space Trail 12-ORA-5 PM 21.3/30/3 EA No. 0K670



I-5 PA/ED Project (I-405 to SR-55) Section 4(f) Evaluation

Jeffrey Open Space Trail 12-ORA-5 PM 21.3/30.3 EA No. 0K670

SOURCE: Bing (2015); AECOM (2017)

FEET

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Trail Closure Point

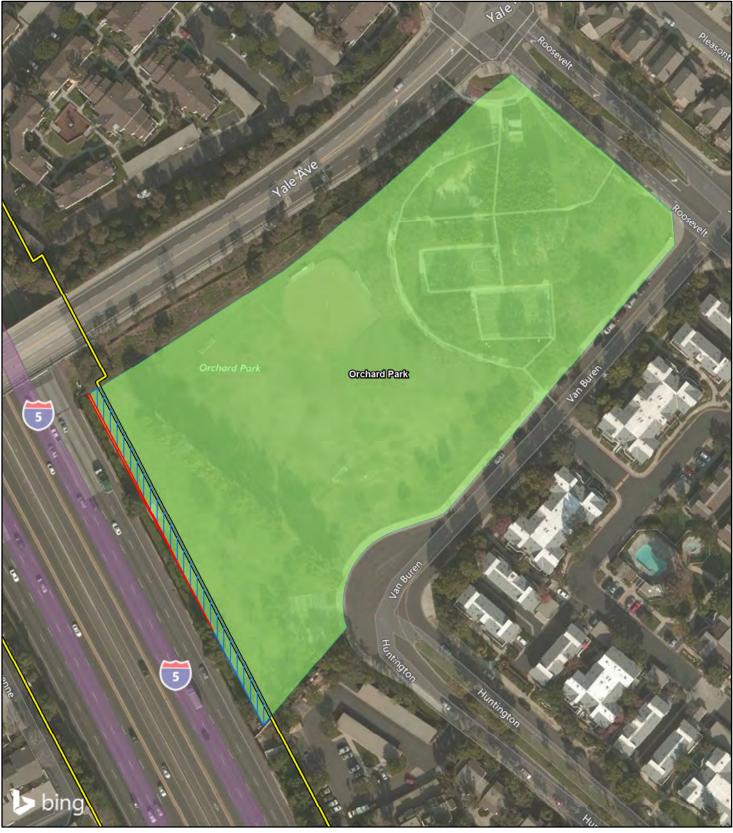
City Boundary

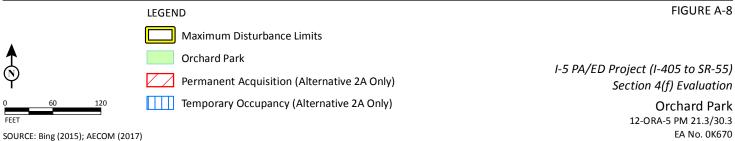


FIGURE A-7

I-5 PA/ED Project (I-405 to SR-55)

Section 4(f) Evaluation Orchard Park 12-ORA-5 PM 21.3/30/3 EA No. 0K670







Eastern edge of Heritage Park.



Maintenance area at Heritage Park.



Maintenance shed at Heritage Park.

FIGURE A-9

I-5 PA/ED Project (I-405 to SR-55)

Section 4(f) Evaluation Heritage Park 12-ORA-5 PM 21.3/30/3 EA No. 0K670

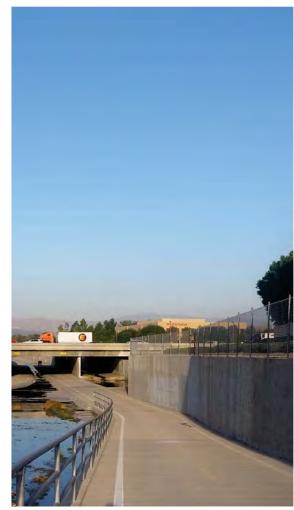




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Peter's Canyon Regional Trail and Bikeway, south of I-5 (County of Orange).

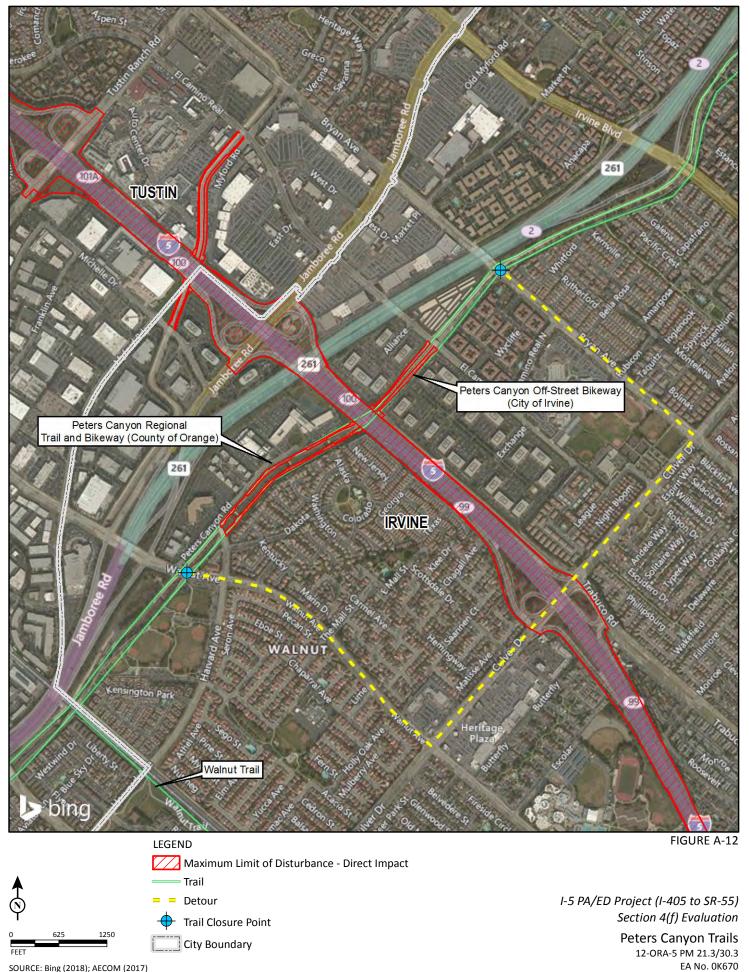


Peter's Canyon Off-Street Bikeway, south of I-5 (City of Irvine).

FIGURE A-11

I-5 PA/ED Project (I-405 to SR-55)

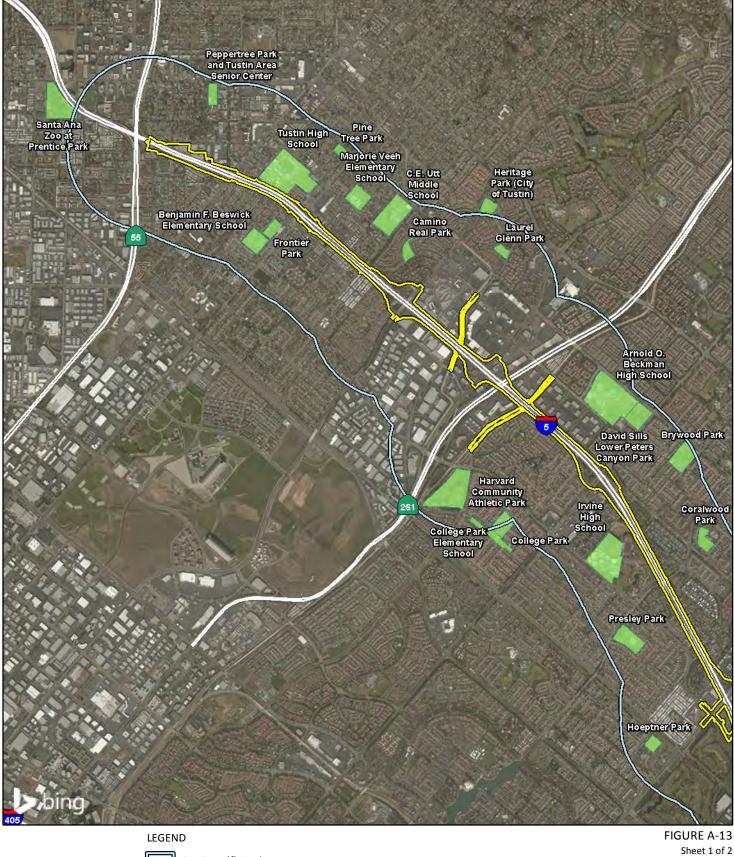
Section 4(f) Evaluation Peter's Canyon Trail 12-ORA-5 PM 21.3/30/3 EA No. 0K670

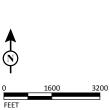


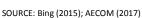
SOURCE: Bing (2018); AECOM (2017)

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Section 4(f) Study Area

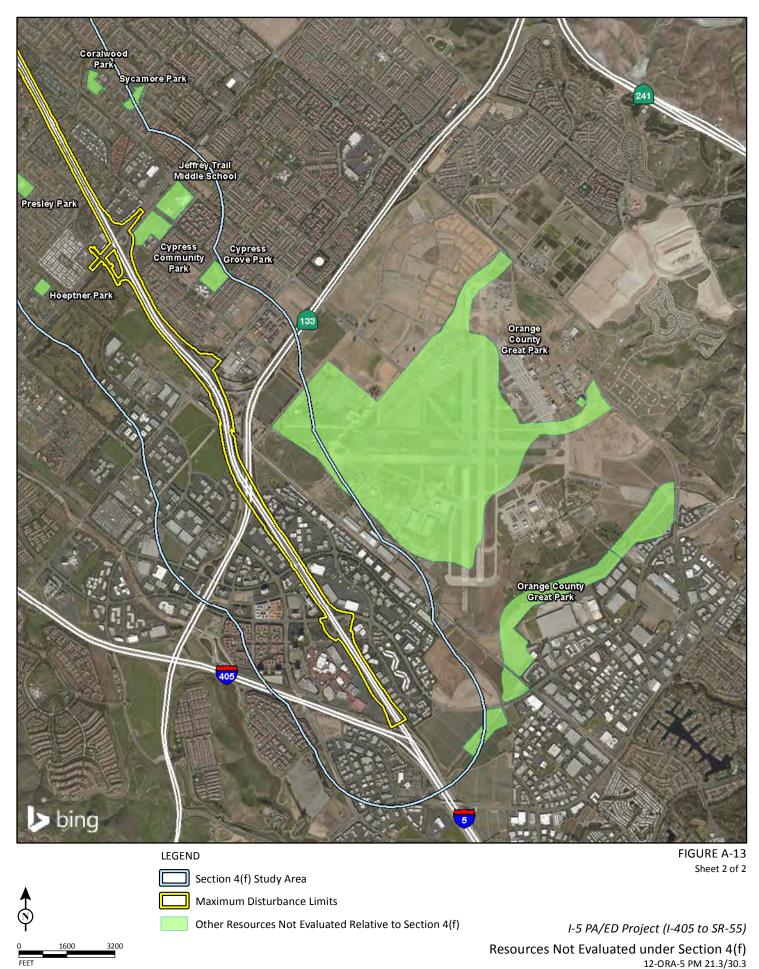
Maximum Disturbance Limits

Other Resources Not Evaluated Relative to Section 4(f)

I-5 PA/ED Project (I-405 to SR-55)

Resources Not Evaluated under Section 4(f) 12-ORA-5 PM 21.3/30.3 EA No. 0K670

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EA No. 0K670

SOURCE: Bing (2015); AECOM (2017)

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ATTACHMENT B

TABLE A.5: RESOURCES DETERMINED NOT TO TRIGGER THE REQUIREMENTS FOR PROTECTION UNDER SECTION 4(f)

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Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	Publicly Owned Parks and Other Recreation Resources
Orange County Great Park	The Orange County Great Park is outside the project limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of the Orange
6950 Marine Way Irvine, CA 92618	County Great Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 2 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the Orange County Great Park for protection under Section 4(f) was
Official with Jurisdiction: City of Irvine	evaluated as follows:
The Orange County Great Park is approximately 1,200 ft east of the maximum disturbance limits. The Orange County Great Park is an	• Access: Access to this park is currently available from Ridge Valley, Marine Way, and Great Park Boulevard. None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Orange County Great Park.
existing and proposed park with a project area spanning approximately 1,300 ac, with more than 200 ac developed and 688 ac in planning and design. The existing park amenities include sports fields, the	• Visual and Aesthetics: This park is in a developed area approximately 1,200 ft east of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park. As a result, the Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this park.
Great Park Balloon, a carousel, a rock play area, and a Visitors Center. The approved park proposal includes	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short or long term.
a 194 ac sports park that will complement the existing sports fields. The sports park is planned to include 18 new additional soccer and multi- use fields, 25 tennis courts, 4 sports courts, 12 baseball/softball fields, and 5 sand volleyball courts. In addition,	of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not result in about a statement of the project would not result in about a statement of the project.
plans include a 170 ac golf course and golf practice facility and clubhouse, a 71 ac agriculture component, a 39 ac Bosque area, 36 ac Upper Bee Canyon area, and a	• Noise: The existing and planned parts of this park are in the vicinity of I-5. Park patrons would hear traffic on I-5 similar to existing conditions during operation of Alternatives 2A and 2B. As a result, Alternatives 2A and 2B would not result in indirect noise effects on the Orange County Great Park that would result in changes in the features and attributes that qualify the park for protection under Section 4(f).

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
178 ac Wildlife Corridor. Vehicular access to the park is available from Ridge Valley, Marine Way, and Great Park Boulevard.	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation under Alternatives 2A and 2B. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Orange County Great Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Cypress Village Trail Northwest-southeast-west Class I	Cypress Village Trail is outside the project limits and there would be no permanent use, temporary occupancy, or permanent easements at this trail under Alternatives 2A and 2B. As a result, the requirements for protection of the Cypress Village Trail under Section 4(f) are not triggered by Alternatives 2A and 2B.
(off-street) trail along the north side of I-5 Figure A-13 Sheet 2 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the trail for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine The Cypress Village Trail is a Class I (off-street) trail parallel to I-5 between Sand Canyon Avenue and Jeffrey Road in the City of Irvine. The trail connects to the Jeffrey Open Space Trail at Cypress Community Park. The trail is open for public use. Pedestrian and bicycle access to this trail is currently available from Sand Canyon Avenue, Jeffrey Road, and adjacent residential access points.	 Access: Pedestrian and bicycle access to this trail is currently available from Sand Canyon Avenue, Jeffrey Road, and adjacent residential access points. None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this trail from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from the Cypress Village Trail.
	 Visual and Aesthetics: This trail is between I-5 and existing residential land uses. A wall and existing vegetation are existing buffers between the trail and I-5. There would be no modification to the wall or vegetation along the trail, therefore, users of the trail would experience views of I-5 similar to existing conditions. Operation of Alternatives 2A and 2B would not result in visual or aesthetic effects that would substantially impair the use of the Cypress Village Trail.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Noise: This trail is in a developed area parallel to I-5. A wall and existing vegetation are the only existing buffers between the trail and I-5. Users of the trail would hear traffic on I-5 similar to existing conditions. As a result, Alternatives 2A and 2B would not result in indirect noise effects on the Cypress Village Trail that would result in changes in the features and attributes that qualify the trail for protection under Section 4(f).
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on this trail under Alternatives 2A and 2B; therefore, there would be no temporary disturbance to the existing vegetation along the existing trail. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation along the trail.
	In summary, the proximity impacts of Alternatives 2A and 2B at the Cypress Village Trail would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this trail. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Cypress Grove Park 275 Rush Lily	Cypress Grove Park is outside the project limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Cypress Grove Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92618 Figure A-13 Sheet 2 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Cypress Grove Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine Cypress Grove Park is approximately 1,800 ft east of the maximum disturbance limits. The approximately 9.4 ac park consists of open play areas, a child play area, a soccer field, a basketball court, a volleyball court, and a softball field, barbeques, and a group picnic area. Vehicular access to the park is available from Rush Lily, and pedestrian access is available from the perimeter of the park.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, the Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Cypress Grove Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,800 ft east of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is approximately 1,800 ft east of Alternatives 2A and 2B and existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Cypress Grove Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Cypress Community Park 255 Visions Irvine, CA 92618 Figure A-13 Sheet 2 of 2 Official with Jurisdiction: City of Irvine	Cypress Community Park is adjacent to and outside the maximum disturbance limits. There would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Cypress Community Park under Section 4(f) are not triggered by the Alternatives 2A and 2B.
	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Cypress Community Park for protection under Section 4(f) was evaluated as follows:
Cypress Community Park is adjacent to the project improvements on Jeffrey Road in the City of Irvine. The community park is approximately 17.9 ac in size and consists of green space with one multi-use building, two child play areas, three lighted	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Cypress Community Park.
	• Visual and Aesthetics: This park is in a developed area adjacent to the maximum disturbance limits for the project. A drainage area and the Jeffrey Open Space Trail are existing buffers between the park and Jeffrey Road and the I-5 ramps. Views of the replacement Jeffrey Road Overcrossing and approach would be similar to existing conditions. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
tennis courts, one lighted softball/soccer overlay field, one lighted baseball diamond, one lighted basketball court, off-street trail access, barbeques, and group picnic areas. Vehicular access to Cypress Community Park is available from Visions on the southeast side of the park. Pedestrian access to Cypress Community Park is available from Jeffrey Road, Roosevelt, and Visions.	substantively change views from the park. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area adjacent to the maximum disturbance limits. The park is subject to noise from traffic on Jeffrey Road and the I-5 ramps. Existing intervening land uses, such as the Jeffrey Open Space Trail and a drainage area provide a buffer between the park, Jeffrey Road, and I-5 that partially shields the park from noise generated on Jeffrey Road and I-5. This buffer area would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction in this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would not result in any direct or indirect effects on the vegetation at the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Cypress Community Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Hoeptner Park	Hoeptner Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Hoeptner
5331 Hoeptner Irvine, CA 92604	Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheets 1 and 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the
Official with Jurisdiction: City of Irvine	activities, features, and/or attributes that qualify Hoeptner Park for protection under Section 4(f) was evaluated as follows:

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
Hoeptner Park is approximately 1,400 ft southwest of the maximum disturbance limits. The approximately 2.2 ac neighborhood park consists of green space, a playground, two tennis courts, and access to Walnut Trail. Vehicular access to the park is available from Hoeptner Street.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Hoeptner Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,400 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 1,400 ft southwest of the maximum project disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Hoeptner Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
Walnut Trail	Walnut Trail is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this off-street trail under Alternatives 2A and 2B. As a result, the requirements for protection of the
East-west Class I (off-street) trail along the Metrolink train tracks	Walnut Trail under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheets 1 and 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the Walnut Trail for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine Walnut Trail is approximately 730 ft southwest of the maximum disturbance limits. The Walnut Trail is a Class I (off-street) trail with adjacent open space areas. The east/west trail is adjacent to the Metrolink train tracks between Harvard Avenue and Sand Canyon Avenue. At Sand Canyon Avenue, the Sand Canyon Trail (Class I [off- street]) connects the Walnut Trail to the San Diego Creek Trail to the south.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this trail from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Walnut Trail.
	 Visual and Aesthetics: This trail is in a developed area approximately 730 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the trail and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the trail or to substantively change views from the trail.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the trail in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This trail is in a developed area approximately 730 ft southwest of the maximum disturbance limits. The existing trail is adjacent to the Metrolink rail corridor and subject to noise from passing trains. The noise from trains and the presence of intervening land uses partially shields the trail from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this trail; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation along the trail.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	In summary, the proximity impacts of Alternatives 2A and 2B at the Walnut Trail would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this trail. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Presley Park 4732 Karen Ann Lane Irvine, CA 92604	Presley Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Presley Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheets 1 and 2 Official with Jurisdiction: City of Irvine	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Presley Park for protection under Section 4(f) was evaluated as follows:
Presley Park is approximately 1,300 ft west of the maximum disturbance limits. The approximately 2.9 ac neighborhood park consists of green space, a playground, one volleyball court, and a group picnic area. Pedestrian access is available from Yale Avenue and Karen Ann Lane. Vehicular access to the park is available from Karen Ann Lane.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Presley Park.
	 Visual and Aesthetics: This park is in a developed area approximately 1,300 ft west of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	• Noise: As noted above, this park is in a developed area approximately 1,300 ft west of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this trail; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation along the trail.
	In summary, the proximity impacts of Alternatives 2A and 2B at Presley Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Sycamore Park 27 Lewis	Sycamore Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Sycamore Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92620 Figure A-13 Sheet 2 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Sycamore Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine Sycamore Park is approximately 2,280 ft northeast of the maximum disturbance limits. The approximately 6.9 ac neighborhood park consists of green space, a playground, and a group picnic area. Pedestrian access to the park is available from Lewis and Eastwood. There are no vehicular parking areas in the park.	• Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Sycamore Park.
	• Visual and Aesthetics: This park is in a developed area approximately 2,280 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	• Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Noise: This park is in a developed area approximately 2,280 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Sycamore Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Coralwood Park 12 Fremont	Coralwood Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Coralwood Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92620 Figure A-13 Sheets 1 and 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Coralwood Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine Coralwood Park is approximately 1,500 ft northeast of the maximum disturbance limits. The approximately 2.7 ac neighborhood park consists of green space, a playground, and picnic tables. Pedestrian access to the park is available from Fremont	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Coralwood Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,500 ft north of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
and Lindberg. There are no off-street vehicular parking areas in the park. On-street parking is available on	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
Lindberg and Fremont.	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 1,500 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Coralwood Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Brywood Park 15 Westwood	Brywood Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Brywood Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92620 Figure A-13 Sheet 2 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Brywood Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine Brywood Park is approximately 1,700 ft northeast of the maximum disturbance limits. The approximately 6 ac park consists of green space, a playground, one soccer field, two ball diamonds, and a group picnic area. Access to the park is available from Bryan Avenue and Westwood. There are no off-street vehicular parking areas in the park.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Brywood Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,700 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 1,700 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
David Sills Lower Peters Canyon Park	In summary, the proximity impacts of Alternatives 2A and 2B at Brywood Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property. David Sills Lower Peters Canyon Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for
Figure A-13 Sheet 1 of 2 3901 Farwell Ave Irvine, CA 92602	protection of David Sills Lower Peters Canyon Park under Section 4(f) are not triggered by Alternatives 2A and 2B. The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify David Sills Lower Peters Canyon Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine David Sills Lower Peters Canyon Park is approximately 1,600 ft northeast of the maximum disturbance limits. The approximately 10.3 ac park consists of a child play area, lighted soccer field, a lighted softball field, eight lighted tennis	• Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from David Sills Lower Peters Canyon Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,600 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
courts, and barbeque and picnic areas, and restrooms. Vehicular access to the park is available from Farwell Avenue.	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: As noted above, this park is in a developed area approximately 1,600 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at David Sills Lower Peters Canyon Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
College Park	College Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of College
14471 Mayten	Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92606 Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify College Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Irvine College Park is approximately 2,500 ft southwest of the maximum disturbance limits. The approximately 7.6 ac park consists of green space, a playground, one volleyball court, and picnic tables. Access to the park is available from Redwood Street, Fir Avenue, Fern Street, Holly Oak Avenue, Acacia Street, Palm Street, Elm Avenue, Sequoia Lane, and Sawleaf Avenue. There are no off- street vehicular parking areas in the park.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from College Park.
	 Visual and Aesthetics: This park is in a developed area approximately 2,500 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: As noted above, this park is in a developed area approximately 2,500 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	In summary, the proximity impacts of Alternatives 2A and 2B at College Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Harvard Community Athletic Park	Harvard Community Athletic Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for
14701 Harvard Avenue Irvine, CA 92606	protection of Harvard Community Athletic Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2 Official with Jurisdiction: City of Irvine	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Harvard Community Athletic Park for protection under Section 4(f) was evaluated as follows:
Harvard Community Athletic Park is approximately 760 ft southwest of the maximum disturbance limits. The approximately 27 ac park consists of a multi-use building, four lighted soccer fields, seven lighted ball diamonds, 4 lighted batting cages, bicycle trail access, a skate park, restrooms, barbeques, and a picnic area. Vehicular access to the park is available from Harvard Avenue.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Harvard Community Athletic Park.
	• Visual and Aesthetics: This park is in a developed area approximately 760 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 760 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Harvard Community Athletic Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Laurel Glenn Park 13301 Myford Road Tustin, CA 92780 Figure A-13 Sheet 1 of 2 Official with Jurisdiction: City of Tustin Laurel Glenn Park is approximately 1,500 ft northeast of the maximum disturbance limits. The approximately 3 ac park consists of green space, a playground, a par course, restrooms, and a picnic shelter. Vehicular access to the park is available from nearby on-street parking turnouts on Heritage Way.	Laurel Glenn Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Laurel Glenn Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Laurel Glenn Park for protection under Section 4(f) was evaluated as follows:
	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Laurel Glenn Park.
	• Visual and Aesthetics: This park is in a developed area approximately 1,500 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	 Noise: This park is in a developed area approximately 1,500 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Laurel Glenn Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Heritage Park (City of Tustin) 2350 Kinsman	Heritage Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Heritage Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Tustin, CA 92780 Figure A-13 Sheet 1 of 2 Official with Jurisdiction: City of	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Heritage Park for protection under Section 4(f) was evaluated as follows:
Tustin Heritage Park is approximately 2,500 ft north of the maximum disturbance limits. The approximately 5 ac park consists of green space, a playground, a roller hockey rink, a basketball court, and group picnic areas. Vehicular access to the park is available from Kinsman Circle.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Heritage Park.
	 Visual and Aesthetics: This park is in a developed area approximately 2,500 ft north of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 2,500 ft north of the maximum project disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Heritage Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Camino Real Park 13602 Parkcenter Lane	Camino Real Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Camino Real Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Tustin, CA 92782 Figure A-13 Sheet 1 of 2 Official with Jurisdiction: City of Tustin Camino Real Park is approximately 750 ft northeast of the maximum disturbance limits. The approximately 4.3 ac park consists of green space with a playground, a basketball court, and a group picnic shelter. Pedestrian access to the park is available from El Camino Real and Parkcenter Lane. There are no off- street vehicular parking areas in the	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Camino Real Park for protection under Section 4(f) was evaluated as follows:
	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Camino Real Park.
	• Visual and Aesthetics: This park is in a developed area approximately 750 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
park.	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 750 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Camino Real Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Pine Tree Park 1402 Bryan Avenue	Pine Tree Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Pine Tree Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Tustin, CA 92780 Figure A-13 Sheet 1 of 2 Official with Jurisdiction: City of	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Pine Tree Park for protection under Section 4(f) was evaluated as follows:
Tustin Pine Tree Park is approximately	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Pine Tree Park.
2,000 ft northeast of the maximum disturbance limits. The approximately 4.2 ac park consists of green space, a playground, a sand volleyball court, a portable skate park, and a picnic	limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
shelter. Pedestrian access to the park is available from Bryan Avenue and Red Hill Avenue. There are no off-street vehicular parking areas in the park.	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 2,000 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Pine Tree Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Frontier Park	Frontier Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for protection of Frontier
1400 Mitchell Avenue Tustin, CA 92780	Park under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Frontier Park for protection under Section 4(f) was evaluated as follows:
Official with Jurisdiction: City of Tustin	 Access: Parking for the park is available on-street along Mitchell Avenue and Utt Drive. None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park from,
Frontier Park is approximately 475 ft southwest of the maximum disturbance limits. The approximately	and parking along, the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Frontier Park.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
4.5 ac park consists of green space, a playground, a frisbee golf course, outdoor fitness equipment, a water feature play area, and a picnic area. Pedestrian access to this park is available from Mitchell Avenue and Utt Drive. There are no off-street vehicular parking areas in the park.	• Visual and Aesthetics: This park is in a developed area approximately 475 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or to substantively change views from the park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park is in a developed area approximately 475 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and I-5 that partially shields the park from noise generated on I- 5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park.
	In summary, the proximity impacts of Alternatives 2A and 2B at Frontier Park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Peppertree Park and Tustin Area Senior Center	Pine Tree Park and Tustin Area Senior Center are outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park and senior center under Alternatives 2A and 2B. As a result, the requirements for protection of Pine Tree Park and Tustin Area Senior Center under Section 4(f) are not
230 W. First Street Tustin, CA 92780	triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Pine Tree Park and Tustin Area Senior Center for protection under Section
Official with Jurisdiction: City of	4(f) was evaluated as follows:

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
Tustin Peppertree Park and Tustin Area Senior Center is approximately 1,800 ft north of the maximum disturbance limits. The approximately 5.5 ac park with a senior center also includes green space, a horseshoe pic, a softball diamond, and a playground, and a picnic shelter. Vehicular and pedestrian access to the park is available from B Street and C Street.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this park and senior center from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Peppertree Park and Tustin Area Senior Center.
	 Visual and Aesthetics: This park/senior center is in a developed area and existing land uses provide a visual buffer between the park and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the park or senior center or to substantively change views from the park. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this park.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the park property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This park/senior center is in a developed area approximately 1,800 ft north of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park/senior center and I-5 that partially shields the park/senior center from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this park and senior center; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the park and senior center.
	In summary, the proximity impacts of Alternatives 2A and 2B at Peppertree Park and Tustin Area Senior Center would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
Santa Ana Zoo at Prentice Park	The Santa Ana Zoo at Prentice Park is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this park under Alternatives 2A and 2B. As a result, the requirements for
1801 East Chestnut Avenue Santa Ana, CA 92701	protection of this resource under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify the Santa Ana Zoo at Prentice Park for protection under Section 4(f) was
Official with Jurisdiction: City of Santa	evaluated as follows:
The zoo/park is approximately 2,500 ft northwest of the maximum disturbance limits. The 19 ac zoo features over 80 species of animals, a children's farm, a train ride, and a carousel. There is on-site parking at the zoo/park. Access to the site is available from West Main Street and Elk Lane.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this zoo/park from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from the Santa Ana Zoo at Prentice Park.
	• Visual and Aesthetics: The zoo/park is in a developed area and is immediately adjacent to I-5 but north of the Study Area. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the zoo/park or that would substantively change views from the zoo/park. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on the Santa Ana Zoo at Prentice Park.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the zoo/park property and amenities in the short- or long-term.
	• Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.
	 Noise: This zoo/park is in a developed area approximately 2,500 ft northwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the park and the project segment of I-5.
	• Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of the zoo/park; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline and ramps and would not result in any direct or indirect effects on the vegetation in the zoo/park. As a result, the construction and operation of Alternatives 2A and 2B would be limited to the vegetation at the Santa Ana Zoo at Prentice Park.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	In summary, the proximity impacts of Alternatives 2A and 2B at the zoo/park would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of the Santa Ana Zoo at Prentice Park. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
	The Build Alternative would not result in the permanent use of property from the Santa Ana Zoo at Prentice Park; therefore, the Build Alternative would also not result in the conversion of any property acquired or developed with grants provided under the Land and Water Conservation Fund Act and would not result in any action that falls under Section 6(f) of this act.
	Publicly Owned Schools
Jeffrey Trail Middle School 155 Visions	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Jeffrey Trail Middle School under Section 4(f) are not triggered by Alternatives 2A and 2B.
Irvine, CA 92618 Figure A-13 Sheet 2 of 2 Official with Jurisdiction: Irvine	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Jeffrey Trail Middle School for protection under Section 4(f) was evaluated as follows:
Unified School District Jeffrey Trail Middle School is approximately 400 ft northeast of the	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Jeffrey Trail Middle School.
maximum disturbance limits. This school has a track, a large grassy play area, and a number of paved sports courts. Vehicular access to the school is available from Visions.	 Visual and Aesthetics: This school is in a developed area approximately 400 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and I-5 project improvements. The existing views from the play areas at this school consist of Jeffrey Road. Views of the replacement Jeffrey Road Overcrossing and approach would be similar to existing conditions. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this school.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.
	• Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA)

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
	to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.
	• Noise: This school is in a developed area approximately 400 ft northeast of the maximum disturbance limits. The school is subject to noise from traffic on Jeffrey Road. Existing intervening land uses, such as the Jeffrey Open Space Trail and Cypress Community Park provide a buffer between the school and Jeffrey Road and I-5 that partially shields the school from noise generated on Jeffrey Road andI-5. This buffer area would continue to shield noise in the future with Alternatives 2A and 2B.
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school.
	In summary, the proximity impacts of Alternatives 2A and 2B at Jeffrey Trail Middle School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Irvine High School 4321 Walnut Avenue Irvine, CA 92604	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Irvine High School under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2 Official with Jurisdiction: Irvine Unified School District	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Irvine High School for protection under Section 4(f) was evaluated as follows:
Irvine High School is approximately 450 ft southwest of the maximum disturbance limits. This school has a football stadium, aquatics center, softball field, baseball field, and grass play areas. Vehicular access to the	• Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Irvine High School.
	• Visual and Aesthetics: This school is in a developed area approximately 450 ft southwest of the maximum disturbance limits for the project. A baseball field in Heritage Park (City of Irvine) provides a visual buffer between the school and I-5. After the I-5 improvements are operational, views from the school toward I-5 would be similar to existing conditions.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
school is available from Walnut Avenue and Escolar.	Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school. As a result, Alternative 2B (Preferred Alternative) would not result in adverse visual or aesthetic effects on Irvine High School.
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: As noted above, this school is in a developed area approximately 450 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on the school property; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline in the vicinity of the school and would not result in any direct or indirect effects on the vegetation in the school.
	In summary, the proximity impacts of Alternatives 2A and 2B at Irvine High School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.
Arnold O. Beckman High School	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Arnold O.
3588 Bryan Avenue Irvine, CA 92602	Beckman High School under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Arnold O. Beckman High School for protection under Section 4(f) was

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
Official with Jurisdiction: Tustin Unified School District	 evaluated as follows: Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent
Arnold O. Beckman High School is approximately 1,270 ft northeast of the maximum disturbance limits. This school has a track, aquatics center, two baseball fields, a softball field, and outdoor basketball courts, and a grass play area. Vehicular access to the school is available from Bryan Avenue and El Camino Real.	 Access. Note of the proposed improvements in Alternatives 2A and 2B would result in temporary of permanent changes to access to this school from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Arnold O. Beckman High School. Visual and Aesthetics: This school is in a developed area approximately 1,270 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This school is in a developed area approximately 1,270 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school.
	In summary, the proximity impacts of Alternatives 2A and 2B at Arnold O. Beckman High School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation
College Park Elementary School	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of College
3700 Chaparral Avenue Irvine, CA 92606	Park Elementary School under Section 4(f) are not triggered by Alternatives 2A and 2B.
Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify College Park Elementary School for protection under Section 4(f) was
Official with Jurisdiction: Irvine	evaluated as follows:
Unified School District College Park Elementary School is	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from College Park Elementary School.
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approximately 2,300 ft southwest of the maximum disturbance limits. This school has two softball fields, a grass play area, and paved sports courts. Vehicular access to the school is available from Chaparral Avenue and Fir Avenue.	 Visual and Aesthetics: This school is in a developed area approximately 2,300 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school.
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property.
	 Noise: This school is in a developed area approximately 2,300 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school.
	In summary, the proximity impacts of Alternatives 2A and 2B at College Park Elementary School would not substantively

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation		
	impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.		
C.E. Utt Middle School 13601 Browning Ave Tustin, CA 92780	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of C.E. Utt Middle School under Section 4(f) are not triggered by Alternatives 2A and 2B.		
Figure A-13 Sheet 1 of 2 Official with Jurisdiction: Tustin Unified School District	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify C.E. Utt Middle School for protection under Section 4(f) was evaluated as follows:		
C.E. Utt Middle School is approximately 1,200 ft northeast of the maximum disturbance limits. This school has grass play areas, a track, three softball fields, one lighted baseball field, and paved sports courts. Vehicular access to the school is available from Browning Avenue.	• Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent streets. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from C.E. Utt Middle School.		
	• Visual and Aesthetics: This school is in a developed area approximately 1,200 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school.		
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.		
	• Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long-term adverse air quality impacts on this Section 4(f) property.		
	• Noise: This school is in a developed area approximately 1,200 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B.		

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation			
	Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school.			
	In summary, the proximity impacts of Alternatives 2A and 2B at C.E. Utt Middle School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.			
Marjorie Veeh Elementary School 1701 San Juan Street Tuetin CA 02720	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Marjorie Veeh Elementary School under Section 4(f) are not triggered by Alternatives 2A and 2B.			
Tustin, CA 92780 Figure A-13 Sheet 1 of 2 Official with Jurisdiction: Tustin Unified School District	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Marjorie Veeh Elementary School for protection under Section 4(f) was evaluated as follows:			
Marjorie Veeh Elementary School is approximately 1,200 ft northeast of the maximum disturbance limits. This school has a grass play area, a playground, and paved sports courts. Vehicular access to the school is available from San Juan Street.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent street. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Marjorie Veeh Elementary School. 			
	 Visual and Aesthetics: This school is in a developed area approximately 1,200 ft northeast of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school. 			
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term. 			
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- 			

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation			
	term adverse air quality impacts on this Section 4(f) property.			
	 Noise: This school is in a developed area approximately 1,200 ft northeast of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B. 			
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school.			
	In summary, the proximity impacts of Alternatives 2A and 2B at Marjorie Veeh Elementary School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.			
Tustin High School 1171 East El Camino Real Tustin, CA 92780	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Tustin High School under Section 4(f) are not triggered by Alternatives 2A and 2B.			
Figure A-13 Sheet 1 of 2 Official with Jurisdiction: Tustin Unified School District	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Tustin High School for protection under Section 4(f) was evaluated as follows:			
Tustin High School is in the immediate vicinity of the project improvements on along the El Camino Real frontage road in the City of Tustin. The recreation areas at this school are approximately 480 ft from the maximum disturbance limits under Alternative 2A. Under	 Access: Pedestrian and bicycle access to this school is currently available from El Camino Real, San Juan Street, and Orange Street. Alternative 2A would require a TCE and permanent right-of way from the El Camino Real frontage road. None of the proposed improvements in Alternatives 2A and 2B would require physical modifications to the access points to the school or improvements on the north side of El Camino Real adjacent to the school. Temporary closures of El Camino Real would be addressed with posted detours. Therefore, access to the recreation areas at the school would be maintained during construction and operation of Alternatives 2A and 2B. Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Tustin High School. Visual and Aesthetics: This school is in a developed area approximately 50 ft north of the maximum disturbance limits 			
Alternative 2B, the recreation areas at this school are approximately 530 ft from the maximum disturbance limits. This school has a football	for the project. The recreation areas at this school are approximately 480 ft and 530 ft from the maximum disturbance limits for Alternatives 2A and 2B, respectively. Existing school buildings and land uses provide a visual buffer between the school recreation areas and project improvements. Alternative 2A includes the new noise barriers and paved edges.			

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation		
stadium, an outdoor swimming pool, two baseball field, a softball field, tennis courts, and grass sports fields. Vehicular access to the school is available from El Camino Real.	Views from the school toward I-5 and the existing El Camino Real frontage road include views of existing roadway and sidewalk and a wall along I-5. The proposed improvements under Alternative 2A do not include new features that would substantively change views from the school. Proposed improvements along Alternative 2B (Preferred Alternative) would be limited to I-5 mainline, and would not include modifications to El Camino Real or the existing walls along I-5. As a result, Alternatives 2A and 2B would not result in adverse visual or aesthetic effects on this school.		
	 Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term. 		
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property. 		
	• Noise: The recreation areas at this school are in a developed area more than 400 ft north of the maximum disturbance limits for Alternatives 2A and 2B. Existing intervening school buildings and land uses provide a buffer between the school recreation areas and El Camino Real and I-5. The intervening land uses at this school partially shields the school from noise generated on the frontage road and freeway and would continue to shield noise in the future with Alternatives 2A and 2B.		
	 Natural Communities, Plant Species, and Animal Species: There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school. As a result, the construction and operation of Alternatives 2A and 2B would not result in short- or long-term impacts to the vegetation at this school. 		
	In summary, the proximity impacts of Alternatives 2A and 2B at Tustin High School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.		

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation		
Benjamin F. Beswick Elementary School	This school is outside the maximum disturbance limits and there would be no permanent use, temporary occupancy, or permanent easements at this school under Alternatives 2A and 2B. As a result, the requirements for protection of Benjamin F. Beswick Elementary School under Section 4(f) are not triggered by Alternatives 2A and 2B.		
1362 Mitchell Avenue Tustin, CA 92780 Figure A-13 Sheet 1 of 2	The potential for Alternatives 2A and 2B to result in proximity or constructive use impacts that would substantially impair the activities, features, and/or attributes that qualify Benjamin F. Beswick Elementary School for protection under Section 4(f) was evaluated as follows:		
Official with Jurisdiction: Tustin Unified School District Benjamin F. Beswick Elementary School is approximately 1,130 ft southwest of the maximum disturbance limits. This school has a grass play area and paved sports courts. Vehicular access to the school is available from Mitchell Avenue.	 Access: None of the proposed improvements in Alternatives 2A and 2B would result in temporary or permanent changes to access to this school from the adjacent street. As a result, Alternatives 2A and 2B would not result in temporary or permanent indirect adverse effects on access to/from Benjamin F. Beswick Elementary School. 		
	• Visual and Aesthetics: This school is in a developed area approximately 1,130 ft southwest of the maximum disturbance limits for the project. Existing land uses provide a visual buffer between the school and project improvements. Alternatives 2A and 2B do not include new features that would be tall enough to be visible from the school or to substantively change views from the school.		
	• Water Quality: Both Alternatives 2A and 2B would treat 100 percent of the new and replaced impervious surface area, providing greater overall water quality benefits to on-site drainages and downstream receiving waters. No additional runoff will affect the school property and amenities in the short- or long-term.		
	 Air Quality: Project construction activities would produce exhaust and fugitive dust emissions. With the implementation of Project Features PF-AQ-1 through PF-AQ-3 and Measure AQ-4 (provided in Section 2.13, Air Quality, in this IS/EA) to control and reduce equipment emissions and fugitive dust, the project construction would not result in any adverse air quality impacts. During operation, no avoidance, minimization, and/or mitigation measures are required, as the project would not produce substantial operational air quality impacts. Therefore, the project would not result in short- or long- term adverse air quality impacts on this Section 4(f) property. 		
	 Noise: This school is in a developed area approximately 1,130 ft southwest of the maximum disturbance limits. Existing intervening land uses provide a buffer between the school and I-5 that partially shields the school from noise generated on I-5 and would continue to shield noise in the future with Alternatives 2A and 2B. 		
	• Natural Communities, Plant Species, and Animal Species : There would be no project construction on or in the immediate vicinity of this school; therefore, there would be no temporary disturbance to the existing vegetation. Operation of Alternatives 2A and 2B would be limited to the I-5 mainline, ramps, and local street improvements and would not result in any direct or indirect effects on the vegetation in the school. As a result, the construction and operation of Alternatives 2A and 2B would not result in short- or long-term impacts to the vegetation at this school.		

Name, Location, Official with Jurisdiction, Description	Section 4(f) Evaluation		
	In summary, the proximity impacts of Alternatives 2A and 2B at Benjamin F. Beswick Elementary School would not substantively impair the protected activities, features, or attributes of this resource in terms of its Section 4(f) significance. As a result, Alternatives 2A and 2B would not result in constructive use of this school. Because Alternatives 2A and 2B would not result in permanent, temporary, or constructive use of this property, they will not trigger the requirements for protection under Section 4(f) at this property.		
Sources: LSA Associates, Inc. (2017). ac = acre(s) CO = carbon monoxide ft = foot/feet I-5 = Interstate 5	mi= mile(s) MSAT = Mobile Source Air Toxics sf = square feet		

ATTACHMENT C

DOCUMENTATION OF CONSULTATION

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DEPARTMENT OF TRANSPORTATION DISTRICT 12 1750 EAST 4TH STREET, SUITE 100 SANTA ANA, CA 92705 PHONE (657) 328-6000 FAX (657) 328-6522 TTY 711 www.dot.ca.gov/d12



Making Conservation a California Way of Life.

December 15, 2017

Ms. Jaimee Bourgeois, P.E.

City of Irvine Public Works - Traffic P.O. Box 19575 Irvine, CA 92623-9575

Dear Ms. Bourgeois:

Re: Interstate 5 (I-5) PA/ED Project (I-405 to SR-55) Section 4(f) Evaluation Relating to Sand Canyon Trail, Jeffrey Open Space Trail, Orchard Park, Heritage Park, Peters Canyon Trail

The California Department of Transportation (Caltrans), as the lead agency, in coordination with the Orange County Transportation Authority (OCTA) as the funding agency, is in the process of preparing a joint Initial Study/Environmental Assessment (IS/EA) for the Interstate 5 (I-5) PA/ED Project in Orange County, California, between Interstate 405 (I-405) and State Route 55 (SR-55).

Effective March 30, 2017, *Caltrans continues to assume FHWA responsibilities under NEPA*, *pursuant to the 23 USC 325 MOU, and the 23 USC 327 MOU, and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes*. The environmental review, consultation, and other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

The proposed I-5 PA/ED Project (I-405 to SR-55) may receive federal funding and/or discretionary approvals through the U.S. Department of Transportation (i.e., FHWA); therefore, documentation of compliance with Section 4(f) is required. The purpose of this letter is to share information from the Preliminary Section 4(f) Resource Analysis. Section 4(f) of the federal Department of Transportation Act of 1966 (49 U.S.C. § 303) declares that "[i]t is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Accordingly, a Preliminary Section 4(f) *De Minimis* Determination is proposed for five resources: Sand Canyon Trail, Jeffrey Open Space Trail, Orchard Park, Heritage Park, Peters Canyon Off-Street Bikeway. The Section 4(f) Evaluation included in Appendix A of the Initial Study/Environmental Assessment (IS/EA) identifies the Section 4(f) resources in the Study Area, describes the nature and extent of the potential effects on the property, and describes measures to minimize harm to the affected resources.

Within the project limits, there are five resources that may be impacted temporarily and/or permanently by the proposed project. These resources are located within the City of Irvine's jurisdiction, and are subject to protection under the provisions of Section 4(f).

- Sand Canyon Trail The Sand Canyon Trail is a Class I (off-street) trail parallel to Sand Canyon Avenue in the City of Irvine, however, portions are located on-street for bicyclists and on a sidewalk for pedestrians. The north-south trail is approximately 4 miles long and extends from Portola Parkway in the north to I-405 in the south. The trail is a continuous access trail and can be accessed from various intersections along its alignment. The entire trail is open for public use.
- Jeffrey Open Space Trail The Jeffrey Open Space Trail (JOST) is an open space corridor with both Class I (off-street) trail and Class II (on-street) facility (for bicyclists) parallel to Jeffrey Road in the City of Irvine. The JOST comprises both existing and planned segments. The existing JOST is a Class I facility from south of I-5 to just north of I-5 where the JOST joins an unnamed trail that serves the Cypress Village community and parallels northbound I-5. Continuing north along Jeffrey Road, the JOST is separated from the roadway and provides connections to the Venta Spur Trail, Portola Trail, parks, and residential development. Ultimately, the JOST would extend north of Portola Parkway, into the future Gateway Park.

The City of Irvine is currently preparing design documentation for a bicycle/pedestrian bridge overcrossing of the JOST at I-5 which are under review by Caltrans District 12. The JOST/I-5 bicycle/pedestrian bridge overcrossing project would connect this project at its northerly end to the existing JOST trail located north of I-5. Construction of the JOST/I-5 bicycle/pedestrian bridge overcrossing would close a gap in the existing trail system and complete the JOST from I-405 to Portola Parkway.

• Orchard Park - Orchard Park is adjacent to the project improvements on the east side of I-5 near Yale Avenue in the City of Irvine. The neighborhood park is approximately six acres in size and consists of park with two playgrounds, two basketball courts, one unlighted ball diamond, one unlighted soccer field, restrooms, picnic areas, and on-site parking.

- Heritage Park Heritage Park is adjacent to the project improvements on the west side of I-5 between Yale Avenue and Culver Drive in the City of Irvine. The community park is approximately 36.5 acres in size and consists of park with two multi-use buildings, two child play areas, an amphitheater, a lake/pond, four restrooms, two concession stands, barbecues, a group picnic area, three pools, three lighted soccer fields, twelve lighted tennis courts, three lighted basketball courts, one volleyball court, two lighted racquetball courts, two lighted ball diamonds, and on-site parking.
- Peters Canyon Off-Street Bikeway The Peters Canyon Off-Street Bikeway is a regional Class I (off-street) trail which is maintained by the City of Irvine The existing off-street trail is approximately 4.6 miles long and is open for public use and passes under the I-5 Freeway. Through the project limits, the existing Class I (off-street) trail is on the east side of the Peters Canyon Wash Channel and crosses under I-5.

Caltrans, in cooperation with OCTA is proposing to widen I-5 between I-405 and SR-55. The project objectives are to increase the mainline capacity within the project limits along the I-5 corridor, improve operational deficiencies of merge and diverge areas within the project limits along the I-5 corridor, improve the existing auxiliary lanes operations, and optimize access of the existing high-occupancy vehicle (HOV) lane. The goal of the proposed project is to also minimize environmental impacts as well as right-of-way acquisitions within the project limits. The project limits on I-5 extend from approximately 0.4 mile (mi) north of the I-5/I-405 interchange (Post Mile [PM] 21.3) to 0.2 mi south of SR-55 (PM 30.3). The proposed project would add one general-purpose lane in each direction on I-5, reestablish existing auxiliary lanes and construct new auxiliary lanes, improve several existing on- and off-ramp junctions, and widen and/or replace several structures.

Three alternatives, including the No Build Alternative, will be analyzed as a part of the Initial Study/Environmental Assessment (IS/EA):

- Alternative 1: No Build Alternative
- Alternative 2A: Add one general-purpose lane (generally, full standard widths are proposed)
- Alternative 2B: Add one general-purpose lane (includes nonstandard shoulder widths and nonstandard lane widths)

Sand Canyon Trail – De Minimis Temporary Use (Alternatives 2A and 2B)

Construction of both Build Alternatives may require a temporary closure of the Sand Canyon Trail along the west side of Sand Canyon Avenue for up to 3 months during construction of the bridge widening (abutment and column bent) for I-5 over Sand Canyon Avenue. Although it is possible that bicyclists could share the travelled way lane with automobiles, a detour route has been identified for bicyclists who do not wish to mix with auto traffic. These closures would only occur when construction activity occurs in the vicinity of the trail. Southbound trail users

could detour around the construction area by continuing to the Class I (off-street) Cypress Village Trail at Sand Canyon Avenue and travel north toward Jeffrey Road. Trail users would then turn left at Jeffrey Road and travel south on the Jeffrey Open Space Trail. The trail user would turn left and head south on the Walnut Trail. The Walnut Trail would lead trail users back to Sand Canyon Avenue. This detour would be available for both northbound and southbound trail users. The affected portion of the trail as well as the proposed detours are shown on Figures 1 and 2. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. The temporary detour would be part of the Transportation Management Plan (TMP) developed during the Plans, Specifications, and Estimates (PS&E) phase of the project. The trail closure plan would be coordinated with the City of Irvine and the County of Orange. The temporary effects of the Build Alternatives on this resource would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f), with implementation of the measures described above, and, therefore those effects would be *de minimis*.

Jeffrey Open Space Trail – De Minimis Temporary Use (Alternative 2A Only)

The construction of the Alternative 2A would require the temporary closure of the Jeffrey Open Space Trail for approximately 9 months during the construction of the replacement Jeffrey Road overcrossing. Although it is anticipated that the new Jeffrey Road overcrossing would be constructed in stages to maintain traffic, which would still allow pedestrians access via the sidewalks on Jeffrey Road, a detour route has been identified for bicyclists who do not wish to mix with auto traffic. These closures would occur when construction activity occurs in the vicinity of the trail. At these times, the trail could be temporarily detoured. Southbound trail users would detour around the construction by continuing to the Class I (off-street) Cypress Village Trail at Jeffrey Road and travel southwest toward Sand Canyon Avenue. Trail users would then turn right at Sand Canyon Avenue and travel south on the Class I (off-street) Sand Canyon Trail. South of the Metrolink railroad tracks, the Sand Canyon Trail intersects with the Class I (off-street) Walnut Trail, the trail user would turn right and head northwest on the Walnut Trail. The Walnut Trail would lead trail users back to Jeffrey Road and the Jeffrey Open Space Trail. These detours would be available for both northbound and southbound trail users. The affected portion of the trail, as well as the proposed detours are shown on Figures 3 and 4. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. The temporary detours would be part of the TMP developed during the PS&E phase of the project. The trail closure plan would be coordinated with the City of Irvine and the County of Orange. The temporary effects of Alternative 2A on this resource would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f), with implementation of the measures described above, and, therefore those effects would be *de minimis*.

Orchard Park – De Minimis Permanent Use and De Minimis and Temporary Use (Alternative 2A Only)

De Minimis Permanent Use

As shown on Figure 6, Alternative 2A would require a permanent easement of 35 square feet of land (0.000048 percent of the total park acreage) from the existing six acre park for maintenance of the proposed wall along the western property line. The provision of a permanent easement would not affect the attributes of the park that qualify it for protection under the provisions of Section 4(f). A project feature would be implemented to require the permanent easement include provisions that provide for replacement of any landscaping or hardscape damaged as part of any maintenance activities. Because the establishment of a permanent easement of 35 square feet of land would result in only minimal effects on the park and would not affect the activities, features and attributes that qualify the property for protection under Section 4(f), those effects would be *de minimis*.

De Minimis Temporary Use

As shown on Figure 6, the construction of Alternative 2A would require a 0.15 acre TCE on the western boundary of Orchard Park. Project features will be implemented to require that the land used for the TCE be returned to the City of Irvine in its original or better condition when construction in the area has been completed and the TCE is no longer needed. During the design phase, the Project Engineer will be required to coordinate the restoration of the affected area within the TCE with the City of Irvine. The temporary effects of Alternatives 2A on this resource would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f), with implementation of the measures described above, and, therefore those effects would be *de minimis*.

Heritage Park – De Minimis Permanent Use and De Minimis Temporary Use (Alternative 2A Only)

De Minimis Permanent Use

As shown on Figure 8, Alternative 2A would require the permanent acquisition of 0.17 acre of land (0.06 percent of the total park acreage) along the eastern property line from the existing 36.5 acre park that would constitute a permanent use under Section 4(f). This land consists of mainly landscaping. Additionally, a small portion (0.01 acre) of the edge of a maintenance area, maintenance shed, and lighting and landscaping would be affected. Replacement/relocation of the maintenance shed, relocation of some containers, and lighting located adjacent to the parking lot, would be required. A project feature would be implemented that requires that the permanent acquisition include provisions that provide for compensation to the owner for any landscaping or hardscape damaged as part of any maintenance activities. Because the permanent acquisition of 0.17 acre of land would result in only minimal effects on the park and would not affect the activities, features and attributes that qualify the property for protection under Section 4(f), those effects would be *de minimis*.

Temporary Occupancy

As shown on Figure 8, the construction of Alternative 2A would require a 0.46 acre TCE on the eastern boundary of Heritage Park. Project features will be implemented to require that the land used for the TCE is returned to the City of Irvine in its original or better condition when construction in the area has been completed and the TCE is no longer needed. During the design phase, the Project Engineer will be required to coordinate the restoration of the affected area within the TCE with the City of Irvine. The TCE for the construction of Alternative 2A would meet the five conditions listed in 23 CFR 774.13(d) and therefore, the temporary occupancy of this park under Alternative 2A for a TCE would not constitute a use under Section 4(f).

Peters Canyon Off-Street Bikeway –No Use (Alternatives 2A and 2B)

Although temporary trail closures during construction may be required for up to 3 months on the County of Orange's Peters Canyon Regional Trail and Bikeway for the Build Alternatives, no temporary closure is required for the City's Peters Canyon Off-Street Bikeway. During the temporary closure of the Peter's Canyon Regional Trail and Bikeway, it is anticipated that pedestrian/bicyclist access would be maintained by accessing the Peters Canyon Off-Street Bikeway, located on the eastern side of Peters Canyon channel, potentially increasing volumes on the City's portion of the trail. Since there will be no temporary closure for the Peters Canyon Off-Street Bikeway, it has been determined that there is no temporary use of this resource.

Summary of Preliminary Section 4(f) Determinations				
Property Name	Alternative	Effects Under Section 4(f)		
		Permanent Use	Temporary Use/ Temporary Occupancy	Constructive Use
Sand Canyon Trail	Alternative 2A	No Use	De Minimis	No Use
	Alternative 2B	No Use	De Minimis	No Use
Jeffrey Open Space	Alternative 2A	No Use	De Minimis	No Use
Trail	Alternative 2B	No Use	No Use	No Use
Orchard Park	Alternative 2A	<i>De minimis</i> (35 square feet)	Temporary occupancy (No Use)	No Use
	Alternative 2B	No Use	No Use	No Use
Heritage Park	Alternative 2A	<i>De minimis</i> (0.172 acre)	Temporary occupancy (No Use)	No Use
	Alternative 2B	No Use	No Use	No Use
Peters Canyon Off-	Alternative 2A	No Use	No Use	No Use
Street Bikeway	Alternative 2B	No Use	No Use	No Use

While the extent of project improvements is under review, it is expected that the project would result in the following:

The activities, features, and attributes of these Section 4(f) resources would not be adversely affected as discussed above. Currently, the IS/EA is scheduled for circulation to the public in Spring 2018. The Section 4(f) Evaluation will be included as an appendix to the IS/EA. As per FHWA and Caltrans guidelines, Caltrans will be in contact with you prior to completion of the IS/EA for your approval in order to finalize these *De Minimis* and temporary occupancy/no use findings. Additionally, we would be available to meet prior to circulation of the IS/EA to discuss the construction activity, additional detour options, and avoidance, minimization or enhancement opportunities.

Sincerely,

SMITA DESHPANDE Branch Chief Division of Environmental Analysis

cc: Ms. Jeannie Lee, OCTA
 Ms. Cheryl Lea, City of Irvine
 Ms. Alicia Raish, OC Parks/Operations/City of Irvine

DEPARTMENT OF TRANSPORTATION DISTRICT 12 1750 EAST 4TH STREET, SUITE 100 SANTA ANA, CA 92705 PHONE (657) 328-6000 FAX (657) 328-6522 TTY 711 www.dot.ca.gov/d12



Making Conservation a California Way of Life.

December 15, 2017

Mr. James Wootten Maintenance Inspector Specialist | Regional Trails and Bikeways OC Parks – Regional Trails and Parks 1 Irvine Park Road Orange, CA 92606

Dear Mr. Wootten:

Re: Interstate 5 (I-5) PA/ED Project (I-405 to SR-55) Section 4(f) Evaluation Relating to Peters Canyon Regional Trail and Bikeway

The California Department of Transportation (Caltrans), as the lead agency, in coordination with the Orange County Transportation Authority (OCTA) as the funding agency, is in the process of preparing a joint Initial Study/Environmental Assessment (IS/EA) for the Interstate 5 (I-5) PA/ED Project in Orange County, California, between Interstate 405 (I-405) and State Route 55 (SR-55).

Effective March 30, 2017, *Caltrans continues to assume FHWA responsibilities under NEPA*, *pursuant to the 23 USC 325 MOU, and the 23 USC 327 MOU, and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes*. The environmental review, consultation, and other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

The proposed I-5 PA/ED Project (I-405 to SR-55) may receive federal funding and/or discretionary approvals through the U.S. Department of Transportation (i.e., FHWA); therefore, documentation of compliance with Section 4(f) is required. The purpose of this letter is to share information from the Preliminary Section 4(f) Resource Analysis. Section 4(f) of the federal Department of Transportation Act of 1966 (49 U.S.C. § 303) declares that "[i]t is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Accordingly, a Preliminary Section 4(f) *De Minimis* Determination is proposed for Peters Canyon Regional Trail and Bikeway. The Section 4(f) Evaluation included in Appendix A of the Mr. James Wootten December 15, 2017 Page 2

Initial Study/Environmental Assessment (IS/EA) identifies the Section 4(f) resources in the Study Area, describes the nature and extent of the potential effects on the property, and describes measures to minimize harm to the affected resources.

Within the project limits, Peter Canyon Regional Trail and Bikeway is the only resource under the County of Orange's jurisdiction, and is subject to protection under the provisions of Section 4(f).

 Peters Canyon Regional Trail and Bikeway - The Peters Canyon Regional Trail and Bikeway is a regional Class I (off-street) trail that connects the cities of Tustin, Orange, Irvine, and Newport Beach. The existing off-street trail is approximately 4.6 miles long and is open for public use and passes under the I-5 Freeway, within the Orange County Flood Control District right-of-way. Through the project limits, the existing Class I (offstreet) trail is on the west side of the Peters Canyon Wash Channel and crosses under I-5. There is currently a missing segment of the trail in the City of Tustin. The trail currently terminates at the Metrolink railroad tracks near the Tustin city limits and continues from Warner Avenue to the south to the trail's terminus and connection to the San Diego Creek Trail at Barranca Parkway in the City of Irvine. At the missing trail segment, the Peters Canyon Trail connects to two Class I (off-street) trails for the length of the missing trail segment. There are future plans for the missing trail segment in the City of Tustin.

Caltrans, in cooperation with OCTA, is proposing to widen I-5 between I-405 and SR-55. The project objectives are to increase the mainline capacity within the project limits along the I-5 corridor, improve operational deficiencies of merge and diverge areas within the project limits along the I-5 corridor, improve the existing auxiliary lanes operations, and optimize access of the existing high-occupancy vehicle (HOV) lane. The goal of the proposed project is to also minimize environmental impacts as well as right-of-way acquisitions within the project limits. The project limits on I-5 extend from approximately 0.4 mile (mi) north of the I-5/I-405 interchange (Post Mile [PM] 21.3) to 0.2 mi south of SR-55 (PM 30.3). The proposed project would add one general-purpose lane in each direction on I-5, reestablish existing auxiliary lanes and construct new auxiliary lanes, improve several existing on- and off-ramp junctions, and widen and/or replace several structures.

Three alternatives, including the No Build Alternative, will be analyzed as a part of the Initial Study/Environmental Assessment (IS/EA):

- Alternative 1: No Build Alternative
- Alternative 2A: Add one general-purpose lane (generally, full standard widths are proposed)
- Alternative 2B: Add one general-purpose lane (includes nonstandard shoulder widths and nonstandard lane widths)

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Peters Canyon Regional Trail and Bikeway– De Minimis Temporary Use (Alternatives 2A and 2B)

Temporary trail closures during construction may be required on the segments of the Peters Canyon Regional Trail and Bikeway directly beneath the Peters Canyon Bridge for the Build Alternatives. Closure of this trail is anticipated to occur for up to 3 months and would only occur when construction activity is being conducted in the vicinity of the trail. It is anticipated that pedestrian/bicyclist access would be maintained by accessing the City of Irvine's Peters Canyon Off-Street Bikeway, located on the eastern side of the Peters Canyon channel. However, in the event that closure of both the County of Orange and City of Irvine trails to bicyclists occurs at this location, a detour plan has been developed for bicyclists. It is expected that pedestrian/bicyclist access can be maintained along one of the trails during construction. As shown on Figures 1 and 2, northbound trail users would exit the Peters Canyon Regional Trail and Bikeway at Walnut Avenue and travel southwest toward Culver Drive. Trail users would then turn left at Culver Drive and travel northeast on the Class II (on-street) bike lane on Culver Drive. At the intersection of Culver Drive and Bryan Avenue, the trail user would turn left onto the Class II bike lane on Bryan Avenue. A left turn onto Bryan Avenue would lead trail users back to an alternate entrance to the Peters Canyon Regional Trail and Bikeway. This detour would be available for both northbound and southbound trail users. Continuous access to the trail would be maintained based on the provision of detour routes during construction. Construction of the project would not prevent or substantially impair use of the trail. At the completion of construction, the trail segment at this location would be restored to its original alignment and to a condition as good as or better than prior to the project. The temporary detour would be part of the Transportation Management Plan (TMP) developed during the PS&E phase of the project. The trail closure plan of the Peters Canyon Regional Trail and Bikeway would be coordinated with the County of Orange and the City of Irvine. The effects of the Build Alternatives on this resource would not affect the activities, attributes and features that qualify the resource for protection under Section 4(f), with implementation of the measures described above, and, therefore those effects would be *de minimis*.

While the extent of project improvements is under review, it is expected that the project would result in the following:

Summary of Preliminary Section 4(f) Determinations				
Property Name	Alternative	Effects Under Section 4(f)		
		Permanent Use	Temporary Use	Constructive
				Use
Peters Canyon Regional	Alternative 2A	No Use	De Minimis	No Use
Trail and Bikeway	Alternative 2B	No Use	De Minimis	No Use

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The activities, features, and attributes of this Section 4(f) resource would not be adversely affected as discussed above. Currently, the IS/EA is scheduled for circulation to the public in Spring 2018. The Section 4(f) Evaluation will be included as an appendix to the IS/EA. As per FHWA and Caltrans guidelines, Caltrans will be in contact with you prior to completion of the IS/EA for your approval in order to finalize this *De Minimis* finding. Additionally, we would be available to meet prior to circulation of the IS/EA to discuss the construction activity, additional detour options, and avoidance, minimization or enhancement opportunities.

Sincerely,

SMITA DESHPANDE Branch Chief Division of Environmental Analysis

cc: Ms. Jeannie Lee, OCTA

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