

1. Section 4(f) Overview

Section 4(f), codified in federal law in 49 USC 303, declares that “it 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.” Section 4(f) protected resources include publicly owned parks; recreational areas of national, state or local significance; publicly owned school playgrounds, wildlife, or waterfowl refuges; or lands from a historic site of national, state, or local significance. One of the first steps in the Section 4(f) consultation process is identifying the entities and individuals who are considered the officials with jurisdiction for various types of property under Section 4(f). In the case of historic sites, the State Historic Preservation Officer (SHPO) has jurisdiction. For publicly owned refuges, recreation areas and parks, the public agency that owns the park is the official with jurisdiction.

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned park land; recreation area; or wildlife and waterfowl refuge of national, state, or local significance; or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if the following applies:

- there is no prudent and feasible alternative to using that land; and
- the program or project would include all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

If historic sites are involved, then coordination with the SHPO is also needed.

1.1. Section 4(f) Use Definitions

When a proposed project is adjacent to or on a property protected under Section 4(f), the impacts of the proposed project on that property must be evaluated. Section 4(f) defines the impact level by types of “use.” These uses occur when any of the conditions discussed in the following subsections are met.

1.1.1. PERMANENT/DIRECT USE

A permanent use of a Section 4(f) resource occurs when property is permanently incorporated into a transportation facility. Permanent use may occur as a result of partial or full acquisition or a permanent easement that allows permanent access onto the property for maintenance or other transportation-related purposes.

1.1.2. CONSTRUCTIVE USE

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the project’s proximity results in impacts 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 if the protected activities, features, or attributes of the resource are substantially diminished.

1.1.3. TEMPORARY OCCUPANCY

A temporary occupancy of a Section 4(f) resource occurs when a Section 4(f) property is required for project construction-related activities, the property is not permanently incorporated into a transportation facility, and the activity is not considered adverse by the agency with jurisdiction in terms of the preservation purpose of Section 4(f).

Temporary impacts to a Section 4(f) property may trigger the application of Section 4(f). 23 Code of Federal Regulations (CFR) 774.13(d) defines the following five temporary occupation exception criteria that must be met to determine that a temporary occupancy does not rise to the level of permanent/direct or constructive use for the purposes of Section 4(f):

- Duration is temporary (i.e., the occupancy is shorter than the time needed for construction of the project, and there is no change in ownership of the property).
- Scope of work is minor (i.e., the nature and magnitude of the changes to the Section 4(f) properties are minimal).
- There are no anticipated permanent adverse physical impacts or permanent interference with the protected activities, features, or attributes of the property.
- The property is restored to the same or better condition that existed prior to the project.
- There is documented agreement from the appropriate federal, state, or local officials having jurisdiction over the property regarding the previously listed conditions.

1.2. *De Minimis* Impact Determinations

When impacts to a Section 4(f) property are minor, as agreed to by the agency with jurisdiction over that property, Section 4(f) regulations can be satisfied through a *de minimis* determination.

De minimis impact is defined in 23 CFR 774.17 as follows:

- For parks, recreational areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that would not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f).
- For historical sites, a *de minimis* impact means that the California Department of Transportation (Caltrans) has determined that, in accordance with 36 CFR 800, no historical property is affected by the project or the project would have “no adverse effect” on the property in question. The SHPO and Advisory Council on Historic Preservation, if involved, must be notified that Caltrans intends to enter a *de minimis* finding for properties where the project results in “no adverse effect.”
- The officials with jurisdiction must concur in writing with a *de minimis* determination. For recreational or refuge properties, concurrence from the officials having jurisdiction over the properties is required. For historical sites, concurrence from the SHPO is required.

1.3. Section 6(F) of the Land And Water Conservation Fund Act (16 U.S.C. § 4601-8(F) and 36 C.F.R. Part 59.1)

State and local governments often obtain grants through the Land and Water Conservation Fund (LWCF) Act to acquire or make improvements to parks and recreation areas. Section 6(f) of this act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of Interior's (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 such conversions. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacements will be necessary.”

2. Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts.

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project while avoiding or minimizing environmental impacts. Caltrans proposes to make improvements on I-80 and US 50 from Kidwell Road near the eastern Solano County boundary (near Dixon), through Yolo County, and to West El Camino Avenue on I-80 and on US 50 to I-5 in Sacramento County.¹ The project would add managed lanes on I-80 and US-50 by a combination of lane conversion, restriping, and shoulder and median reconstruction with a concrete barrier. Drainage modifications would be required due to median reconstruction in the locations to which sheet flow currently drains. Existing ITS elements and infrastructure would be modified, and new ITS elements would be added, including ramp meters, fiber-optic conduit and cables, and overhead signs.

2.1. Project Alternatives

This section describes alternatives that were developed to meet the purpose and need of the project. The No Build Alternative (Alternative 1) is described below. Build Alternatives 2a, 3a, 4a, 5a, and 6a propose the same geometric footprint, but would incorporate different managed lane types. Build Alternatives 2b, 3b, 4b, 5b, and 6b propose the same geometric footprint, include an I-80 managed lane direct connector, but would incorporate different managed lane types. Build Alternatives 7a and 7b would not construct new lanes but would repurpose an existing lane instead; however, Build Alternative 7b would include the I-80 managed lane direct connector.

- Build Alternative 2a: Add a high-occupancy vehicle lane in each direction for use by vehicles with two or more riders (HOV 2+).
- Build Alternative 2b: Add a high-occupancy vehicle lane in each direction for use by vehicles with two or more riders (HOV 2+), and build an I-80 managed lane direct connector.

¹ I-80 corridor between PM 40.7 and PM 44.7 in Solano County, between PM 0.00 and PM 11.72 in Yolo County, and between PM 0.00 and PM 1.36 in Sacramento County; and US-50 between PM 0.00 and PM 3.12 in Yolo County and between PM 0.00 and PM 0.617 in Sacramento County.

- Build Alternative 3a: Add a high-occupancy toll lane in each direction for free use by vehicles with two or more riders (HOT 2+). Single-occupied vehicles would pay a fee for the lane usage.
- Build Alternative 3b: Add a high-occupancy toll lane in each direction for free use by vehicles with two or more riders (HOT 2+), and build an I-80 managed lane direct connector. Single-occupied vehicles would pay a fee for the lane usage.
- Build Alternative 4a: Add a high-occupancy toll lane in each direction for free use by vehicles with three or more riders (HOT 3+). Vehicles with less than three riders would pay a fee for lane usage.
- Build Alternative 4b: Add a high-occupancy toll lane in each direction for free use by vehicles with three or more riders (HOT 3+), and build an I-80 managed lane direct connector. Vehicles with less than three riders would pay a fee for lane usage.
- Build Alternative 5a: Add an express lane in each direction (i.e., everyone would pay a fee to use the lane, regardless of number of riders).
- Build Alternative 5b: Add an express lane in each direction (i.e., everyone would pay a fee to use the lane, regardless of number of riders), and build an I-80 managed lane direct connector.
- Build Alternative 6a: Add a transit-only lane in each direction.
- Build Alternative 6b: Add a transit-only lane in each direction, and build an I-80 managed lane direct connector.
- Build Alternative 7a: Repurpose the current number one general-purpose lane for use by vehicles with two or more riders (HOV 2+); no new lanes would be constructed.
- Build Alternative 7b: Repurpose the current number one general-purpose lane for use by vehicles with two or more riders (HOV 2+); no new lanes would be constructed. Build an I-80 managed lane direct connector.

This project contains a number of standardized measures, which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project.

The Build Alternatives consist of the following three geographic segments.

Segment 1

Segment 1 stretches from Kidwell Road in Eastern Solano County through Davis to the Eastern end of the Yolo Causeway east of Enterprise Boulevard in West Sacramento. Segment 1 consists of three sub-segments:

- *Segment 1a* is from Kidwell Road to Solano County/Yolo County Line.
- *Segment 1b* is from the Solano/Yolo County Line to west end of the Yolo Causeway.
- *Segment 1c* is from the start of the Yolo Causeway to east of Enterprise Boulevard.

Segment 2

Segment 2 starts just east of Enterprise Boulevard and continues north on I-80 to West El Camino Avenue.

Segment 3

Segment 3 starts at the I-80/US-50 Separation and continues east along US-50 to I-5 near downtown Sacramento. Segment 3 consists of two sub-segments:

- *Segment 3a* is the I-80/US-50 Separation to Jefferson Boulevard Undercrossing.
- *Segment 3b* is the Jefferson Boulevard Undercrossing to just east of I-5.

2.1.1. COMMON DESIGN FEATURES OF THE BUILD ALTERNATIVES

Common design features and standardized measures are shared among the Build Alternatives.

Managed Lanes

Managed lanes are highway facilities or a set of lanes where operational strategies are implemented to manage overall traffic congestion or in response to changing conditions (FHWA 2008). Managed lanes can include pricing, vehicle eligibility, or access control concepts. The lanes have flexibility to be used by different types of vehicles, depending on the need and can be actively managed to accommodate peak travel demands. Managed lanes would be designated using a striping pattern to distinguish between the mixed-flow.

Intelligent Transportation System/Transportation Management Systems

Each of the Build Alternatives would include placement of ramp meters and other ITS/Transportation Management Systems (TMS) such as closed-circuit television (CCTV) and changeable message signs. Several maintenance pullouts are proposed adjacent to I-80 on-ramps to accommodate an electrical cabinet for proposed ramp meters or other ITS/TMS infrastructure.

Proposed ITS elements would be installed on a new pole foundation; some existing ITS infrastructure in these locations would be abandoned or replaced. Accordingly, it is assumed that each ITS pole foundation would have up to a 6-foot radius permanent footprint with up to 10-foot radius temporary area for construction.

Structure Modifications

As summarized in Table 1, Build Alternatives would add improvements to existing structures to accommodate proposed Managed Lanes.

Table 1 Structure Modifications

Structure Name	Structure Number	Route	Post Mile	Alternative	Structure Work
South Fork Putah Creek	23-0054 R	Sol 80	42.36	All Build Alternatives	Place fiber optic conduit
Old Davis Rd Undercrossing	23-0155R	Sol 80	R43.5	All Build Alternatives	Place fiber optic conduit

Structure Name	Structure Number	Route	Post Mile	Alternative	Structure Work
South Davis Overhead	23-0156R	Sol 80	R43.93	All Build Alternatives	Place fiber optic conduit
S113/ E80 Connector Separation	23-0178F	Sol 113	R22.08	All Build Alternatives	Place fiber optic conduit
S113/ E80 Connector Separation	23-0179F	Sol 113	R22.17	All Build Alternatives	Place fiber optic conduit
Putah Creek Pedestrian Undercrossing	22-0194	Yol 80	0.01	All Build Alternatives	Place fiber optic conduit
Richard Boulevard Overcrossing RW NO. 3	TBD	Yol 80	0/0.60	All Build Alternatives	Retaining wall at abutment along eastbound I-80 off-ramp to Richards Boulevard
I-80 Managed Lane Direct Connector	TBD	Yol 80	9.5/10.0	Build Alternatives 2b, 3b, 4b, 5b, 6b, 7b	Proposed managed lane connector retaining wall #1; Proposed managed lane connector retaining wall #2

Source: Caltrans Draft Project Report (July 2021)

Ramp Modifications

Within Segment 2, eastbound ramp modifications would be constructed at I-80 eastbound on-ramp from Richards Boulevard to accommodate realignment within the right-of-way. In addition, ramp modifications would occur at the westbound I-80 off-ramp to County Road (CR)-32A/Chiles Road to accommodate additional bicycle/pedestrian pathway within the right-of-way.

Bicycle/Pedestrian Facilities

The Build Alternatives would replace the existing bicycle pathway pavement behind the gas station located north of West Capitol Avenue from PM 9.15 to PM 9.35. The existing bicycle pathway would be rerouted during repaving activities for up to two months, but repaving activities may occur at nighttime to minimize access disruption. To maintain access, bicycles traveling westbound would be redirected along West Capitol Avenue. Bicycles traveling eastbound would be redirected along a short segment of sidewalk on West Capitol Avenue and use the crosswalk at the West Capitol Avenue/westbound I-80 off-ramp intersection². Bicyclists would then continue eastbound along West Capitol Avenue using the existing bicycle lane. Caltrans would add crosswalk pavement marking across the westbound I-80 off-ramp to West Capitol Avenue and near the existing West Capitol Avenue crosswalk. In addition, Caltrans would add advanced warning signs to alert the motorists traveling on the westbound I-80 off-ramp to West Capitol Avenue before reaching the proposed crosswalk. Caltrans would place

² City of West Sacramento Municipal Code 10.32.020 states that bicycles are permitted on the public sidewalk but shall yield to any pedestrian.

signage as part of the traffic management plan to note the access updates and identify the bicycle/pedestrian detours.

The Build Alternatives would also replace the existing bicycle pathway pavement from PM 9.1 to the Yolo Causeway bridge deck approach at approximately PM 8.9. The bicycle pathway will be closed at night due to asphalt repaving activities or reversing control will be provided to pedestrians/ bicyclists. The existing Class I bicycle pathway along the Yolo Causeway would not require closure during construction activities.

The Build Alternatives would extend the westernmost limit of the existing Class I bicycle pathway from I-80 along Yolo Causeway to connect to CR-32A. The pathway extension would be located adjacent to the westbound I-80 off-ramp to CR 32A and would be approximately 12-foot-wide. The area surrounding the pathway extension would be graded to comply with the Americans with Disabilities Act of 1990 (ADA) regulations. A concrete barrier would separate the pathway extension from westbound off-ramp vehicular traffic. Once construction of the pathway extension along westbound I-80 off-ramp is complete, the Build Alternatives would conduct pavement rehabilitation from CR 32A to western Yolo Causeway Levee Road. During pavement rehabilitation activities, Levee Road would be closed. Bicycles would be redirected along the newly constructed pathway extension on westbound I-80 off-ramp to access the existing Class I bicycle pathway along Yolo Causeway, which would be built prior to rehabilitation activities on Levee Road.

The Build Alternatives would include widening the shoulders of CR-32A from the existing Levee Road path to just east of CR-105 to accommodate a standard Class I bicycle path. A future Yolo County project proposes widening the shoulders of CR-32A from CR-105 to the proposed Class I bicycle path along CR-32A to accommodate a standard Class II bicycle lane. Construction of the Class II bicycle lane would involve widening the shoulders by 4 feet for the Class II 6-foot lane on both sides with standard edge line striping. No barriers would be constructed. Caltrans would coordinate with Yolo County Public Works Department to complete this bicycle pathway design along CR 32A. Caltrans is clearing the environmental studies for the proposed Yolo County bike lane along CR32A.

Park-and-Ride Facility

Within Segment 2 of each of the Build Alternatives, a Park-and-Ride Facility would be constructed on the east side of Enterprise Boulevard in a 4.5-acre lot and would provide for approximately 300 parking spaces. Users of the Park-and-Ride Facility would have the option to park their cars for the day and connect to several county and regional transit services. The facility would be located partially within the existing Caltrans right-of-way and partially outside the existing Caltrans right-of-way.

Signage

The Build Alternatives would include roadside signs and overhead signs to provide symbolic or text messages that would guide and warn motorists and regulate the flow of traffic. Some of the signs would have hours of operation that restrict certain classes of vehicles during peak periods. Other signs would have information for motorists of the conditions or hazards that they are approaching.

Roadside signs would include regulatory and warning signs, route shields, and guide signs. These signs would be located on wood or metal posts. Wood posts would be approximately 6-inches by 6-inches while metal posts would be approximately 2.5-inches by 2.5-inches.

Roadside signs would be mounted on the freeway concrete median barrier or placed adjacent to the edge of the travel way up to 30 feet. However, placement of roadway signs would avoid environmentally sensitive areas.

Overhead signs would be mounted on versatile truss structures spanning above the travel lanes. The total height of the overhead sign structure (including the sign) would depend on the type of sign being mounted but would not likely exceed 40 feet in height. Overhead sign structures would have a concrete foundation of up to 6.5 feet diameter and would either be supported on a cast-in-drilled-hole pile foundation or supported by a structure.

Lighting

Street lighting would be added near CR-32A at the proposed bicycle pathway extension adjacent to the westbound off-ramp. Within Segment 2, bridge deck lighting with Type 21 Barrier-Rail-Mounted Lighting Standards would be constructed. Additional street lighting would be added to the Bryte Bend Bridge (I-80 Sacramento River Bridge Overhead), but it may also be added at proposed auxiliary lane locations if determined necessary during the design phase. Some nighttime lighting would occur during nighttime construction work activities. Signage would use reflective lettering.

Road Cut/Fill

Some locations would require full structural section reconstruction, and other locations would require cut or fill of the embankment due to road widening.

Grinding

Cold planing, the process of removing part of the surface of a paved area, would be required throughout the project limits. Cold planing would be required for ramp conforms at all ramps and may be required at other locations along the travel way wherever hot mix asphalt is currently in place. A mill (cold planing) and fill operation may be proposed to repair roadway surface scarring that occurs during temporary restriping associated with some stage construction operations.

Site Preparation

Site preparation would include delineating construction work areas, installing environmentally sensitive area (ESA) fencing around sensitive habitats and cultural resource areas, installing wildlife exclusion fencing around staging areas, installing best management practices (BMPs) in accordance with the project's Stormwater Pollution Prevention Plan (SWPPP), and removing vegetation, as summarized in Appendix E.

Utilities

Build Alternatives 2a, 3a, 4a, 5a, 6a, and 7a would not result in potential conflicts with existing utilities that are present along the I-80/US-50 corridor. Utility companies would require verification of facilities and involvement in construction plans. Accordingly, prior to construction, an estimated 15 test hole sites would be drilled at eight different locations for natural gas lines running transversely underneath I-80, the Yolo Causeway, and West Capitol Avenue in Sacramento where the new managed lane would be constructed with retaining walls and columns. Positive findings would verify whether the gas line would require relocation or how to redesign the project components to avoid conflicts with existing utilities.

Under all Build Alternatives, removal of an existing overhead sign near Westacre Park, within Caltrans right-of-way, would require an overhead electrical distribution line to be temporarily de-energized. Under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b, up to four 115-kilovolt overhead utility towers may be relocated or tower height increased near the new I-80 managed lane direct connector at the I-80/US-50 separation in West Sacramento.

Fiber-Optic Cable

The Build Alternatives would install a fiber-optic cable and associated fiber-optic splice boxes within the roadbed at the eastbound outside shoulder of I-80 from west of Kidwell Road in Solano County at PM 40.7 to PM 4.35 in Yolo County. Cut and cover or trenching would be the primary construction method and would require excavation of up to 42 inches deep to install within a 12-foot buffer surrounding the running line. Fiber-optic cable may also be placed via directional borings to avoid conflicts with existing utilities.

Right-of-Way and Temporary Construction Easements

The Build Alternatives would require Caltrans to acquire two private fee parcels to construct the proposed park-and-ride facility at Enterprise Boulevard (2.8 acres). A total of seven TCEs would be required along the project alignment.

Staging Areas

Staging areas would be located at the I-80/West El Camino Avenue interchange, South River Road, I-80/Richards Boulevard interchange, the I-80 and SR-113 interchange, West Capitol Avenue, and along Kidwell Road. These areas total 53.31 acres and would be used for equipment maintenance and storage of equipment, construction materials, fuels, lubricants, solvents, and other possible contaminants during construction.

Traffic Management During Construction

Various Transportation Management Plan (TMP) elements such as portable changeable message signs (CMS) and the California Highway Patrol Construction Zone Enhanced Enforcement Program would be used to minimize delays to the traveling public. Flaggers would be used to divert traffic. Prior to construction, a detailed TMP would be prepared.

Ramp closures are anticipated at all ramp locations adjacent to proposed widening or proposed mainline paving. Traffic would be detoured to the next interchange. Caltrans would also place signage as part of the TMP to note the access updates and identify the bicycle/pedestrian detours. Caltrans would install a cross walk at the westbound I-80 off-ramp across right turn movement to West Capitol Avenue as well as a temporary flashing beacon located upstream.

Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b may require a temporary, full closure on westbound US-50. Full closures would occur during the hours of the lowest volume of traffic (e.g., nighttime) or during a continuous 24- or 48-hour operation. The primary detour for westbound US-50 traffic would be to use northbound I-5 to westbound I-80. Local traffic would use other interchanges in the area.

Vegetation and Tree Removal

Vegetation clearing would be required and would be confined to the area within the project footprint, including construction access routes. Vegetation removal and clearing would be

completed with hand tools where possible. Chainsaws, grinders, and excavators would be used for vegetation that cannot be removed by hand. All vegetation would be removed within proposed cut and fill lines as well as within temporary impact lines where ITS components would be constructed. Within areas of temporary impact, vegetation removal would be avoided to the extent possible.

Construction Equipment

The equipment used for the proposed work of the Build Alternatives would be similar among the Build Alternatives. Center median work would use excavators, scrapers, motor graders, loaders, backhoes, pavers, concrete barrier slip form pavers, truck mounted cranes, 18-wheel trucks, dump trucks, and water trucks. Reconstruction and modification of ramps/gores/shoulder embankments would use excavators, motor graders, loaders, backhoes, pavers, 18-wheel trucks, dump trucks, and water trucks. Road surfacing work, including placement for sensors in the road surface, would use core drillers, trailers containing and dispersing sealant, and water trucks.

Construction of the I-80 managed lane direct connector under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b would require pile driving to install the footings to a depth of up to 40 feet. Equipment would also include a crane (for pile driving), excavator, dozer, loader, manlift, articulated 4x4 forklift, truck, dump truck, trailer unit air compressor, and water truck. This construction equipment would also be used for structural sign mounts along with a truck mounted crane for all Build Alternatives. A truck-mounted auger would be used for installing roadside signs.

Ground Disturbance

The depth of ground disturbance would vary throughout the project limits. At locations where CMS, sign structures, or piles would be installed, disturbance could be up to 30 feet deep. As described, construction of the I-80 managed lane direct connector under Build Alternatives 2b, 3b, 4b, 5b, 6b, and 7b would require pile driving to install the footings to a depth of up to 40 feet. At locations of culverts, depth of ground disturbance could vary from 3 feet to 10 feet (i.e., the estimated depth to the bottom of a culvert or inlet). At locations of linear electrical facilities such as fiber-optic and conduit installations, the ideal depth is typically 4 feet, assuming 42 inches of cover; however, depth could be increased to avoid conflicts with existing or proposed drainage or existing utilities.

Site Cleanup and Post-Construction Activities

All construction materials and debris would be removed from the construction work areas and recycled or properly disposed of off-site. Caltrans would restore all areas temporarily disturbed by project activities, such as staging areas and access roads, to near or better than pre-construction conditions in accordance with applicable permits and Caltrans requirements.

2.1.2. UNIQUE FEATURES OF THE BUILD ALTERNATIVES

Build Alternatives 2a and 2b: HOV 2+ Managed Lane

Lane Configuration – Build Alternatives 2a and 2b

Build Alternatives 2a and 2b would begin at the Solano/Yolo County Line west of Davis to West El Camino Avenue on I-80 and end at I-5 on US-50 in Sacramento County. Build Alternatives 2a and 2b would include an HOV 2+ managed lane in the eastbound and westbound direction. This would be accomplished by constructing in the median from the Solano/Yolo County line to west

of the Yolo Causeway and continuing eastward by restriping to West El Camino Avenue on I-80 and to I-5 on US-50 in Sacramento County.

Build Alternative 2b would involve construction of an I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 2a. The I-80 managed lane direct connector would provide a direct connection of the HOV 2+ managed lane by flying over US-50 at the I-80/US-50 Interchange. The connector would include a retaining wall on either side and would travel underneath the existing eastbound connector from I-80 to US-50. The proposed managed lane direct connector would be constructed of columns and include concrete barrier type 842 railings.

Segment 1

Segments 1a, 1b, and 1c would be restriped with 6-inch thermoplastic traffic stripes for three mixed-flow lanes and one managed lane in each direction, westbound and eastbound.

Within Segment 1b, from just west of the Solano/Yolo County Line to the west end of the Yolo Causeway, the project would involve replacement of the existing inside shoulders and construction of the eastbound and westbound median from around Richards Boulevard to 1.5 miles east of Mace Boulevard to accommodate managed lanes in the eastbound and westbound directions. The new shoulders and construction areas would be asphalt concrete material. The median barriers would be upgraded from a metal beam guard rail to a reinforced concrete barrier.

Segment 2

Within Segment 2, the Bryte Bend Bridge would be restriped to accommodate the HOV 2+ managed lane in each direction. Reducing lane and shoulder widths would accommodate a fourth lane on the Bryte Bend Bridge. The bridge striping would change from three lanes (two 12-foot lanes and one 11.5-foot lane) to four lanes (four 11-foot lanes) with 1-foot inside and 2.5-foot outside shoulders.

Segment 3

Within Segment 3a, from I-80/US-50 Separation to Jefferson Boulevard Undercrossing, the pavement would be restriped to convert one mixed-flow lane in each direction to managed lanes.

Within Segment 3b, from the Jefferson Boulevard Undercrossing to just east of I-5, the Jefferson Boulevard Undercrossing (Br. No. 22-0106 L/R), and the Sacramento River viaduct (Br. No. 24-0014 R/L) between Jefferson Boulevard and the I-5/US-50 interchange would be restriped to add an additional managed lane in each direction.

Lane Access – Build Alternatives 2a and 2b

An HOV lane is a type of managed lane that allows qualified users, who meet the minimum number of passengers, to use the managed lane. The number of vehicle occupants required to qualify can vary depending on location. Under Build Alternatives 2a and 2b, vehicles with two or more occupants would be permitted to access the HOV lane, and all other vehicles would be prohibited from using those lanes. The HOV lanes would be designated using a striping pattern and a diamond marking to distinguish them from mixed-flow lanes and would operate only during peak commute hours.

Signage – Build Alternatives 2a and 2b

Approximately 45 overhead signs would be replaced or proposed within the project area. Several existing overhead signs would be removed and not replaced. In addition, 311 roadside signs would be replaced and 221 roadside signs are proposed within the median or the shoulder. Proposed signage would be the same for Build Alternatives 2a and 2b.

Drainage/Culverts – Build Alternatives 2a and 2b

Anticipated work includes extending existing culverts through existing unpaved medians, extending existing culverts at locations where construction may occur outside the existing edge of pavement lining, and possibly abandoning existing culverts where median construction would occur in crowned sections of the roadway. New drainage inlets and culverts are proposed to be replaced or repaired to accommodate areas where existing shoulders are being narrowed, to accommodate additional runoff due to the increased pavement area, or to perpetuate existing drainage patterns. The linings of one pipe would occur using cast-in-place-pipe lining (CIPP). CIPP is a method to repair pipes without needing to trench by inserting a liner inside the existing culvert pipe.

Build Alternative 2a and Build Alternative 2b would construct 5 new culverts and replace or improve 21 existing culverts. As described, many of the proposed drainage features would be located within the construction footprint of the median for the new HOV 2+ managed lane. In addition, proposed culverts would traverse beneath the freeway to convey drainage to a new outlet. In these instances, the freeway would be trenched using an excavator and the barrel would be installed. Once the barrel is installed, the trench would be backfilled and compacted back to preconstruction conditions. Trenching across the freeway travel lanes would occur in segments during low peak (nighttime) traffic hours to maintain access. Construction of each new or replaced culvert would occur over approximately 2 nights; however, construction of several culverts could occur concurrently as further described in the construction schedule. It is assumed each of these culvert repair or replacement areas would have a 20-foot by 20-foot temporary construction impact footprint, not to exceed the roadway right of way. Proposed drainage features for the I-80 managed lane direct connector, under Build Alternative 2b, would occur within the construction footprint of the I-80 managed lane direct connector.

Construction Schedule – Build Alternatives 2a and 2b

Construction of Build Alternative 2a is anticipated to take approximately 443 construction working days over 22 months. Construction of Build Alternative 2b is anticipated to take approximately 732 construction working days over 36 months. Construction would potentially commence in Spring 2025. Due to high daytime traffic volumes, nighttime work would be expected. Both daytime and nighttime work should be anticipated throughout the project duration.

Build Alternatives 3a and 3b: HOT 2+ Managed Lane

Build Alternatives 3a and 3b would be the same as Build Alternatives 2a and 2b, respectively, but would include an HOT 2+ managed lane instead of an HOV 2+ lane. Build Alternative 3b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 3a.

The HOT managed lane would allow vehicles with a minimum two-person occupancy to use the lane for free, while single-occupied vehicles would pay for the lane usage. All other project

components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Approximately 79 overhead signs would be replaced or proposed within the project area. Several existing overhead signs would be removed and not replaced. In addition, 311 roadside signs would be replaced and 373 roadside signs are proposed within the median or the shoulder.

Build Alternatives 4a and 4b: HOT 3+ Managed Lane

Build Alternatives 4a and 4b would be the same as Build Alternatives 2a and 2b, respectively, but would include an HOT 3+ managed lane instead of an HOV 2+ lane. Build Alternative 4b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 4a.

The HOT managed lane would allow vehicles with a minimum three-person occupancy to use the lane for free. Vehicles with less than three riders would pay for the lane usage. Vehicles with two passengers may pay reduced or full tolls to travel within the HOT lane. All other project components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Proposed signage for Build Alternatives 4a and 4b would be the same as Build Alternatives 3a and 3b, respectively.

Build Alternatives 5a and 5b: Express Managed Lane

Build Alternatives 5a and 5b would be the same as Build Alternatives 2a and 2b, respectively, but would include an express lane instead of an HOV 2+ lane. Build Alternative 5b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 5a. An express lane is a managed lane that allows vehicles of any occupancy to access a dedicated lane once a toll is paid. All other project components would be the same as Build Alternatives 2a and 2b, respectively, with the exception of signage locations.

Proposed signage for Build Alternatives 5a and 5b would be the same as Build Alternatives 3a and 3b, respectively.

Build Alternatives 6a and 6b: Transit-Only Managed Lane

Build Alternatives 6a and 6b would be the same as Build Alternatives 2a and 2b, respectively, but would include transit-only managed lanes instead of HOV 2+ lanes. Build Alternative 6b would involve construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 6a. A transit-only lane is a managed lane that allows only approved public transit vehicles, such as bus services, to access a dedicated lane. All other project components would be the same as Build Alternatives 2a and 2b, including the proposed signage for Build Alternatives 6a and 6b, respectively.

Build Alternatives 7a and 7b: Repurpose Lanes to HOV 2+ Managed Lane

Build Alternatives 7a and 7b would repurpose the current number one general-purpose lanes to HOV 2+ managed lanes. No new lanes would be constructed. Build Alternative 7b would involve

construction of the I-80 managed lane direct connector in addition to the construction activities planned for Build Alternative 7a.

Lane Configuration - Build Alternatives 7a and 7b

Build Alternatives 7a and 7b would maintain the existing median pavement delineation, unpaved median, and add an HOV 2+ lane by repurposing an existing mixed-flow lane (lane number one). As a result, Build Alternatives 7a and 7b would not shift the edge of travel way into the median or require barrier beam removal within the median.

Lane Access - Build Alternatives 7a and 7b

Vehicles with two or more occupants would be permitted to access the HOV 2+ lane, and all other vehicles would be prohibited from using them. The HOV 2+ lanes would be designated using a striping pattern and a diamond marking to distinguish them from mixed-flow lanes. HOV 2+ lanes would only operate during peak commute hours.

Signage – Build Alternatives 7a and 7b

Proposed signage for Build Alternatives 7a and 7b would be the same for Build Alternatives 2a and 2b, respectively.

Drainage/Culverts – Build Alternatives 7a and 7b

Build Alternatives 7a and 7b would repurpose the current number one general-purpose lanes to HOV 2+ managed lanes. Therefore, culvert construction associated with Build Alternative 7a would only be related to replacements or improvements to 18 existing culverts. Build Alternative 7b would construct 5 new culverts associated with the I-80 managed lane direct connector. Construction methods would be the same as Build Alternative 2a and 2b, respectively. The lining of one pipe would also occur using CIPP. As stated earlier, CIPP is a method to repair pipes without needing to trench by inserting a liner inside the existing culvert pipe.

Construction Schedule – Build Alternatives 7a and 7b

Construction of Build Alternative 7a is anticipated to take approximately 180 construction working days over 10 months. Construction of Build Alternative 7b is anticipated to take 732 construction working days over 36 months to complete. Construction would potentially commence in Spring 2025. Due to high daytime traffic volumes, nighttime work would be expected. Both daytime and nighttime work should be anticipated throughout the project duration.

Alternative 1 – No Build Alternative

Alternative 1, the No Build Alternative, would maintain the existing conditions, and no work would be conducted to relieve current traffic congestion to improve traffic flow, mobility, and travel time reliability while at the same time reducing vehicle emissions and travel costs. The No Build Alternative would not provide a transportation facility that functions for all users, including bicyclists, pedestrians, local transit services, and freight. Recurring travel demand would continue to exceed the current design capacity of the highway, resulting in severe traffic congestion and impaired mobility. Additionally, the transportation network would not include adequate facilities for all modes of transportation.

The No Build Alternative assumes programmed and planned improvements to the current corridor. While there are numerous planned or programmed transportation projects within the region that can impact future travel patterns, this section focuses only on those future baseline improvements that directly impact the project area. The baseline improvement projects within the project area are listed in Table 2.

3. Description of Section 4(f) Resources

Section 4(f) resources in the project area include publicly owned recreational resources and historic properties. The study area for Section 4(f) was 500 feet from the edge of the proposed project. This distance is based on the nature of the proposed project.

3.1. Historic Properties

The Caltrans Office of Cultural Resources Studies conducted research, architectural history surveys, extended phase I studies, and evaluations of cultural resources within the area of potential effects (APE) in various dates in 2021. Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking because there are no historic properties within the APE. Based on these studies and findings summarized in the Historic Property Survey Report (December 6, 2020), no portion of any historic properties will be physically incorporated into the project and as evidenced by the Finding of No Historic Properties Affected and there are no proximity impacts that are anticipated to rise to the level of substantial impairment. As such, the undertaking would not result in any Section 4(f) use or *de minimis* finding to any historic properties or historical resources, regardless of alternative.

3.2. Public Parks and Wildlife Facilities

Table 1 summarizes public parks and wildlife areas within 500 feet of the project area, which are also depicted on Figure 2 at the end of this report. There are nine (9) public parks including a dog park and bike park, two (2) nature areas, and one (1) wildlife area within the 500-foot buffer, with eight (8) of the recreation areas being directly adjacent to the proposed project and existing Caltrans right-of-way.

Table 1. Public Parks and Wildlife Areas within 500 Feet of the Proposed Project, Listed Generally East to West.

Park Name	Facility Type	Distance/Relationship to Project
River Otter Park	Public Park	Adjacent
Sand Cove Park	Public Park	400 feet
Meadowdale Park	Public Park	Adjacent
Southside Park	Public Park	500 feet
O'Neil Park	Public Park	500 feet
Westacre Park	Public Park	Adjacent
Roland Hensley Bike Park	Public Bike Park	Adjacent and Underneath
Yolo Bypass Wildlife Area*	Wildlife Area	Adjacent and Underneath
Playfields Park*	Public Park	50 feet

Toad Hallow Dog Park	Public Dog Park	400 feet
Putah Creek Riparian Reserve	Trails/Nature Area	Adjacent
U.C. Davis Arboretum	Trails/ Nature Area	Adjacent

*These resources received funds from the LWCF Act and are therefore also 6(f) resources

3.2.1. RIVER OTTER PARK

River Otter Park is managed by the City of Sacramento and is located adjacent to the project area at 2303 Barandas Drive, Sacramento. The small (1.88-acre) park features a playground, volleyball court, and picnic tables.

3.2.2. SAND COVE PARK

Sand Cove Park is a beach and river access park maintained by the City of Sacramento that spans 9.88 acres and is approximately 400 feet from the project area. Fishing and other water activities are common, with a small parking lot and access off the Garden Highway.

3.2.3. MEADOWDALE PARK

Meadowdale Park is located at 3625 West Capitol Avenue in West Sacramento and is adjacent to the project area. The 4-acre park is managed by the City of West Sacramento and includes picnic tables, barbeques, a playground, and parking. Access is from West Capitol Avenue.

3.2.4. SOUTHSIDE PARK

Southside Park is managed by the City of Sacramento and is located at 2115 6th Street, Sacramento. It is approximately 500 feet from the proposed project area. The 20-acre park has numerous facilities including tennis courts, basketball courts, wading pool, jogging path, picnic tables, and age-specific playgrounds.

3.2.5. O'NEIL PARK

O'Neil Park is located at 715 Broadway, Sacramento, and consists of a lighted soccer field and a baseball/softball field with restroom facilities and parking. It is maintained and managed by the City of Sacramento and is approximately 500 feet from the project area, with access and street parking is along Broadway and 8th Streets.

3.2.6. WESTACRE PARK

Westacre Park is located adjacent to the project area at 1755 Evergreen Avenue in West Sacramento. The City of West Sacramento maintains the 5-acre park which features an enclosed skateboard park, picnic tables, and shade areas. The parking lot for Westacre Park is accessed from Evergreen Avenue.

3.2.7. ROLAND HENSLEY BIKE PARK

The small (0.5 acre) Roland Hensley Bike Park in West Sacramento is a Class one bicycle lane at 4940 West Capitol Avenue, which connects to the east end of the Yolo Causeway Bicycle

Path. It includes a picnic area and water fountain. Access to parking for the City of West Sacramento managed park is from Tule Jake Road.

3.2.8. YOLO BYPASS WILDLIFE AREA

The Yolo Bypass Wildlife Area is comprised of seventeen separate management units covering approximately 16,600 acres, with the portion along the project area managed by California Department of Fish and Wildlife, Bay Delta Region. It is protected habitat for fish, waterfowl, migratory birds, raptors, invertebrates, snakes, and turtles. Vegetation types include managed seasonal and permanent wetland, natural seasonal wetland, natural perennial wetland, and riparian woodland. The Wildlife Area is open daily to the public for wildlife viewing and fishing. The wildlife area includes designating self-driving tours along levees. Land also includes Tule Ranch, a working cattle ranch with extensive vernal pool areas and a Class 1 bicycle pathway on Levee Road managed by Yolo County.

3.2.9. PLAYFIELDS PARK

Playfields Park is maintained by the City of Davis and is located at 2500 Research Drive, Davis, and is approximately 16 acres in size and is approximately 50 feet from the project area. It features three baseball/softball fields, a soccer field, batting cages, basketball hoops and playground equipment. The large parking lot is accessed from Research Drive.

3.2.10. TOAD HOLLOW DOG PARK

Toad Hollow Dog Park is a 2.5 acre City of Davis off-leash dog park and is approximately 400 feet from the project area. The address is 1919 2nd Street, Davis. It has shade trees, benches, and parking accessed from 2nd Street.

3.2.11. PUTAH CREEK RIPARIAN RESERVE

The University of California, Davis (UC Davis) Putah Creek Riparian Reserve is a 640-acre natural riparian and grassland ecosystem that runs along the southern edge of the UC Davis campus. Most of the reserve is open to the public and is maintained and operated by the UC Davis Arboretum and Public Garden.

3.2.12. UNIVERSITY OF CALIFORNIA DAVIS ARBORETUM AND PUBLIC GARDEN

The UC Davis Arboretum and Public Garden spans the campus' 5,300-plus acres and includes the historic Arboretum. It connects with the Putah Creek Riparian Reserve and is open to the public. The gardens, natural areas and landscapes are open 24 hours a day, every day of the year. Access is at various locations, but the vistor headquarters are located off of Le Rue Road.

3.3. Potential Impacts to Section 4(f) Resources

This section provides an evaluation of the potential use of recreation facilities subject to Section 4(f) evaluation within the 500-foot project study area. No public parks, recreation facilities, historic properties, or archaeological sites are expected to have a "permanent/direct use" under Section 4(f) because the project would not result in permanent partial or full acquisition or easement of a Section 4(f) resource. The nature of the project would not result in a constructive

(“indirect”) use that could substantially impair the key activities, features or attributes of protected facilities or resources due to the project’s proximity.

Construction-related activities within Roland Hensley Bike Park and Yolo Bypass Wildlife Area would more likely result in a temporary occupancy as further described in Section 3.3.4, but the duration of the occupancy would be temporary, the scope of work would be minor, no adverse impacts to protected activities or access would occur, the property would be restored to same or better condition than existing prior to the project, and the local jurisdictions would be involved accordingly. Therefore, the requirements for an exception under 23 CFR 774.13(d) will be met. Concurrence with the official with jurisdiction for each of these properties will be obtained before approval of the final environmental document if it would occur temporary occupancy.

Of the public facilities subject to further Section 4(f) evaluation, there are seven (7) facilities close enough to the project to necessitate more detailed analysis (Figure 3). As confirmed with the additional analysis, the project would not result in any Section 4(f) use to any recreation resources, regardless of Build Alternative.

3.3.1. RIVER OTTER PARK

River Otter Park is located adjacent to project area at 2303 Barandas Drive, Sacramento. The park is currently located along the Interstate 80 (I-80) right-of-way, and access would not be disrupted under Build Alternatives 2a and 2b through 7a and 7b as no construction, staging, or other work is proposed near the park. As such, there is no Section 4(f) impact under any proposed alternative and there would be no proximity impacts.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the park.

Constructive Use: The park is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 “Dust Control”, Section 14-9 “Air Quality” (Standard Measure GHG-1) and Section 18 “Dust Palliatives.” The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as

a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use of River Otter Park.

Temporary Occupancy: No construction activities or project components are proposed within River Otter Park. Access to park facilities would not be disrupted, and park users would not be impacted. Standard measures would further reduce potential noise or air quality impacts during construction along the I-80 corridor, as described above.

3.3.2. MEADOWDALE PARK

Meadowdale Park is located at 3625 West Capitol Avenue in West Sacramento. Alternatives 2a and 2b through 7a and 7b would have no impact because no construction, staging, or work is planned near this resource. However, Build Alternative 2b, 3b, 4b, 5b, 6b, and 7b include cut and fill excavation for a new connector ramp approximately 100 feet from the park. There would be no proximity impacts.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the park.

Constructive Use: Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Meadowdale Park. The park is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control", Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives". The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park.

Temporary Occupancy: There would be no temporary use of the park and access to the park would remain open.

3.3.3. WESTACRE PARK

Westacre Park is located adjacent to the project area at 1755 Evergreen Avenue in West Sacramento. The parking lot for Westacre Park is accessed from Evergreen Avenue, and access would not be disrupted. Build Alternatives 2a through 7a and 2b through 7b propose a CMS sign along westbound 50 (PM 2.01), about 850 feet west of Westacre Rd with the sign post located behind the soundwall, within State right of way and adjacent to Westacre Park. As detailed below, there would not be an impact under Build Alternatives 2a and 2b through 7a and 7b and no proximity impacts because no construction is proposed near the park.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the park. Construction access will be made from Westacre Road and State right of way only.

Constructive Use: Under all Build Alternatives, removal of an existing overhead sign near Westacre Park, within the Caltrans right-of-way, would require an overhead electrical distribution line to be temporarily de-energized. In addition, a roadway sign is proposed adjacent to Westacre Park, within the Caltrans I-80 right-of-way. According to the Visual Impact Analysis prepared for the project, potential visual effects are buffered by mature trees, which would remain (Caltrans 2022b).

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control", Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives". The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

Temporary Occupancy: Construction activities or project components are proposed adjacent to but not within Westacre Park. Access to park facilities would not be disrupted, and park users would not be impacted. Standard measures would further reduce potential noise or air quality impacts during construction along the I-80 corridor, as described above. Access to the park will be maintained during construction.

3.3.4. ROLAND HENSLEY BIKE PARK

Roland Hensley Bike Park in 4940 West Capitol Avenue, West Sacramento, connects to the east end of the Yolo Causeway Bicycle Path. Access to the bike park would not be permanently altered under any alternative. The existing bicycle pathway would be rerouted during repaving activities, but repaving activities may occur at nighttime to minimize access disruption or reversing pedestrian/ bicycle controls may be implemented during construction. To maintain access, bicycles traveling westbound would be detoured along West Capitol Avenue. Bicycles traveling eastbound would be redirected along a short segment of sidewalk on West Capitol Avenue and use the crosswalk at the West Capitol Avenue/westbound I-80 off-ramp intersection. Bicyclists would then continue eastbound along West Capitol Avenue using the existing bicycle lane. Caltrans would install a cross walk at the westbound I-80 off-ramp across right turn movement to West Capitol Avenue as well as a temporary flashing beacon located upstream. Because park and bicycle access would be continued, no Section 4(f) impacts would occur as a result of any Build Alternatives 2a and 2b through 7a and 7b, but constructive use is analyzed in more detail below.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the park.

Constructive Use: Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Roland Hensley Bike Park. Under Alternatives 2b, 3b, 4b, 5b, 6b, and 7b, construction of a connector ramp is proposed but this work is approximately 550 feet from the park, and noise or dust is not anticipated to impact the resource. Therefore, there are no proximity impacts that would rise to the level of substantial impairment.

Temporary Occupancy: As described, implementation of the any of the Build Alternatives would include repaving of the existing Class I bikeway through Roland Hensley Bike Park to improve the condition of the existing recreational resource to be better than existing prior to the project. During construction, bicycles would be detoured and connectivity would remain open, as described above. Users would not be impacted as required by Caltrans Standard Measure TT-1, which states that pedestrian and bicycle access would be maintained during construction. As part of Standard Measure TT-3, a traffic management plan would include the detour plan. In addition, a 0.2-acre construction staging area is located partially within the park; however, would be located in an areas that is already paved and fenced off from the bike path. As such, the construction staging area would have no effect on the recreational function of the park. None of the temporary construction-related impacts would adversely affect the activities, features, or attributes of the park.

Specifically, temporary occupancy is supported by the following: (1) the duration of the proposed work is temporary, less than the overall project construction period, and no change in property ownership would occur; (2) the work is confined to paving the trail portion and minor staging in an unused area only, and would result in minimal changes to the resource, including improvement to the trail; (3) no permanent adverse impacts to the park and no interference with the protected activities, features, or attributes of the park would occur, as detours and night work would ensure that access would not be impeded; (4) the disturbed land would be fully restored to at least as good condition, in this case improved; and, (5) concurrence by the City of West Sacramento, as the officials with jurisdiction, was obtained on April 15, 2024.

3.3.5. YOLO BYPASS WILDLIFE AREA

The Yolo Bypass Wildlife Area's approximately 16,600 acres, with 30 acres (0.02 percent) overlapping the Environmental Study Limit. No Section 4(f) impact is anticipated for the Yolo Bypass Wildlife Area. Build Alternatives 2a and 2b through 7a and 7b would not directly or temporarily use the wildlife area and would be no significant construction work which would/could cause a constructive use. There would be no proximity impacts.

Direct Use: Implementation of the any of the Build Alternatives would not require acquisition of park property, and therefore no direct use of the wildlife area.

Constructive Use: The project does not propose construction activities, beyond restriping, in the portion of I-80 that traverses above the Yolo Bypass Wildlife Area. Therefore, indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use.

Temporary Occupancy: Implementation of the Build Alternatives would include pavement rehabilitation from CR 32A to western Yolo Causeway Levee Road, of which a sliver of Levee Road appears to be partially located within the Yolo Bypass Wildlife Area. The Class 1 bicycle pathway along Levee Road is managed by Yolo County. During pavement rehabilitation activities, Levee Road would be closed. Bicycles would be detoured along the newly constructed pathway extension on westbound I-80 off-ramp to access the existing Class I bicycle pathway along Yolo Causeway, which would be built prior to rehabilitation activities on Levee Road. Access would not be disrupted, and users would not be impacted. In addition, the features of the wildlife area that qualify the resource under Section 4(f) and Section 6(f) are associated with the wildlife viewing and hiking trails located south of I-80, and are not associated with Levee Road (CDFW 2021).

Specifically, temporary occupancy is supported by the following: (1) the duration of the proposed work is temporary, less than the overall project construction period, and no change in property ownership would occur; (2) the work is confined to pavement rehabilitation activities on Levee Road, and would result in minimal changes to the resource; (3) no permanent adverse impacts to the resource and no interference with the protected activities, features, or attributes of the park would occur, and detours would ensure that access would not be impeded; (4) the disturbed land would be fully restored to at least as good condition, in this case improved; and, (5) concurrence by Yolo County, as the officials with encroachment permit jurisdiction (Issued Permit ENC 24-019), was obtained on April 10, 2024.

3.3.6. PUTAH CREEK RIPARIAN RESERVE

The UC Davis Putah Creek Riparian Reserve is a 640-acre natural riparian and grassland ecosystem that runs along the southern edge of the UC Davis campus. Most of the reserve is open to the public and is maintained and operated by the UC Davis Arboretum and Public Garden. Build Alternatives 2a and 2b through 7a and 7b would not result in a Section 4(f) impact because no project elements or construction is planned near the reserve besides placing fiber optic conduit along the existing structure at PM 42.36.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the reserve would occur.

Constructive Use: Indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of Putah Creek Riparian Reserve. Small portions of

the reserve are located near the project and is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 “Dust Control”, Section 14-9 “Air Quality” (Standard Measure GHG-1) and Section 18 “Dust Palliatives”. The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park’s activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

Temporary Occupancy: There would be no temporary use or impacts to access to the Putah Creek Riparian Reserve or to access to the reserve.

3.3.7. UNIVERSITY OF CALIFORNIA DAVIS ARBORETUM AND PUBLIC GARDEN

The UC Davis Arboretum and Public Garden spans the campus’s 5,300-plus acres and includes the historic Arboretum. It connects with the Putah Creek Riparian Reserve and is open to the public. The gardens, natural areas and landscapes are open 24 hours a day, every day of the year. Access is at various locations, but the visitor headquarters is located off of Le Rue Road. No alternative would result in a Section 4(f) use to the resource.

Direct Use: There would be no acquisition of park property, and therefore no direct use of the park

Constructive Use: Portions of the resources are located near the proposed project, However, indirect air quality and noise impacts as a result of the proposed project are not expected to result in a constructive use of UC Davis Arboretum and Public Garden. The resource is currently adjacent to the Caltrans I-80 right-of-way and is therefore currently subject to indirect air quality and noise impacts.

The Air Quality Report prepared for the project determined that dust would be generated during grading and construction operations (Caltrans 2023a). Diesel exhaust from construction vehicles may also pose both a health and nuisance impact to nearby receptors. However, these

construction activities are expected to occur during a relatively short time. Caltrans special provisions and standard specifications include the requirement to minimize or eliminate dust through application of water or dust palliatives. The following construction dust and equipment exhaust emissions measures shall be implemented when practical, during all phases of construction work: Control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 "Dust Control", Section 14-9 "Air Quality" (Standard Measure GHG-1) and Section 18 "Dust Palliatives". The proposed project would also comply with rules and regulations pertaining to the control of fugitive dust and prevention of public nuisance published by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).

The Noise Study Report prepared for the project determined that construction activities would result in temporary increases to noise and vibration at adjacent receptors (Caltrans 2022a). However, construction activities would follow applicable local regulations and would be short-term and intermittent. Furthermore, all construction equipment would be required to conform with Section 14-8.02, Noise Control, of the Caltrans Standard Specifications. In addition, noise-generating activities would be restricted between certain hours and unnecessary idling within 100 feet of residences would be prohibited. As a result, indirect air quality and noise impacts as a result of the proposed project are not expected to result in substantial impairment to any of the park's activities, features or attributes. Therefore, there would not be a constructive use that would substantially impair the activities, features, and attributes of the park. Therefore, impacts from the project would not constitute a constructive use.

A new overhead sign is proposed within Caltrans right-of-way but would be visible from the UC Davis Arboretum and Public Garden. According to the visual impact analysis prepared for the project (Caltrans 2022b), the overall level of visual impact is expected to be low because of the sign's distance from potential viewers and vegetative screening (as depicted below). Therefore, no proximity impacts that rise to the level of substantial impairment are anticipated.

Temporary Occupancy: There would be no temporary use of the University of California Davis Arboretum and access to the garden will be maintained during construction.

Existing View and Simulated Conditions from PM SOL R43.28 looking south.



Photo source and date: Stantec, April 2021



4. Description Of Section 6(f) Resources

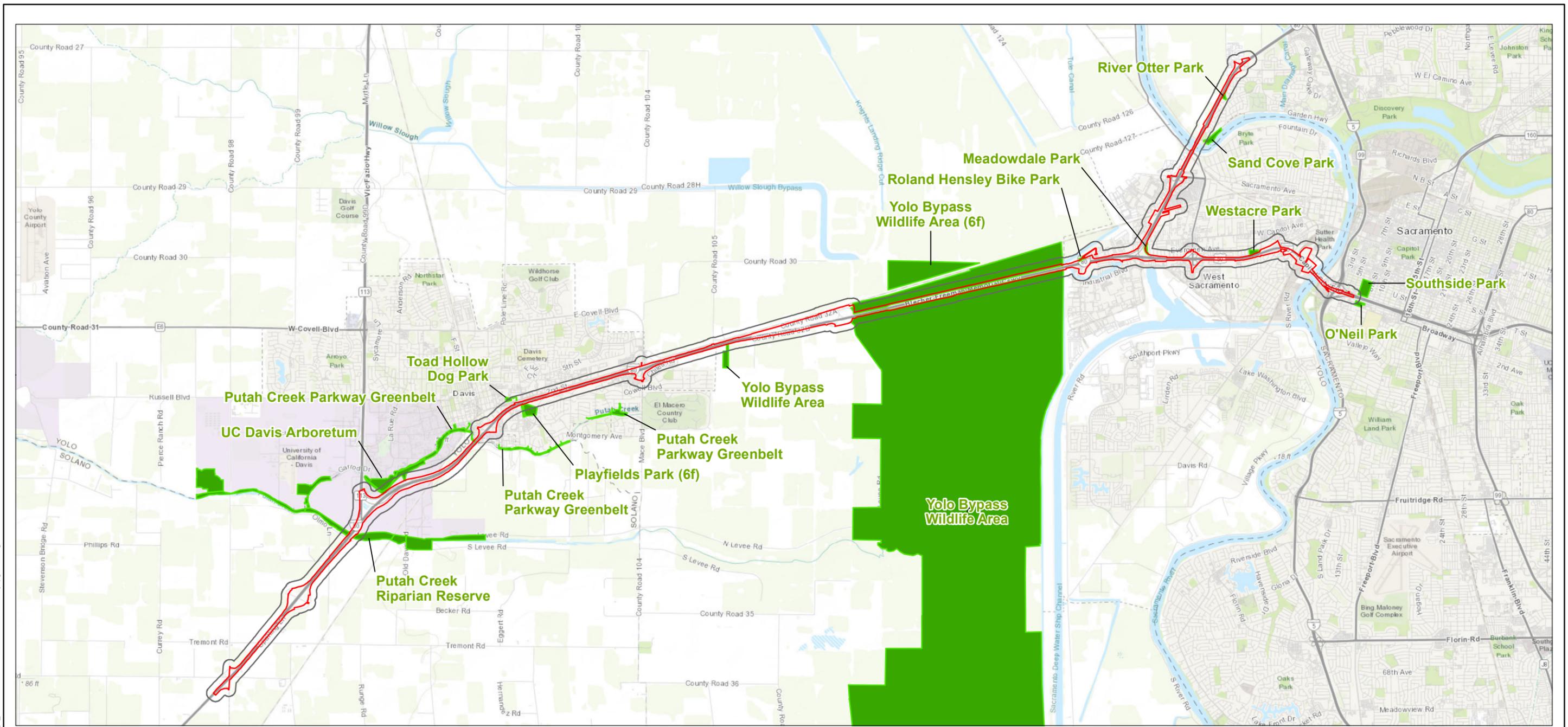
The project is adjacent to two recreation areas, both in Yolo County, which were developed with LWCF federal assistance (Section 6, LWCF Act of 1965). These are the Yolo Bypass Wildlife Area and the Playfields Park at 2500 Research Drive, Davis. Known as Section 6(f) properties, properties acquired or developed with LWCF assistance shall be retained and used for public outdoor recreation; any conversion of use, wholly or partly, would require the approval of NPS. The proposed project would not result in any conversion or use of the Yolo Bypass Wildlife Area or the Playfields Park, nor would it restrict or reduce public access.



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Figure 1
Project Location and Vicinity
 Yolo 80 Corridor Improvement Project
 EA 03-3H900
 Solano, Yolo, and Sacramento Counties, California

Service Layer Credits:
 ESRI, National Geographic, DigitalGlobe, GeoEye



- ESL
- 500-ft ESL Buffer
- Potential Section 4(f) and Section 6(f) Recreation Areas

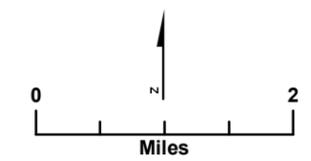


Figure 2
Overview of Recreation Areas
 within 500 feet of the Project
 Yolo 80 Corridor Improvement Project
 EA 03-3H900
 Solano County, Yolo County,
 Sacramento County, California

Notes
 1. Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet
 2. Data Sources: CalTrans, Stantec, 2021
 3. Background: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



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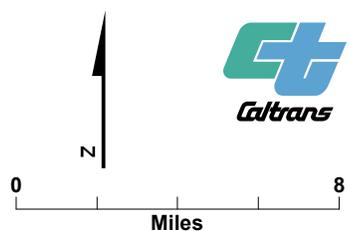


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