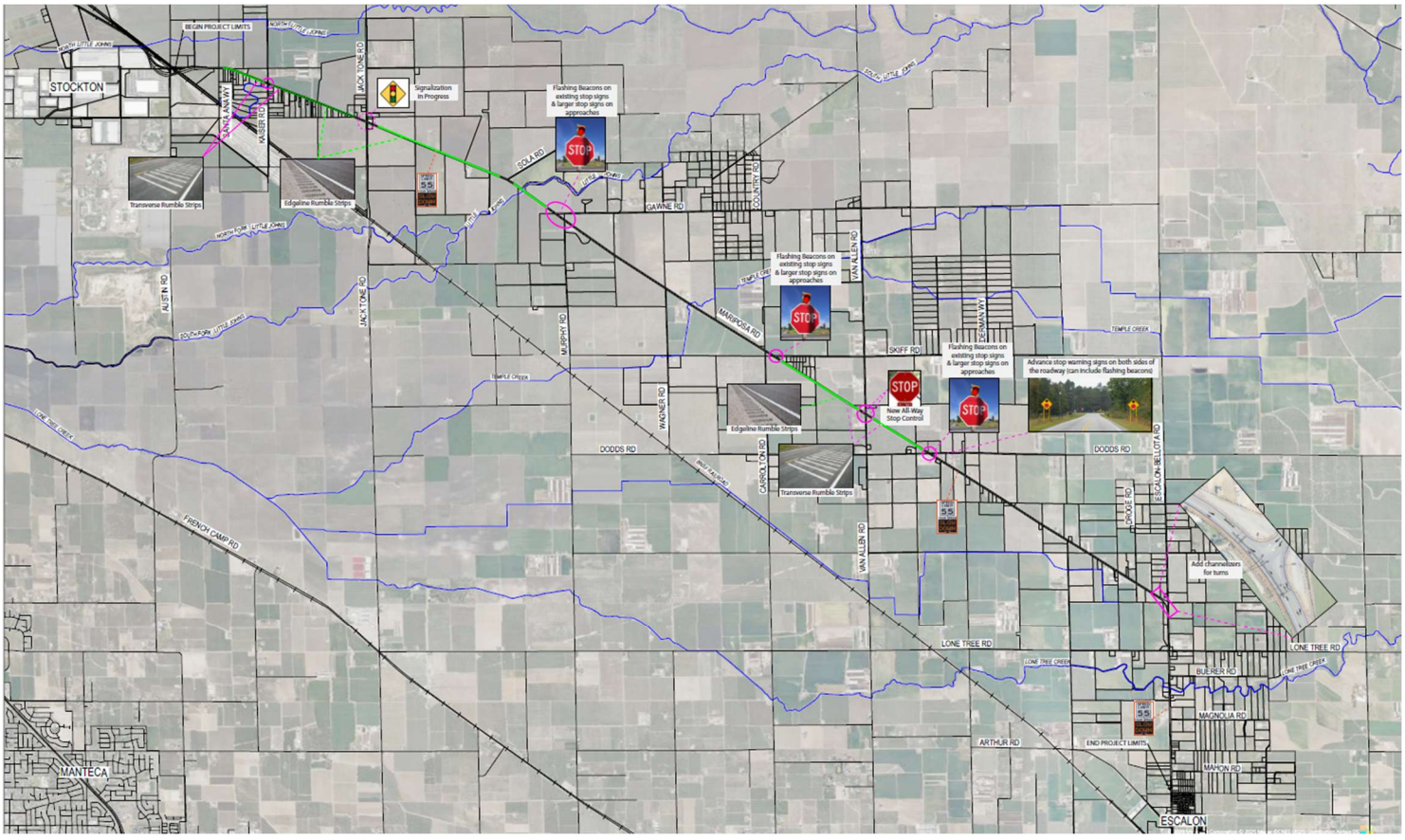
Mariposa Road & Escalon-Bellota Specific Plan

Draft IS/MND

County of San Joaquin Department of Public Works

October 29, 2026



Draft Initial Study/ Mitigated Negative Declaration
Mariposa Road & Escalon-Bellota Specific Plan

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Appendix C Biological Resources Report

1. Project Information

Project Title	Mariposa Road and Escalon-Bellota Road Specific Plan
Lead Agency Name & Address	San Joaquin County Department of Public Works 1810 East Hazelton Avenue Stockton, CA 95205
Contact Person & Phone Number	Marilissa Loera, (209) 468-3085
Project Location	Unincorporated San Joaquin County between Stockton and Escalon.
General Plan Land Use Designation	Urban Reserve Agriculture; General Agriculture; Limited Agriculture; Public Facilities or Services; Open Space Parks Recreation; Open Space and Resource Conservation.
Zoning	Agricultural Urban Reserve-20; General Agriculture-40; Limited Agriculture-5; Public Facilities; Crossroads Commercial; General Agriculture-20; Limited Agriculture-10.

1.1 CEQA Requirements

San Joaquin County, serving as the California Environmental Quality Act (CEQA) Lead Agency, has prepared this Initial Study to provide the public, responsible agencies, and trustee agencies with the information about the potential environmental effects of the proposed Mariposa Road and Escalon-Bellota Road Specific Plan (Project or Specific Plan). The Specific Plan is provided as Appendix A.

San Joaquin County is considering several operational and safety improvements to the 13.5-mile Mariposa Road and Escalon-Bellota Road corridor (Project Corridor) to address recent and projected growth in traffic through the corridor. The Specific Plan identifies near-term improvements to be constructed within the next ten years, and long-term improvements that would be implemented in the future subject to funding availability. Improvements identified within the Specific Plan include installation of rumble strips on existing pavement, replacing existing stop signs with larger stop signs, widening portions of roadway, changes to traffic control and intersection alignments, among other actions.

The Specific Plan is subject to the requirements of CEQA. The purpose of this Initial Study is to provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration or a Negative Declaration. This Initial Study is intended to satisfy the requirements of the California Environmental Quality Act, CEQA, (Public Resources Code, Div 13, Sec 21000-21177), and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387). CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts.

Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

1. A description of the project including the location of the project;
2. An identification of the environmental setting;
3. An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
4. A discussion of the ways to mitigate the significant effects identified, if any;
5. An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;
6. The name of the person or persons who prepared or participated in the Initial Study.

1.2 Specific Plan Background

The Mariposa Road and Escalon-Bellota Road corridor (Project Corridor) is a 13.5-mile-long corridor along Mariposa Road and Escalon-Bellota Road between the Stockton city limits at Austin Road and the Escalon city limits north of Miller Avenue. The Project Corridor serves as an important route for local traffic, agricultural operations, freight movement, and access to surrounding communities. Both Stockton and Escalon, along with surrounding unincorporated areas of San Joaquin County, have experienced increased development and a growing population, resulting in higher projected traffic volumes along the Specific Plan Corridor. Projected traffic increases raise concerns about traffic operations and safety performance.

Forecasts conducted for the Specific Plan show traffic exceeding the current Level of Service (LOS) threshold by 2045 for affected roadway segments in the Project Corridor. Safety analysis conducted for the Specific Plan identified that five of the seven Project Corridor segments have a higher proportion of fatal and injury collisions than the state average for similar roadway types, and Mariposa Road west of Jack Tone Road has a higher than average collision rate. Common types of collisions along roadway segments include head on, rear-end and hit object.

In addition to roadway segments, eight study intersections were identified and assessed for the Specific Plan. Of these intersections, four have a higher collision rate than the state average for similar intersection types, and five have a higher percentage of collisions resulting in fatalities or injuries. Common collision factors include drivers traveling at unsafe speeds, automobile right-of-way violations, and improper turning. Because Mariposa Road runs diagonally, many of the intersections are skewed instead of perpendicular. At skewed intersections, visibility of opposing traffic is poor, resulting in drivers entering the oncoming traffic lane to better see approaching vehicles. Drivers experience longer-intersection exposure when turning due to the size of the intersection and aligning a vehicle to turn can be more challenging. These conditions can lead to higher collision rates – specifically, broadside collisions and automobile right-of-way violations, which are common along the corridor.

The Specific Plan was developed to identify necessary near-term and long-term safety and operational improvements within the Project Corridor while supporting existing and future travel needs. The Specific Plan contains an evaluation of the existing transportation conditions on the Corridor, identification of near-term and long-term improvement needs, assessment of alternatives, and proposed recommendations that best address safety and traffic operations along the Project Corridor.

1.3 Location and Existing Setting

Improvement Locations

As identified above, the Project Corridor is located within unincorporated San Joaquin County, California, along an approximately 13.5-mile corridor extending from the Stockton city limits at Austin Road to the Escalon city limits north of Miller Avenue, generally following Mariposa Road and Escalon-Bellota Road (see Figure 1.1) The Specific Plan evaluates conditions along seven segments of the Project Corridor, and includes proposed near-term and long-term improvements at seven sites, as well as minor near-term improvements (such as rumble strips and radar speed signs) dispersed throughout the Project Corridor.

The road segments identified and evaluated in the Specific Plan are:

Mariposa Road

Segment 1	Austin Road to Jack Tone Road
Segment 2	Jack Tone Road to Gawne Road
Segment 3	Gawne Road to Skiff Road
Segment 4	Skiff Road to Dodds Road
Segment 5	Dodds Road to Escalon-Bellota Road

Escalon-Bellota Road

Segment 6	Mariposa Road to Lone Tree Road
Segment 7	Lone Tree Road to Escalon City Limits

The seven sites identified for near-term and long-term improvements are listed below. Some near-term improvements are also proposed in dispersed locations within the existing roadway throughout the Project Corridor.

Mariposa Road

Site 1	Mariposa Road segment west of Jack Tone Road. Site 1 is comprised of the full extent of Segment 1.
Site 2	Intersection of Mariposa Road and Gawne Road. Site 2 is located at the junction of Segment 2 and Segment 3.
Site 3	Intersection of Mariposa Road and Skiff Road. Site 3 is located at the junction of Segment 3 and Segment 4.
Site 4	Intersection of Mariposa Road and S. Van Allen Road. Site 4 is located within Segment 4.
Site 5	Intersection of Mariposa Road and Dodds Road. Site 5 is located at the junction of Segment 4 and Segment 5.

Escalon-Bellota Road

Site 6	Intersection of Mariposa Road and Escalon-Bellota Road. Site 6 is located at the junction of Segment 5 and Segment 6.

Site 7	Escalon-Bellota Road from Mariposa Road to Escalon City Limits. Site 7 is comprised of the full extents of Segment 6 and Segment 7.

Existing Setting

Mariposa Road is a two-lane, east-west, major collector that begins as East Mariposa Road at the intersection of Martin Luther King Jr. Boulevard within the City of Stockton and ends at Escalon-Bellota Road. Within the Project Corridor, the posted speed limit is 55 mph. The width of pavement varies from approximately 34 feet to 50 feet at select intersections.

Escalon-Bellota Road is a 55 miles per hour (mph), two-lane, north-south, major collector that begins at the intersection of State Route (SR) 26 and Escalon-Bellota Road in unincorporated San Joaquin County (County). Escalon-Bellota Road continues south and intersects Mariposa Road approximately two miles north of the City of Escalon city limits. Within the County, where Escalon-Bellota is two-lanes, pavement width is approximately 32 feet. Within the City of Escalon, the roadway becomes Escalon Avenue and transitions to a minor arterial. Additionally, the roadway widens to four lanes with a two-way-left-turn (TWLT) median lane. At SR 120, the roadway name changes to McHenry Avenue and continues south into Stanislaus County and the City of Modesto.

Known utilities along the corridor include utility poles and overhead utility lines owned and operated by telecommunication companies and PG&E on both sides of the road. Irrigation and drainage facilities are located throughout the corridor, primarily at residential driveways. Irrigation canals are located on Mariposa Road south of Sola Road and north of Droge Road, as well as along Escalon-Bellota Road.

At several points along the corridor west of Carrolton Road, Mariposa Road is elevated above creeks or channels. Specifically, Mariposa Road bridges are located at Kaiser Road, east of Kaiser Road, across Little Johns Creek, approximately 2,200 feet south of Gawne Road, and across Temple Creek. There are two bridges on Murphy Road south of Gawne Road. The bridges are approximately the same width as the roadway pavement (around 35 feet) and have concrete barriers with metal guardrail end treatments.

Other physical structures along the corridor include vee-gutters, dairy cattle fences, and roadway edge stone structures, as well as business frontages and parking on Escalon-Bellota Road only. Figure 1.2 provides an aerial map of existing utilities and structures.

Surrounding Land Uses

The corridor is primarily surrounded by agricultural land, with various residential, commercial, agricultural and public facility related structures located intermittently throughout. A summary of site improvement locations and surrounding land uses is provided in Table 1-1, Summary of Surrounding Land Uses.

Table 1-1 Summary of Surrounding Land Uses

Improvement Site	Surrounding Land Uses
Mariposa Road	
Site 1 Mariposa Road Segment west of Jack Tone Road	Mariposa Road segment is primarily surrounded by agricultural land. Residential and agricultural related structures are located intermittently along Mariposa Road. At Jack Tone Road toward the western limit of the corridor is Collegeville Elementary School, Collegeville Rural Fire Department, Collegeville Cemetery, and two commercial properties (Subway and Larson Construction Inc.) West of Jack Tone Road, the southern side of Mariposa Road is lined with structures of varying land uses, including residential and commercial.
Site 2 Intersection of Mariposa Road and Gawne Road / Murphy Road	Gawne Road intersection is surrounded by agricultural fields. At Murphy Road, the land east of Mariposa Road is agricultural. South of Mariposa Road and east of Murphy Road is a residential building about 330 feet from the intersection and about 100 feet from the edge of pavement. Additional utilities and structures at intersection include two bridges on Murphy Road (each 22 feet in length) and a corrugated metal pipe (CMP) culvert with concrete headwalls at Gawne Road.
Site 3 Intersection of Mariposa Road and Skiff Road	Skiff Road intersection is surrounded primarily by agricultural fields, except for the southeast portion of land between Mariposa Road and Skiff Road. Land use in this area includes several residential structures, beginning approximately 275 feet east of the intersection and set back about 60 feet from the edge of pavement. The wheat field in the parcel north of Skiff Road is considered to have moderate potential for nesting and high potential for foraging uses.
Site 4 Intersection of Mariposa Road and Van Allen Road	East of Van Allen Road are agricultural fields. West of Van Allen Road and north of Mariposa Road is a house and an additional structure located about 270 feet and 141 feet north of the intersection, respectively. West of Van Allen Road and south of Mariposa Road are several additional structures starting approximately 160 feet south of the intersection. Buildings are set back approximately 50 feet from the edge of pavement of Van Allen Road.
Site 5 Intersection of Mariposa Road and Dodds Road	North of Dodds Road are agricultural fields. Southeast of the Dodds Road and Mariposa Road intersection is an agricultural field that extends approximately 920 feet southeast, followed by several agricultural related structures and a residential building. The home and agricultural structures nearest Mariposa Road are about 50 feet away from the edge of pavement (Mariposa Road) and the structures closest to Dodds Road are about 100 feet away from the edge of pavement. South of Mariposa Road are several dwelling units, the Stuyt Dairy Farmstead Cheese Shop, and other agriculture related structures. The structures begin about 80 feet from the intersection and are set back about 50 feet from Mariposa Road. Additional utilities and structures include drainage pipes, one located at the intersection north of Mariposa Road, and two drainage pipes about 150 feet south of the intersection on the south side of Mariposa Road, at the first driveway.

Improvement Site	Surrounding Land Uses
Escalon-Bellota Road	
Site 6 Intersection of Mariposa Road and Escalon-Bellota Road	On the south side of Mariposa Road, there are multiple residential structures about 230 feet north of the intersection, set back from the edge of pavement by about 20 feet. There is another residential structure 187 feet north of the intersection set back from the Escalon Bellota Road travel lane by about 50 feet. East of Escalon Bellota Road is a storage yard for agricultural equipment and an agricultural field. There are a couple of structures in the storage yard, located about 220 feet from the edge of pavement. Southwest of intersection is an irrigation canal located about 30 feet from the edge of pavement. The irrigation channel appears to go underground directly across the intersection.
Site 7 Escalon-Bellota Road Segment	Along Escalon-Bellota Road segment, land use is agricultural and residential, with some commercial and agricultural structures located on both sides. Structures are set back from edge of travel lane by varying distances, between a minimum of 20 feet at Lone Tree Intersection, to about 70 feet in other parts of the corridor. Escalon Livestock Market is located east of Lone Tree intersection. There is a bridge over Lone Tree Creek, located approximately 620 feet south of Buerer Road. At the southern end Escalon Golf Course is just north of the Escalon City Limits, on the west side of the segment. A low-density residential neighborhood is located in the City of Escalon on the east side. Houses are set back from edge of pavement by about 30 feet.

Existing and Projected Roadway Volumes

The Specific Plan was developed using existing and projected roadway volumes for year 2035 and 2045. Roadway volume projections were developed using publicly available traffic data from planned industrial and warehousing development in south Stockton, county population projections developed by the California Department of Finance, and the county's regional travel demand model. The growth utilized to estimate projected trips through the Project Corridor would be occurring separately and without implementation of the Project. The existing and projected roadway volumes are provided in Table 1-2.

Table 1-2 Existing and Projected Roadway Volumes

Segment ID	Segment Location	Existing Daily Trips 2024	Projected Daily Trips[1]	
			2035	2045
Mariposa Road				
1	Austin Road to Jack Tone Road	8,881	12,300	13,900
2	Jack Tone Road to Gawne Road	9,501	10,900	12,100

Segment ID	Segment Location	Existing Daily Trips 2024	Projected Daily Trips[1]	
			2035	2045
3	Gawne Road to Skiff Road	9,095	10,400	11,600
4	Skiff Road to Dodds Road	8,688	9,900	11,100
5	Dodds Road to Escalon-Bellota Road	6,722	7,700	8,600
Escalon-Bellota Road				
6	Mariposa Road to Lone Tree Road	11,324	12,900	14,400
7	Lone Tree Road to Escalon City Limits	11,242	12,800	14,300

[1] Projected volumes were developed using information from existing planned industrial growth in south Stockton and population projections prepared by California Department of Finance.

1.4 Project Description

San Joaquin County proposes to address the safety and traffic operation related concerns along the Mariposa Road Escalon-Bellota Road corridor through a series of near-term and long-term improvements identified in the Mariposa Road Escalon-Bellota Road Specific Plan.

Near-term improvements identified in the Specific Plan are intended to be implemented within the first 10 years after the Specific Plan is adopted and include lower-cost strategies to slow vehicle speeds and reduce run-off-road collisions, as well as turn lanes, pavement markings, and stop signs. Additionally, rumble strips (transverse and edgeline rumble strips) and radar speed signs would be dispersed throughout the Project Corridor as part of the near-term improvements.

Long-term improvements identified in the Specific Plan would occur under future conditions subject to funding availability, and include intersection realignment, traffic control, including stop signs and roundabouts, and roadway widening. The Specific Plan includes alternative options for each long-term improvement location and identifies a preferred design for each location. For the purposes of this IS/MND, the potential impacts were evaluated using the alternatives with the largest footprint and/or potential environmental impact, which are not necessarily the Specific Plan's preferred alternatives.

A summary of proposed near-term and preferred long-term improvements is provided in Table 1-3. The additional dispersed minor near-term improvements are listed in Table 1-4. A summary of all alternatives, the preferred alternative, and the alternative evaluated in this IS/MND for environmental impacts is provided in Table 1-5.

Table 1-3 Summary of Specific Plan Near-Term and Preferred Long-Term Improvements

Improvement Site	Near-Term Improvements	Preferred Long-Term Improvements
Site 1 Mariposa Road Segment west of Jack Tone Road	See Table 1-4.	**Alternative 1** Widen Mariposa Road between west end of the corridor to Jack Tone Road to accommodate a two-way left turn lane (1.7-mile segment).
Site 2 Intersection of Mariposa Road and Gawne Road / Murphy Road	Replace existing stop signs with larger stops signs. Install solar-powered flashing beacons within road right-of-way (ROW).	**Alternative 2** Realign Gawne Road.
Site 3 Intersection of Mariposa Road and Skiff Road	Replace existing stop signs with larger stops signs. Install solar-powered flashing beacons within ROW.	**Alternative 2** Realign Skiff Road.
Site 4 Intersection of Mariposa Road and S. Van Allen Road	Convert existing two-way stop control intersection to an all-way stop-controlled intersection.	**Alternative 1** Realign Van Allen Road with all-way stop-control.
Site 5 Intersection of Mariposa Road and Dodds Road	Replace existing stop signs with larger stops signs. Install solar-powered flashing beacons within ROW. Install warning flashing beacons on the southern intersection approach within the ROW.	**Alternative 2** Install left turn lanes and realign Dodds Road to the north.
Site 6 Intersection of Mariposa Road and Escalon-Bellota Road	Install channelizers between the southbound through and left turn lanes on the western side of the intersection.	**Alternative 2** Install a roundabout.
Site 7 Escalon-Bellota Road Segment	Install radar speed signs at Magnolia Road within ROW.	**Alternative 3** Mariposa Road to Lone Tree Road: widen to four lanes. Lone Tree Road to northern Escalon city limit: widen to five lanes, include 4 through lanes and a two-way center turn lane.

Table 1-4 Summary of Dispersed Near-Term Improvements

Safety Improvement Type	Locations of Improvements
Transverse Rumble Strips	– Approaching Kaiser Road (Site 1) – Approaching Van Allen Road
Edgeline Rumble Strips	– South of Skiff Road to Van Allen Road – Van Allen Road to Dodds Road – North of Santa Ana Way to Gawne Road
Radar Speed Signs	– Between Jack Tone Road and Sola Road – South of Dodds Road – Between Buerer Road and Magnolia Road

Near-Term Improvements

As previously stated, near-term improvements proposed by the Project are intended to be implemented within the next 10 years. Proposed near-term improvements are shown in Figure 1.3. A summary of the near-term improvements is provided below:

Dispersed Corridor Improvements

All dispersed corridor improvements would be installed within the existing road right-of-way (ROW).

Transverse rumble strips would be installed on the existing Mariposa Road pavement approaching Kaiser Road and Van Allen Road. Transverse rumble strips placed across travel lanes are typically 4 inches wide and are placed 250 feet upstream from the intersection or stop bar.

Edgeline rumble strips would be installed along the existing Mariposa Road pavement south of skiff Road to Van Allen Road, Van Allen Road to Dodds Road, and north of Santa Ana Way to Gawne Road. Edgeline rumble strips would be placed less than five feet from the outside of the existing shoulder pavement marking.

Radar speed signs, or dynamic/variable speed warning signs, would be installed at three locations within the Project Corridor. Potential sign locations include between Jack Tone Road and Sola Road, south of Dodds Road, and between Buerer Road and Magnolia Road. For each installation location, two radar speed signs would be installed, one for each direction of travel. Therefore, up to six radar speed signs would be installed as part of the near-term improvements. The proposed radar speed signs would be solar powered.

Site 1: Mariposa Road Segment west of Jack Tone Road

No near-term improvements are proposed at Site 1 beyond those identified in the dispersed corridor improvements, above.

Site 2: Intersection of Mariposa Road and Gawne Road / Murphy Road

Existing stops signs at the intersection would be replaced with larger stop signs. In addition, solar-powered flashing beacons would be installed within the ROW.

Site 3: Intersection of Mariposa Road and Skiff Road

Existing stop signs at the intersection would be replaced with larger stop signs. In addition, solar-powered flashing beacons would be installed within the ROW.

Site 4: Intersection of Mariposa Road and Van Allen Road

The existing two-way stop-controlled intersection would be converted to an all-way stop-controlled intersection. Improvement would include two new stop signs, advance warning signs (such as flashing beacons), and pavement markings on the northern and southern Mariposa Road approaches. All improvements at Site 4 would be installed within the ROW.

Site 5: Intersection of Mariposa Road and Dodds Road

Existing stops signs at the intersection would be replaced with larger stop signs. In addition, solar-powered flashing beacons would be installed within the ROW. Advance stop warning signs would be installed on the southern approach to the intersection, approximately 500 feet south of Dodds Road and within the ROW.

Site 6: Intersection of Mariposa Road and Escalon-Bellota Road

Traffic channelizers would be installed on the western side of the intersection between the northern and southern approaches. The channelizers separate southbound through traffic from the left turn lane. Pavement markings to separate the through and left turn lanes would be installed on the roadway leading to the channelizers.

Site 7: Escalon-Bellota Road Segment

Radar speed signs would be installed at Magnolia Road within ROW.

Long-Term Improvements

The Specific Plan includes a series of long-term alternatives for sites in the Project Corridor and identifies a preferred alternative for each. Table 1-5 summarizes the alternatives identified in the Specific Plan, the preferred alternative, and the alternative evaluated for environmental impacts within this IS/MND. The alternatives evaluated within this IS/MND are further described after Table 1-5.

Table 1-5 Summary of Long-Term Project Alternatives

Location	Specific Plan Alternatives				Scenario Evaluated in IS/MND[1]
	Alternative 1	Alternative 2	Alternative 3	Preferred Alternative	
Mariposa Road					
Site 1 Mariposa Road Segment west of Jack Tone Road	Widening for center two-way left-turn lane	Widening to 4 lanes	N/A	Alternative 1	Alternative 2
Site 2 Intersection of Mariposa Road and Gawne Road / Murphy Road	Northern intersection realignment	Southern intersection realignment	Align Gawne Road with Murphy Road	Alternative 2	Alternative 3
Site 3 Intersection of Mariposa Road and Skiff Road	Northern intersection realignment	Southern intersection realignment	N/A	Alternative 2	Alternative 1
Site 4 Intersection of Mariposa Road and S. Van Allen Road	All-way stop control (AWSC)	All-way stop control (AWSC) with intersection realignment east	Eastern intersection realignment with traffic signal	Alternative 1	Alternative 2
Site 5 Intersection of Mariposa Road and Dodds Road	Add southbound left turn lane	Northern intersection realignment with left turn lanes	N/A	Alternative 2	Alternative 2
Escalon-Bellota Road					
Site 6 Intersection of Mariposa Road and Escalon-Bellota Road	Roundabout (aligned west of the current intersection)	Roundabout (aligned east of the current intersection)	Traffic signal	Alternative 2	Alternative 1
Site 7 Escalon-Bellota Road Segment	Widening for two-way left turn lane	Widening to 4 lanes	Widening to 5 lanes (4 lanes with two-way left turn lane)	Alternative 3	Alternative 3

1. As noted previously, the alternative with the potential for greater impacts was conservatively evaluated for the purposes of CEQA.

Site 1: Mariposa Road Segment west of Jack Tone Road (Alternative 2 Evaluated)

Under Alternative 2, Segment 1 between the western end of the Project Corridor (approximately 1,300 feet west of Santa Ana Way) to Jack Tone Road would be widened to accommodate up to two 12-foot through lanes in each direction and 6-foot-wide shoulders. The distance between shoulders is currently 24 feet, which would be widened to 48 feet. The roadway would be widened to the north, primarily through agricultural fields. The existing bridges at Kaiser Road and just easterly of Kaiser Road would be widened or reconstructed.

The alignment boundary for the segment is shown in Figure 1.5. The vehicle speed limit is expected to be 55 mph.

Under Alternative 2, the distance from the edge travel lane to nearby structures would change, as provided in Table 1-6.

Table 1-6 Distance to Structures at Site 1 with Long-Term Improvement

Address of Built Structure	Structure Type	Approximate Distance[1]	
		Existing	With Project[2]
9851 E Mariposa Road	Residential	90 feet	67 feet
6052 Kaiser Road	Residential	430 feet	407 feet
13019 E Mariposa Road	Residential	360 feet	337 feet
13225 E Mariposa Road	Collegeville Rural Fire Department	86 feet	63 feet
6701 S Jack Tone Road	Collegeville Elementary School	315 feet	292 feet
6631 Jack Tone Road	Residential	616 feet	593 feet
6595 Jack Tone Road	Commercial	750 feet	727 feet

Notes:
1. Approximate distances are from the edge of travel lane to the building.
2. Alternative 2 evaluated.

Site 2: Intersection of Mariposa Road and Gawne Road / Murphy Road (Alternative 3 Evaluated)

Under Alternative 3, Gawne Road and Murphy Road would be combined into one intersection by realigning the roadways so that they are aligned perpendicularly to Mariposa Road. Gawne Road would be realigned approximately 465 feet from the current southern edge of the intersection through the parcel to the south, aligning with Murphy Road. Murphy Road would be realigned approximately 30 feet west from the current edge of pavement. The first existing bridge along Murphy Road would be widened or reconstructed.

The alignment alternatives for the intersection are shown in Figure 1.6. The vehicle speed limit is expected to be 55 mph.

Site 3: Intersection of Mariposa Road and Skiff Road (Alternative 1 Evaluated)

Under Alternative 1, Skiff Road would be realigned to intersect with Mariposa Road perpendicularly. Alternative 1 would realign the intersection approximately 50 feet north of the Skiff Road edge of pavement through the parcel to the north.

The alignment alternatives for the intersection are shown in Figure 1.7. The vehicle speed limit is expected to be 55 mph.

Site 4: Intersection of Mariposa Road and Van Allen Road (Alternative 2 Evaluated)

Under Alternative 2, the Van Allen Road intersection would be realigned so that both approaches intersect with Mariposa Road perpendicularly. The southern leg of Van Allen Road would be realigned to be perpendicular with Mariposa Road, approximately 25 feet east of the current intersection. The northern leg of Van Allen Road would be realigned, curving to the east to be perpendicular with Mariposa Road. The eastern edge of pavement (at the easternmost point) would be realigned 70 feet east through the adjacent parcel, which is an orchard.

The realignment of Van Allen Road is not anticipated to result in a decreased distance between vehicle travel lanes and the existing residential structures in the vicinity of the intersection.

The proposed alignment for the intersection is shown in Figure 1.8. The vehicle speed limit is expected to be 55 mph.

Site 5: Intersection of Mariposa Road and Dodds Road (Alternative 2 Evaluated)

The Dodds Road intersection would be realigned so that both approaches intersect Mariposa Road perpendicularly.

The west leg of Dodds Road would be realigned approximately 50 feet north from the northern edge of pavement through the adjacent parcel, which is currently an orchard. The realignment would result in the southern edge of pavement moving from 92 to 75 feet from the agricultural structure south of the intersection. The east leg of Dodds Road would be realigned approximately 200 feet north from the norther edge of pavement through the adjacent parcel, which is currently an orchard.

Additionally, Mariposa Road pavement width would be widened from 36 feet to 48 feet at the intersection to accommodate 12-foot left-turn lanes on both approaches. Roadway widening would begin approximately 1,000 feet from the proposed Dodds Road intersection on both approaches.

The proposed alignment for the intersection is shown in Figure 1.9. The vehicle speed limit is expected to be 55 mph.

Site 6: Intersection of Mariposa Road and Escalon-Bellota Road (Alternative 1 Evaluated)

A roundabout would be constructed at the Mariposa Road and Escalon-Bellota Road intersection. This includes channelizers on each approach and possibly sidewalks and crosswalks on each intersection leg.

The western leg of the intersection (Mariposa Road) would be slightly realigned north. The west side of the intersection would be aligned so that the west side of the roundabout would encroach into the adjacent parcel, impacting the existing irrigation ditch. At the southeast corner of the intersection, the intersection realignment would result in the edge of the roundabout being approximately 60 feet west of the existing edge of pavement.

The nearest sensitive receptors to the proposed improvement at Site 6 are existing residences south of Mariposa Road. Existing residences are approximately 18 feet to 60 feet from the roadway. Additionally, an existing residence north of the intersection of Mariposa Road and Escalon-Bellota Road is approximately 50 feet west of Escalon-Bellota Road.

The extent of the proposed alignment for the intersection is shown in Figure 1.10. The vehicle speed limit is expected to be 55 mph.

Site 7: Escalon-Bellota Road Segment (Alternative 3 Evaluated)

Under Alternative 3, Escalon-Bellota Road would be widened up to five lanes between Lone Tree Road, and the northern City limits of Escalon, and up to four lanes from Mariposa Road to Lone Tree Road. The proposed design includes two 12-foot through lanes in each direction, a 14-foot two-way left turn lane in the center, and 6-foot shoulders. This expands the current pavement width up to 74 feet from approximately 32 at the road's narrowest to 46 feet at its widest, measured from the existing centerline.

Residential, commercial and agricultural structures that line Escalon-Bellota Road are set back from the edge of the travel lanes varying distances. The most constrained portion of the corridor is at Lone Tree Road. On the east side of the road, the structures at 14940 Escalon-Bellota Road and 25643 Lone Tree Road are set back from the center line by 34 feet and the edge of travel lane by approximately 20 feet. The proposed road widening would move the edge of pavement to four feet from the existing fence line, and the edge of travel lane approximately 10 feet from the structures. On the west side of the road is a deli at 25411 Lone Tree Road, where the nearest building is offset from the edge of the travel lane by approximately 26 feet. There is also a parking lot in front of the deli with 5 parking spots that would need to be removed or relocated elsewhere. The road would be widened approximately 10 feet west, moving the edge of pavement approximately 10 feet, and the edge of the travel lane approximately 16 feet. This would result in the edge of the travel lane to be approximately 28 feet from the existing structures.

In narrower portions of the corridor where pavement width is approximately 32 feet, the roadway would be widened 20 feet on each side of the road (including a 6-foot shoulder) bringing the edge of the travel lane 14 feet closer to existing residential structures.

The alignment for the segment is shown in Figure 1.10 and Figure 1.11. The vehicle speed limit is expected to be 55 mph.

1.5 Project Construction

Near-Term Improvements

Construction of near-term Project improvements is expected to occur over the next 10 years. Specific construction phasing is unknown.

Near-term improvements consist primarily of the replacement of existing stop signs with larger stop signs, installation of solar-powered flashing beacons, and installation of radar speed signs, and grinding rumble strips within the existing roadway. Construction equipment would include hand tools, pickup trucks, augers, portable generators, small excavator/backhoes, and traffic control devices. For rumble strips, a ruble-strip grinder or milling machine, traffic control vehicles, and possibly a sweeper.

Stop sign replacement would take a few hours of construction activity per sign. Installation of solar powered flashing beacons and radar speed signs may take between 1 and 3 days of construction activity for each installation. Installation of rumble strips may take between 5 to 10 days.

Long-Term Improvements

Construction of the long-term improvements is anticipated to commence after 2035 and would be implemented based on funding availability. Specific construction phasing is unknown. Proposed improvements for Site 7, Escalon-Bellota Road segment, represent the longest construction duration for long-term improvements. It is estimated that construction of Site 7 improvements would take approximately 1 year.

A variety of construction equipment would be used to build the long-term improvements. This would include, but not necessarily be limited to, excavators, backhoes, front end loaders, scrapers, graders, concrete saws, jackhammers, impact driver for shoring installation, chainsaws, forklifts, rollers, asphalt road pavers, compactors, air compressors, generator sets, and pneumatic tools. A variety of trucks including cement mixers, haul trucks, and water trucks would also be required. Site preparation, including demolition, clearing and grading of the Project site as necessary would require the removal and off-haul of materials. This would include, but not necessarily be limited to, vegetation, concrete, asphalt and fill, and certain existing utilities that would be removed and replaced.

Construction Staging Areas

Construction staging would occur east and west of Mariposa Road, along the five side streets included in the Project's proposed intersection improvements, and potentially other side streets along the corridor. All construction staging is assumed to occur within road ROW.

Site Access and Traffic Control

Traffic control management plans will be coordinated with the County and in-place during construction.

1.6 Operation and Maintenance

Following construction, the facilities would be maintained by San Joaquin County. Operation and maintenance activities would include occasional repaving or pavement repair, restriping, and maintenance of signs, flashing beacons, and drainage.

Implementation of the Project is not anticipated to result in an increase in vehicle trips, though trips may slightly re-route with the access re-opened. No additional staff would be needed to manage, operate, or maintain the upgraded facilities. The proposed Project would not generate new vehicle trips.

As previously stated in Section 1.3, traffic volumes are projected to increase through the Project Corridor without implementation of the Project. Projected traffic volumes are provided in Table 1-1. Without implementation of the Project, roadway operation and safety along the Project Corridor are anticipated to degrade under the projected trip volumes. The improvements proposed by the Specific Plan are identified to improve safety in the near-term, and safety and operations in the long-term. Connectivity and safety in the broader Project area would improve with implementation of the Project.

1.7 Compliance with Existing Regulations and Standard BMPS

The Project will abide by the following regulations and industry-accepted Best Management Practices (BMPs) to reduce or avoid potential adverse effects that could result from construction or operation of the Project. In addition to these BMPs, mitigation measures are presented in the following analysis sections in Chapter 3, Environmental Analysis, to reduce potentially significant environmental impacts below a level of significance.

Implement Air Quality Control Measures during Construction

To limit fugitive dust, the following San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII, Fugitive PM10 Prohibitions, will be included in construction contract specifications and required during implementation of the Project:

- All areas of earth moving shall be pre-watered sufficient to limit visible dust emission to 20 percent opacity;
- Work shall be phased to reduce the amount of surface disturbed at any one time;
- Vehicular access to disturbed surfaces shall be restricted
- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at the end of each workday. The use of dry power sweeping shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible;
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph;
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site;
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Implement Geotechnical Design Recommendations

Where applicable, the improvements will be designed and constructed in compliance with the site-specific recommendations made in Project-specific Geotechnical Reports. This will include design in accordance with recommendations for roadway design, site preparation and grading, fill settlement, temporary slopes and shoring, groundwater dewatering, compaction requirements open-cut trenching, surface drainage and erosion control, construction observation and other factors, as appropriate. The geotechnical recommendations will be incorporated into the final plans and specifications for each long-term improvement and will be implemented during construction.

Implement Required Stormwater Pollution Prevention Plan

The Project would seek coverage under State Water Resources Control Board (Water Board) Order No. 2022-0057-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities. The County would submit permit registration documents (notice of intent, risk assessment, site maps, Stormwater Pollution Prevention Plan, annual fee, and certifications) to the California State Water Resources Control Board (Water Board). The Stormwater Pollution Prevention Plan (SWPPP) would address pollutant sources, best management practices, and other requirements specified in the Order. The SWPPP would include erosion and sediment control measures, and dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified SWPPP Practitioner would oversee implementation of the Project SWPPP, including visual inspections, sampling and analysis, and ensuring overall compliance.

Implement Required San Joaquin County Tree and Riparian Habitat Protection Measures

San Joaquin County's Development Title, Chapter 9 (Natural Resources Regulations; SJC Code §§ 9-707.030, 9-400.080) establishes local regulatory standards for the protection of trees and riparian habitat applicable to all discretionary development projects within the unincorporated county.

Project activities at the Lone Tree Creek crossing shall be designed to minimize encroachment on riparian vegetation and the natural bank to the maximum extent practicable, consistent with the intent of San Joaquin County General Plan Policy NCR-2.8 (Natural Open Space Buffer) and the riparian habitat protection provision of Development Title, Section 9-707.030. The applicability of the Section 9 riparian buffer standard to this public road improvement project shall be confirmed with the San Joaquin County Community Development prior to finalizing the Project design at the Lone Tree Creek crossing. If the buffer standard is determined to apply, a Riparian Habitat Mitigation Plan shall be prepared consistent with Section 9-707.030.

Implement Required San Joaquin County Native Oak Tree Measures

The proposed Project improvements along Murphy Road are not anticipated to involve direct removal of any of the mapped valley oaks, as these trees occur along the ditch margin rather than within the primary road prism. However, this determination is contingent on confirmation of the final Project design footprint, which was not available at the time of this IS/MND. If road widening or shoulder improvements encroach within the dripline of mapped valley oaks, direct impacts through root zone compaction, grade changes, or inadvertent mechanical damage during construction are regulated under San Joaquin County Development Title, Section 9-400.080.

As native oak trees under the ordinance, tree removal would require an approved Improvement Plan application and 3:1 replacement. If any mapped oaks qualify as heritage oak trees based on size or designation, removal is subject to a higher threshold of necessity and 5:1 replacement.

If road widening extends within the dripline of these trees, it could constitute a regulated activity under Section 9-400.080, requiring installation of protective fencing at the dripline prior to grading, no grade changes within 6 feet of the trunk, and prohibition on trenching within the protected zone. Confirmation of the final Project footprint relative to the driplines of mapped oaks is required before a definitive compliance requirements can be made.

1.8 Required Agency Approvals

The Project may require the following approvals:

U.S. Army Corps of Engineers

A Clean Water Act Section 404 permit would be required if the Project results in temporary or permanent impacts to federal jurisdictional waters.

U.S. Fish and Wildlife Service and NOAA Fisheries

The U.S. Army Corps may initiate Section 7 Consultation with USFWS and NOAA regarding potential impacts to federally listed species during construction.

Regional Water Quality Control Board

If Project activities at any water feature crossing result in discharge to Waters of the United States (WOTUS), a Water Quality Certification must be obtained prior to the start of activities.

Additionally, if Project activities at any water feature crossing result in discharge of waste (e.g., fill material, stormwater, or construction-related sediment) into Waters of the State, a waste discharge requirements (WDR) or WDR waiver from the Central Valley RWQCB (Region 5) may be required. Early coordination with the RWQCB is recommended to determine permitting requirements prior to finalizing construction plans at water feature crossings.

California Department of Fish & Wildlife

The CDFW would need to issue a Streambed Alteration Agreement for impacts to the bed, bank, or channel of a waterway. Work at Lone Tree Creek and Irrigation Feature 1 crossings that encroach within the bed, bank, or riparian zone of these features may constitute a regulated activity under CDFW Fish and Game Code Section 1602, potentially requiring a Lake and Streambed Alteration Agreement prior to initiation of construction.

South San Joaquin Irrigation District

South San Joaquin Irrigation District (SSJID) Structure Permit or Temporary Construction Permits would be required for Project improvements or construction activities would affect SSJID facilities.

Central San Joaquin Water Conservation District

Central San Joaquin Water Conservation District (CSJWCD) temporary construction or use permit may be required for Project improvements or construction activities that would affect CSJWCD facilities.

Oakdale Irrigation District

Oakdale Irrigation District (OID) Structure Review Permits would be required for Project improvements or construction activities would affect OID facilities.

1.9 Tribal Consultation

On September 10, 2025, the San Joaquin County Department of Public Works (SJCDPW) sent tribal consultation invitations to local and federally recognized tribes as required by California Assembly Bill (AB 52) and Section 106 of the National Historic Preservation Act (NHPA).

On June 17, 2025, the Native American Heritage Commission (NAHC) stated that its search of the Sacred Lands File was negative for the presence of cultural resources in the Project area. The NAHC also supplied a list of individuals to be contacted for information regarding locations of scared or special sites of cultural or spiritual significance in the study area and surrounding vicinity. SJCDPW sent letters describing the Plan and cultural resources inventory and its location to the following tribal contacts:

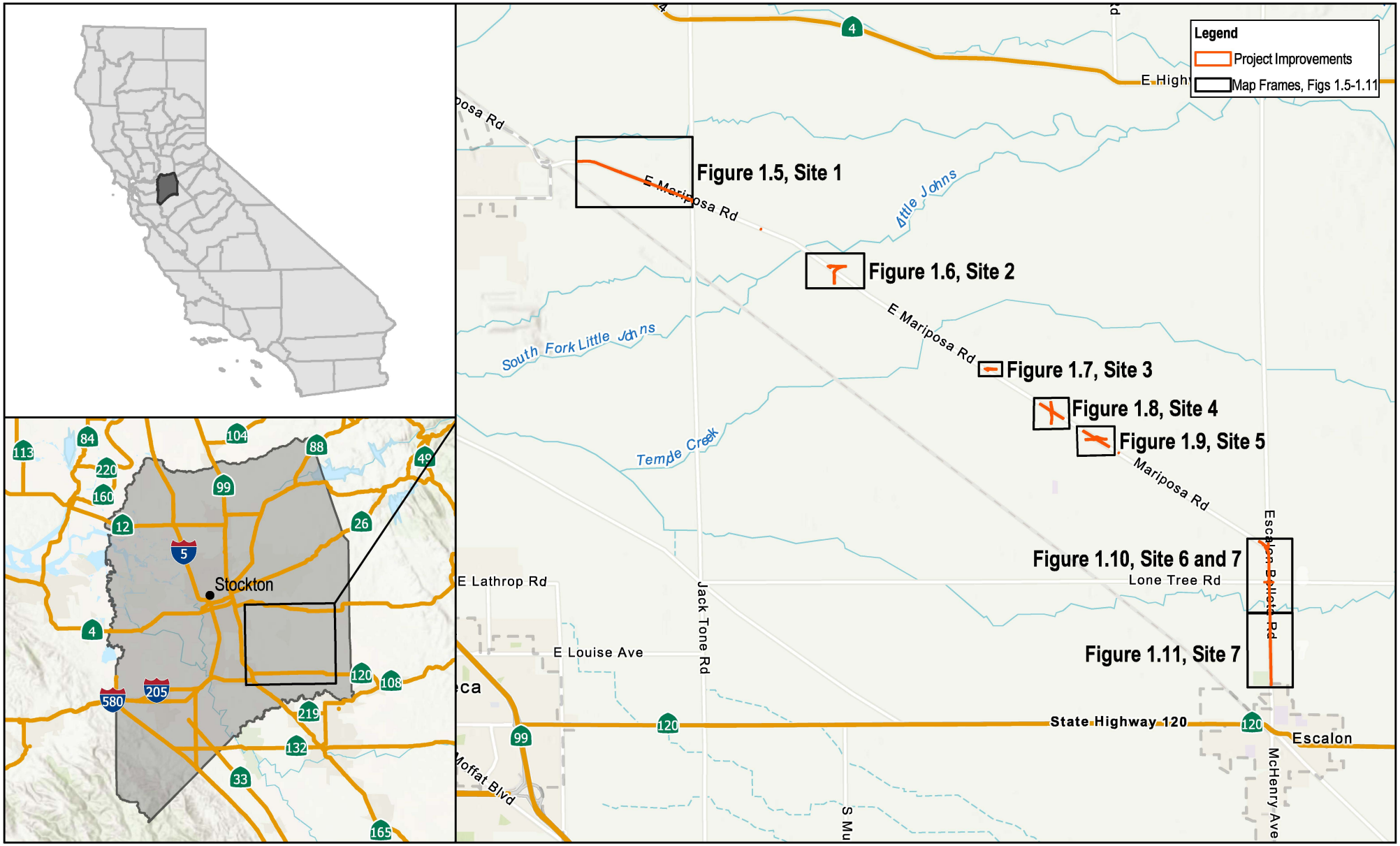
- Vice-Chairperson Ed Ketchum, Amah Mutsun Tribal Band;
- Chairperson Valentin Lopez, Amah Mutsun Tribal Band;
- Chairperson Katherine Perez, Northern Valley Yokut /Ohlone Tribe;
- Tribal Compliance Officer Timothy Perez, Northern Valley Yokut /Ohlone Tribe;
- Environmental Department Kerri Vera, Tule River Indian Tribe;
- Chairperson Neil Peyron, Tule River Indian Tribe;
- Cultural Preservation Department of the Wilton Rancheria;
- Tribal Historic Preservation Officer Steven Hutchason, Wilton Rancheria;
- Executive Director of Cultural Preservation Michelle St. Clair, Wilton Rancheria; and
- Chairperson Kenneth Woodrow, Wuksachi Indian Tribe and Eshom Valley Band.

SJCDPW followed up with all tribes by telephone on October 27, 2025.

Katherine Perez of the Northern Valley Yokut Tribe responded via email on June 23, 2025, requesting formal consultation under AB 52. The tribe also requested the presence of an archaeologist and tribal monitor during all ground-disturbing work due to “the high possibility for inadvertent discovery” within the study area at the railroad crossing and two waterways— Little Johns and Lone Tree creeks. Ms. Perez also expressed the need for tribal cultural awareness training prior to construction. Applied EarthWorks, Inc. (Æ) on behalf of SJCDPW responded via email on June 24, 2025, acknowledging their request.

On October 30, 2025, SJCDPW held an AB 52 consultation meeting with the Northern Valley Yokut Tribe to provide an overview of the Specific Plan. Ms. Perez, along with representatives from SJCDPW, GHD, and Æ attended. Ms. Perez restated her concerns on behalf of the Tribe regarding ground disturbance associated with the proposed improvements in areas surrounding the waterways, railroad, and farmland. GHD stated that future consultation will include sharing the results of this report and all proposed CEQA mitigation measures related to cultural and tribal resources.

For a summary of the investigation and mitigation measures related to cultural and tribal resources, see Section 3.5, Cultural Resources, and 3.18, Tribal Resources.



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Mariposa Road and Escalon-Bellota Road Specific Plan

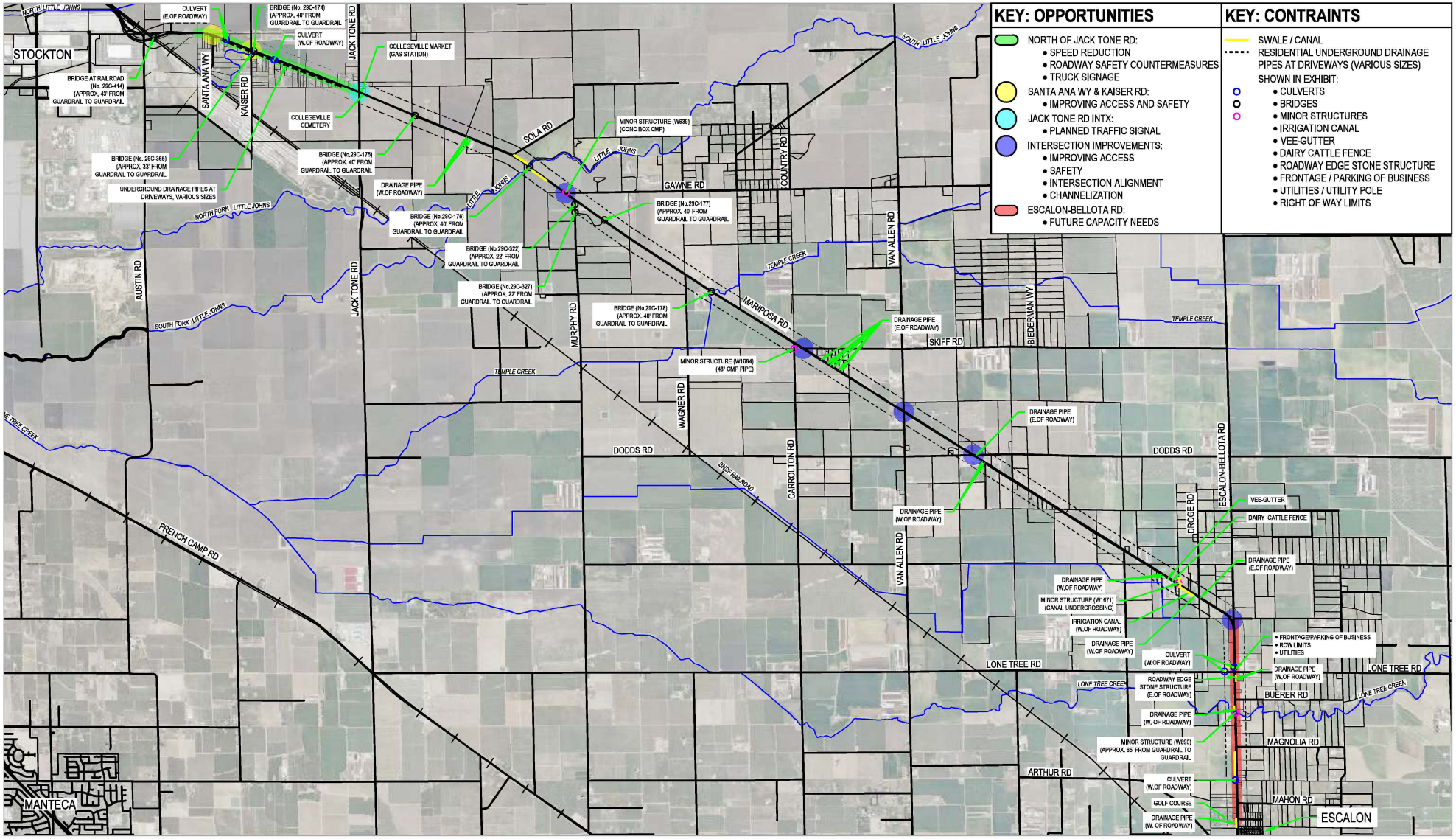
Project No. **12635063**
Revision No. **-**
Date **Oct 2026**

Project Vicinity

FIGURE 1.1

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Data source: CA_Counties: USA Major Cities: Sources: Esri; U.S. Department of Commerce, Census Bureau; U.S. Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Geodetic Survey (NGS)



San Joaquin County
Mariposa Road & Escalon-Bellota
Road Specific Plan

Opportunities & Constraints

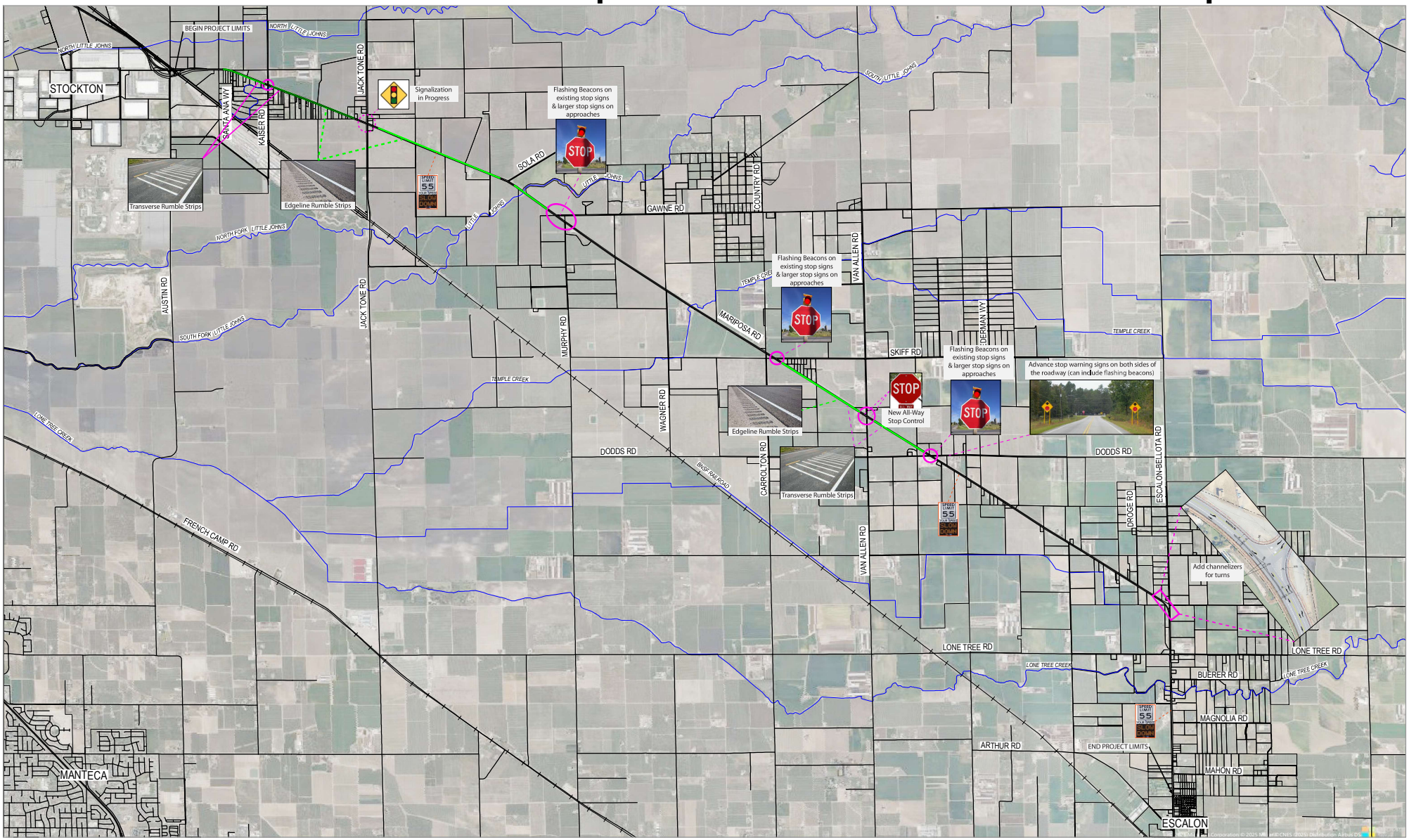
Project No. 12635063
Report No. 001
Date APRIL 2025

FIGURE 1.2

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Mariposa Road & Escalon-Bellota Road Specific Plan



NEAR-TERM SAFETY IMPROVEMENTS

FIGURE 1.3

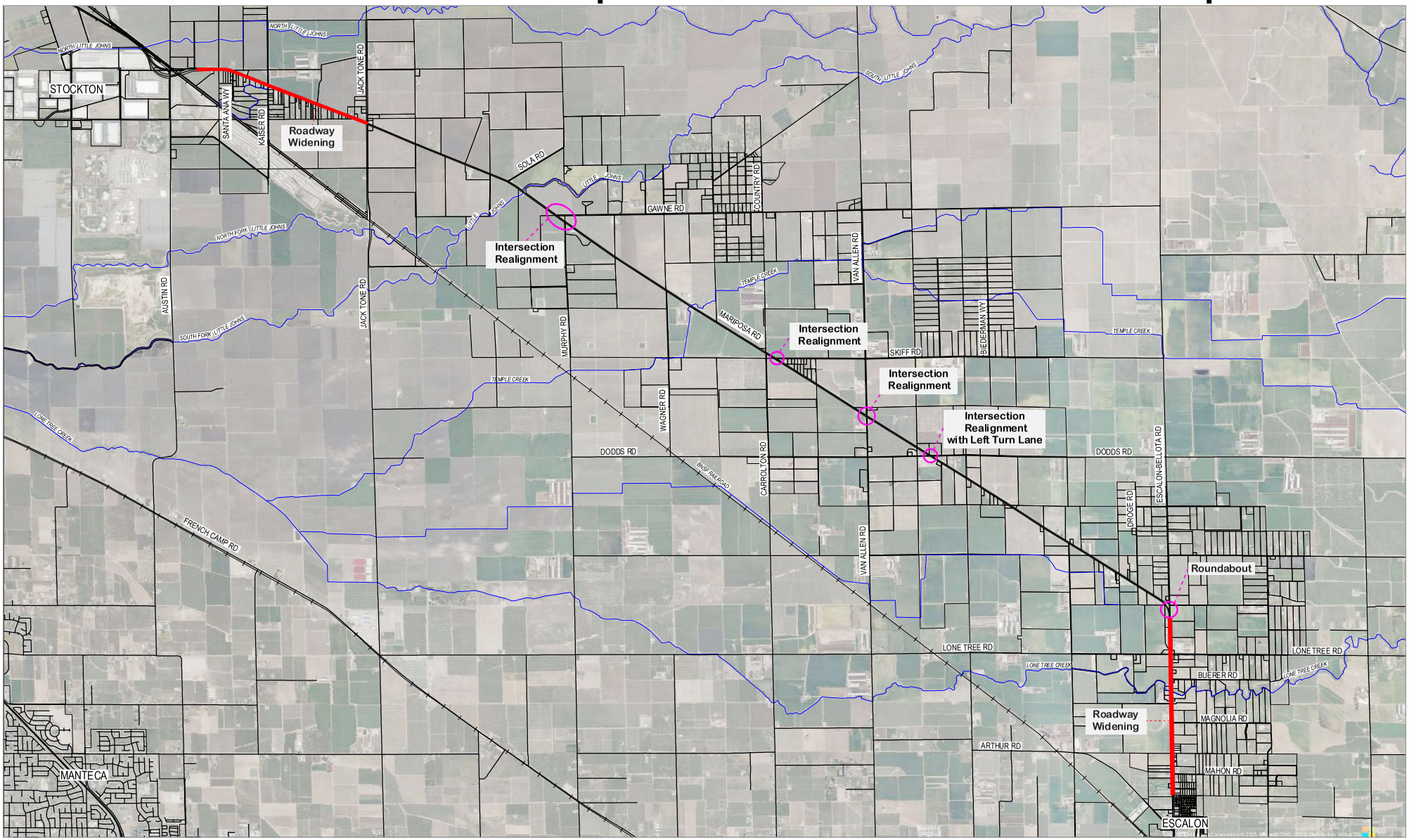
San Joaquin County

NORTH

GHD Inc.
943 Reserve Drive, Suite 100
Roseville, CA 95678 USA
T 1 916 782 8688 W www.ghd.com

OCT 2025

Mariposa Road & Escalon-Bellota Road Specific Plan



PROJECT OVERVIEW - LONG-TERM SAFETY AND OPERATIONAL IMPROVEMENTS

FIGURE 1.4

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San Joaquin County

NORTH



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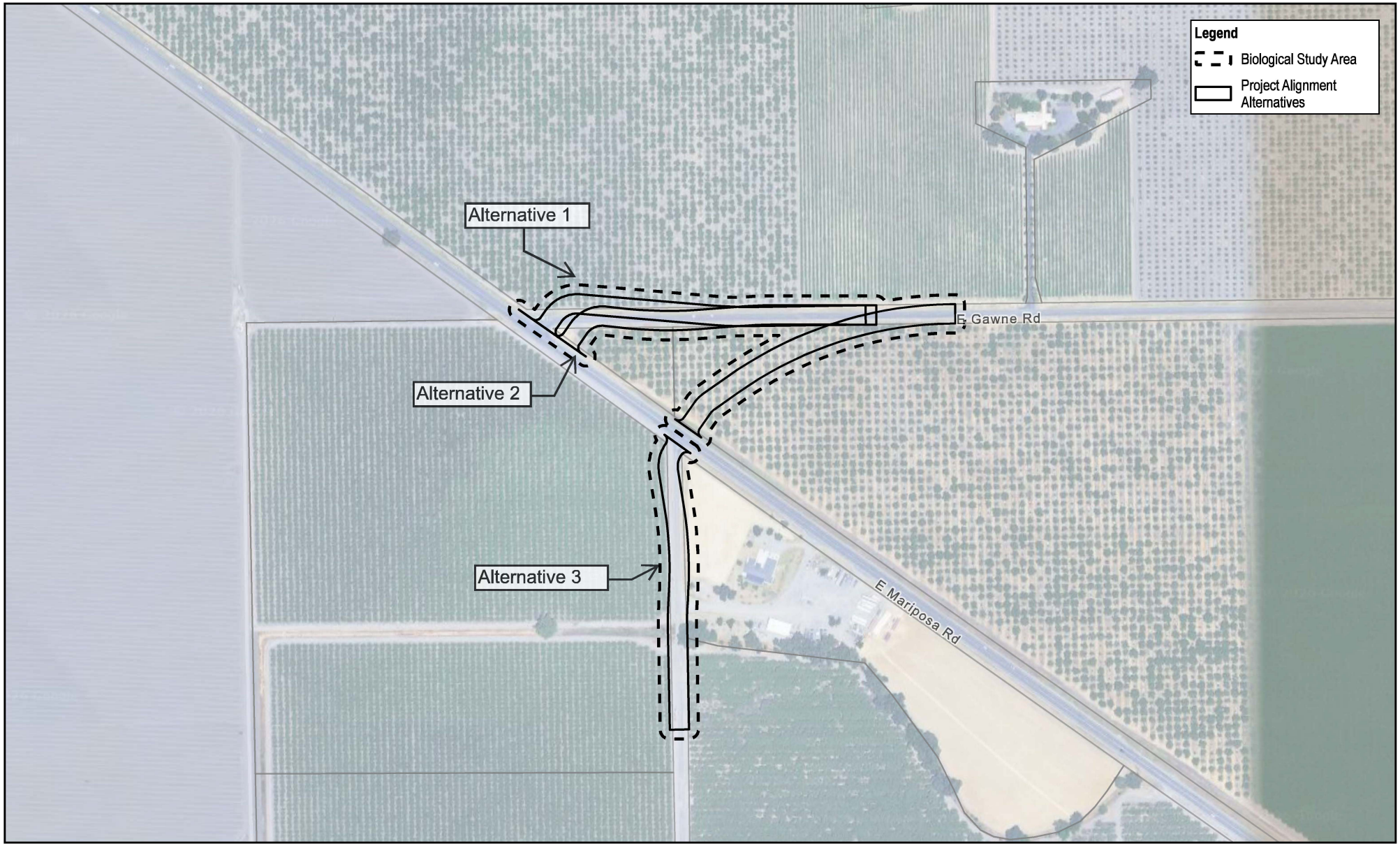
Site 1: Mariposa Road Segment

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Revision No. **-**
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FIGURE 1.5

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Mariposa Road and Escalon-Bellota Road Specific Plan

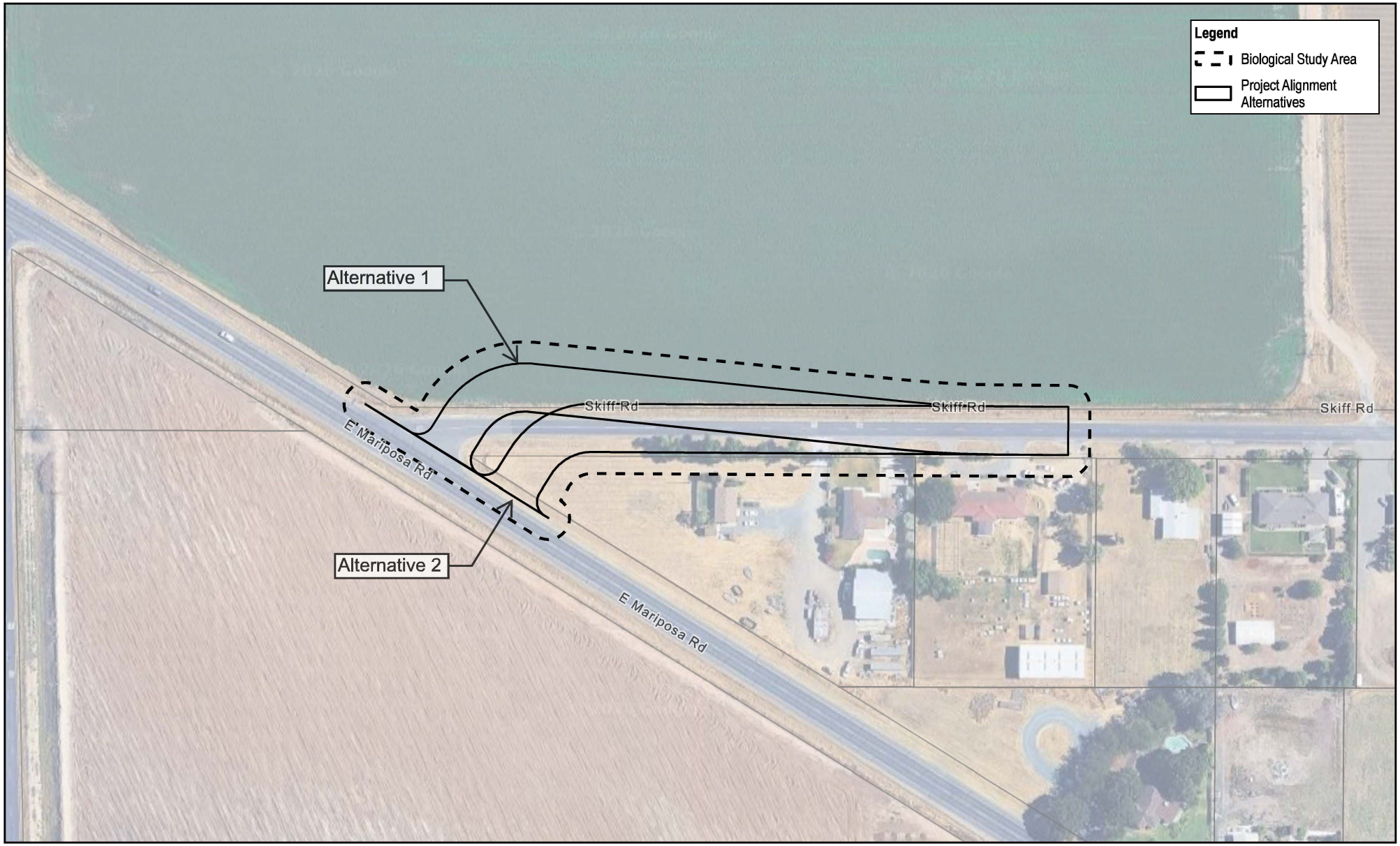
Site 2: Intersection of Mariposa Road and Gawne Road

Project No. **12635063**
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Date **Oct 2026**

FIGURE 1.6

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Mariposa Road and Escalon-Bellota Road Specific Plan

Site 3: Intersection of Mariposa Road and Skiff Road

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FIGURE 1.7

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Mariposa Road and Escalon-Bellota Road Specific Plan

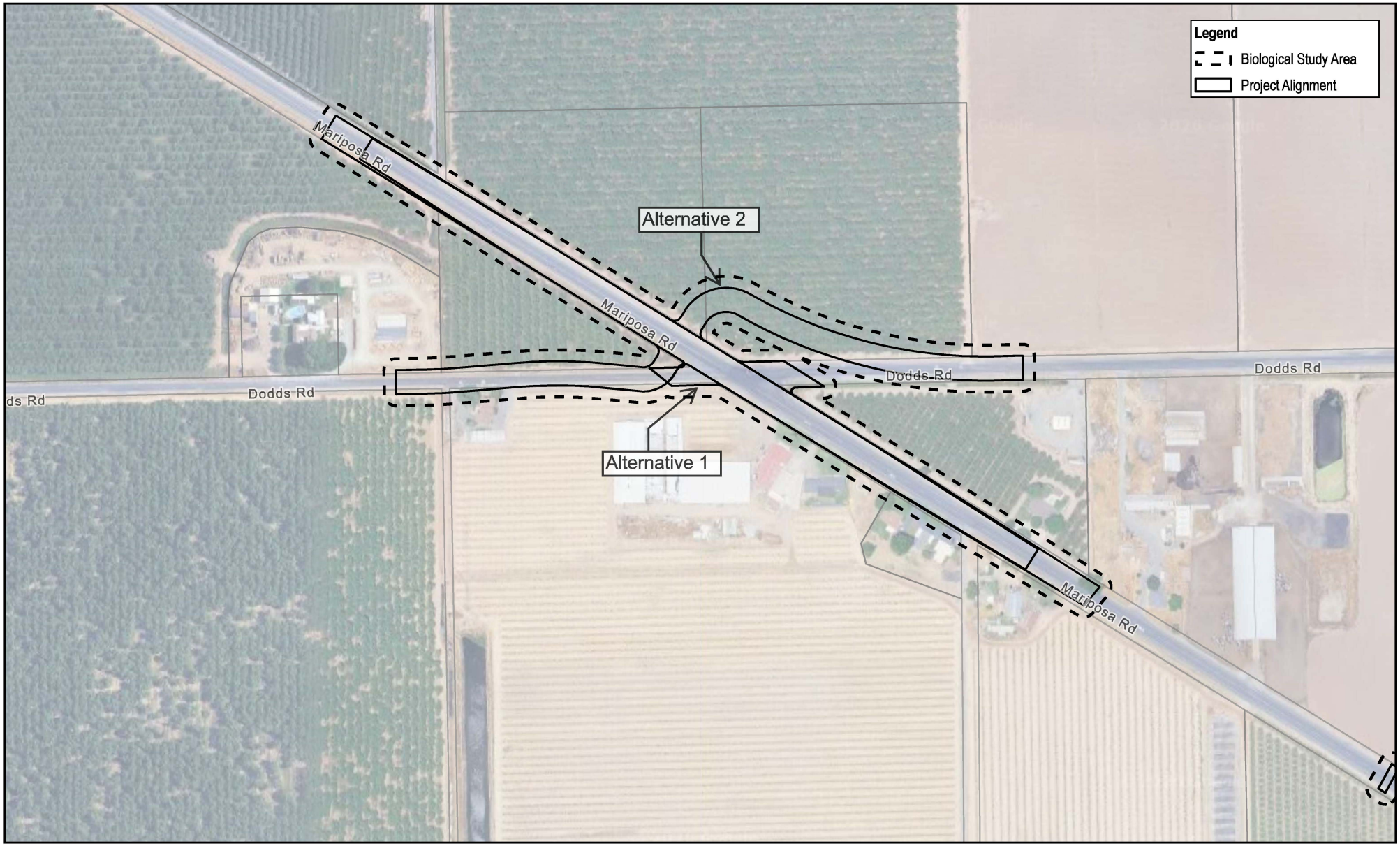
Site 4: Intersection of Mariposa Road and S. Van Allen Road

Project No. **12635063**
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Date **Oct 2026**

FIGURE 1.8

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Mariposa Road and Escalon-Bellota Road Specific Plan

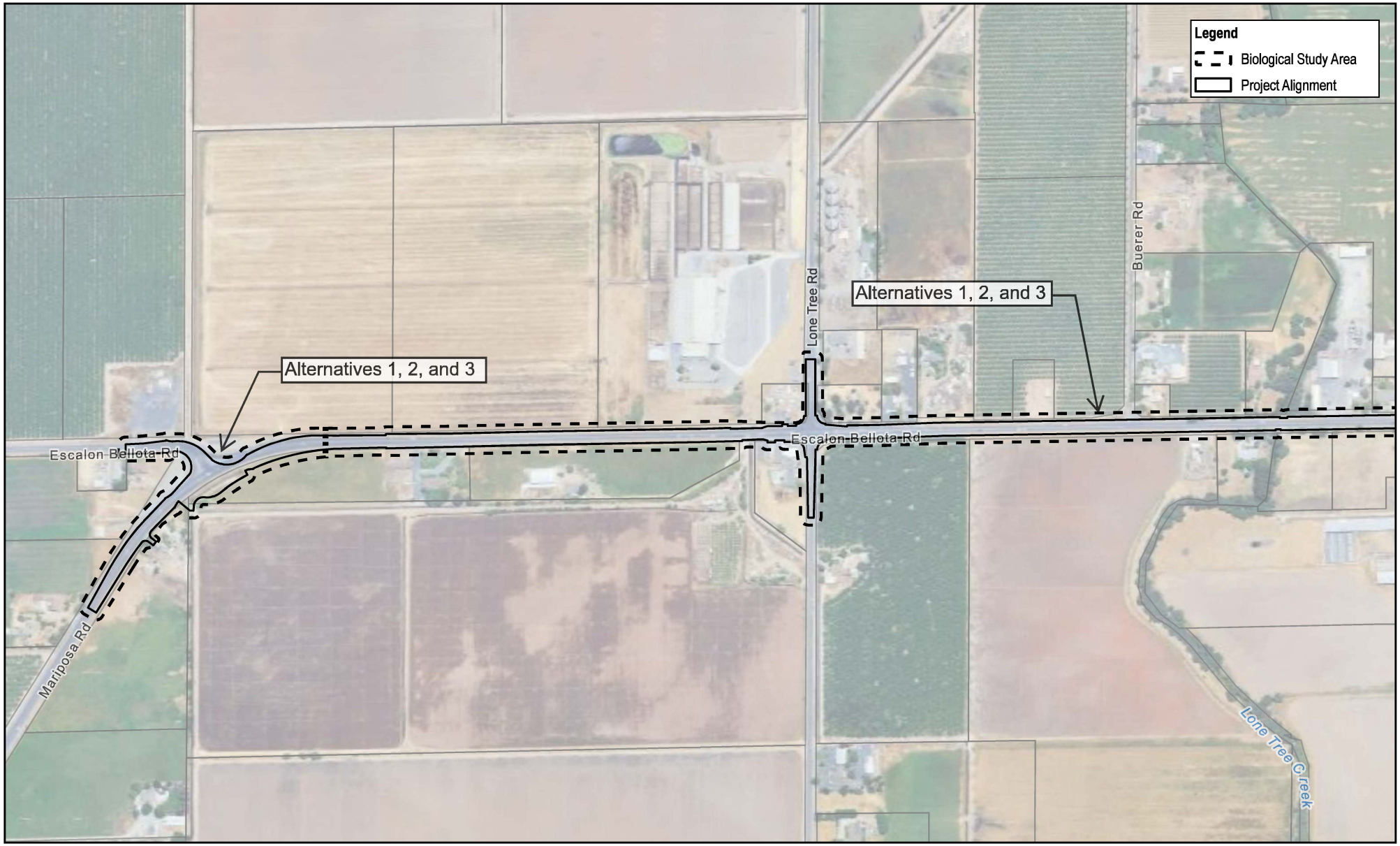
Site 5: Intersection of Mariposa Road and Dodds Road

Project No. **12635063**
Revision No. **-**
Date **Oct 2026**

FIGURE 1.9

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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

Site 6 and 7: Intersection of Mariposa Road and Escalon-Bellota Road, Escalon-Bellota Road Segement

Project No. **12635063**
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FIGURE 1.10

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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

Site 7: Escalon-Bellota Road Segment

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Date **Oct 2026**

FIGURE 1.11

\\ghdnet\ghd\US\Azure\EastUS\12635063\GIS\Maps\Working\12635063_ISMND_SpecificPlan.aprx - Figure 1.5-1.11 - 12635063_002_RoadSegments
Print date: 01 Oct 2026 - 16:48

Data source: Reference - Full (Road Labels Above):
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2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages:

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agricultural & Forestry Resources	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Air Quality	☐ Hydrology & Water Quality	☐ Transportation
☐ Energy	☐ Land Use & Planning	☐ Tribal Cultural Resources
☐ Biological Resources	☐ Mineral Resources	☐ Utilities & Service Systems
☐ Cultural Resources	☐ Noise	☐ Wildfire
☐ Geology & Soils	☐ Population & Housing	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.

☐ I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

LEAD AGENCY Signature Date

3. Environmental Analysis

3.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

Background and Regulatory Setting

San Joaquin County is located within the San Joaquin Valley and is characterized by predominantly flat terrain, extensive agricultural lands, and a network of rivers, sloughs, canals, and creeks. Prominent scenic resources within the county include Delta wetlands, river corridors, valley oak groves, and views of the Diablo Range and Sierra Nevada foothills.

San Joaquin County has designated 26 local roadways as local scenic routes. Interstate 5 and State Routes (SR) 4 and 99 are County-designated scenic roadways. Interstate 5 and Interstate 580 are also designated State Scenic Highways (San Joaquin County 2016). These routes were selected for their scenic, recreational, historic, agricultural, and topographic qualities. Neither Mariposa Road nor Escalon-Bellota Road is identified as a County-designated scenic route. Interstate 5 and Interstate 580 are more than 5 miles from the Project Corridor. The County's General Plan does not identify any county-designated scenic vistas.

a, b) Have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

The Project Corridor is located within a rural agricultural area of San Joaquin County characterized by agricultural fields, scattered residences, irrigation facilities, agricultural structures, and existing roadway infrastructure. The Project Corridor is not located within or adjacent to a designated scenic vista area.

The Project Corridor is not designated as a State Scenic Highway and is not identified as a County scenic route in Figure NCR-1 of the San Joaquin County General Plan (San Joaquin County 2016). Additionally, the Project Corridor is not in proximity to a State scenic highway.

Proposed improvements would occur within and adjacent to existing roadways and would not obstruct or substantially alter views of the surrounding landscape. Therefore, implementation of the Project would not have the potential to result in a substantial adverse effect on a scenic vista or damage scenic resources within a State scenic highway. No impacts to scenic vistas or state scenic highways would occur with implementation of the Project.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Less than Significant Impact)

The Project is located within a non-urbanized area of San Joaquin County, surrounded by rural agricultural land uses. Proposed improvements, including roadway widening, intersection modifications, turn lanes, traffic control devices, and roundabouts, would occur within and adjacent to the existing transportation corridor and would be visually consistent with existing roadway uses. Although localized changes to visual character would occur, the Project would not substantially degrade the visual character or quality of public views of the site or surrounding area. Impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less than Significant Impact)

The Project primarily consists of roadway and intersection improvements within the existing transportation corridor. The Project would include installation of solar-powered flashing beacons as a safety improvement; flashing safety beacons would not result in a substantial light or glare that would adversely affect day or nighttime views. Additionally, the Project does not propose substantial new lighting or the use of highly reflective materials that would create a significant source of light or glare. Any traffic safety lighting that may be installed at future intersections or roundabouts would be limited in extent and consistent with applicable roadway design standards. Therefore, Project impacts from substantial light or glare would be less than significant.

3.2 Agriculture and Forest Resources

Would the Project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			✓	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			✓	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

Background and Regulatory Setting

The California Department of Conservation, Division of Land Resource Protection, administers the California Farmland Mapping and Monitoring Program (FMMP), to assess and plan for California's agricultural land resources. The FMMP produces Important Farmland Maps, which identify "Prime Farmland" and "Farmland of Statewide Importance." These classifications are based on criteria developed by the United States Department of Agriculture Natural Resources Conservation Service (NCRS), which classify soils by various physical and chemical properties. For farmland to be considered "Prime" or of "Statewide Importance" in California, land must have been used for irrigated agricultural production at some time during the four years prior to the Important Farmland Map date. See California Department of Conservation, Prime Farmland and Farmland of Statewide Importance, available at https://www.conservation.ca.gov/dlrp/fmmp/Pages/prime_farmland_fmmp.aspx.

The California Land Conservation Act of 1965 (commonly known as the Williamson Act) established a voluntary tax incentive program for preserving agricultural and open space lands. A property owner

enters into a 10-year contract with the County, which places restrictions on the land in exchange for tax savings. The property is taxed according to the income it is capable of generating from agriculture and other compatible uses, rather than its full market value. Williamson Act contracts are renewed automatically each year unless they are canceled or a Notice of Non-renewal is filed with the County (Baseline 1992).

The California Department of Forestry and Fire Protection (Cal Fire) monitors and maps the state's forest resources and overall vegetation types, and produces a map that classifies lands within the state into 13 large-scale categories (WHR13 Types) that encompass both natural landscapes as well as agricultural and urban uses, and water bodies. The current WHR13-type map identifies the Project Corridor, as well as the majority of the San Joaquin Valley, as agricultural land. There is no mapped forestland in San Joaquin County (Cal Fire 2026).

The San Joaquin County General Plan identifies the county as the agricultural heart of California (San Joaquin 2016). The Project Corridor areas (between Stockton and Escalon) is primarily agricultural and rural residential in character. The Project Corridor is within and adjacent to areas identified by the county as Agricultural Preserve and under current Williamson Act Contracts (San Joaquin 2026). The County General Plan policy LU-7.14 encourages all areas designated for agricultural uses to be placed in an agricultural preserve and be eligible for Williamson Act contracts, provided the land is not anticipated for development for at least 10 years (San Joaquin County 2016b).

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Less than Significant Impact)

The Project Corridor is largely surrounded by rural and agricultural property. Much of the surrounding area is identified as "Prime Farmland", "Farmland of Statewide Importance" and "Unique Farmland". Implementation of the Specific Plan would result in safety and operational improvements, including installation of signage within the ROW, widening of roadways, and intersection improvements.

The exact acreage needed to accommodate roadway widening and intersection improvements would depend on the alternatives selected and final design. Additional areas may be required for use in temporary construction easements, but this land would revert to agricultural uses when construction is completed. San Joaquin County does not have a significance threshold for acreage conversion from agricultural to non-agricultural uses; however, the conversions would occur adjacent to existing roadway f. The areas of conversion are on the boundaries of the existing agricultural uses and would not substantively affect the agricultural productivity of the parcels. The impact would be less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Less than Significant Impact)

As stated above, the Project Corridor is largely surrounded by rural and agricultural property. Multiple properties in the surrounding area are associated with Williamson Act Contracts (San Joaquin County District Viewer, Williamson Act map background view, available at

http://www.sjmap.org/DistrictViewer/ (San Joaquin County 2026). The Project would not be expected to conflict significantly the existing agricultural zoning or with Williamson Act-encumbered parcels.

However, the proposed long-term improvements would require minimal dimensions of right-of-way from the parcels' boundaries, and would not interfere with the remaining areas' agricultural capability. Property owners would be compensated for the acquisition.

c, d) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)) or result in the loss of forest land or conversion of forest land to non-forest use? (No Impact)

There is no mapped forestland in the vicinity of the proposed Project or in San Joaquin County generally. Accordingly, no impacts associated with farmland or forestland loss are anticipated.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

Other than the minimal acreage converted from agriculture discussed in Impact 3.2 (a) above, the Project would not induce further conversion of agricultural land to non-agricultural uses. The near-term improvements would not increase capacity. The long-term improvements would be designed for the projected design-year volumes and would not increase capacity beyond the design-year volumes, developed using available traffic data from planned industrial and warehousing development in south Stockton, county population projections developed by the California Department of Finance, and the county's regional travel demand model. The Project would not result in other changes not already evaluated in this initial study, that would convert farmland to another use.

3.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Background and Regulatory Setting

The Project is located within the San Joaquin Valley Air Basin (Air Basin). The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local air district that monitors air quality, enforces local, state and federal air quality regulation for the counties within the Air Basin, including San Joaquin County, inventories and assesses the health risks of Toxic Air Contaminants (TAC), and adopts rules that limit pollution. The Project area is designated ‘nonattainment’ for the federal ambient air quality standards for ozone and particulate matter 2.5 microns and smaller in diameter (PM2.5). Additionally, the Project area is designated ‘nonattainment’ for the California ambient air quality standards for ozone, particulate matter 10 microns and smaller in diameter (PM10), and PM2.5. The Project area is designated ‘attainment’ or ’unclassified’ for all remaining criteria pollutants standards.

PM10 includes emission of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM10 emissions include unpaved road dust, smoke from wood stoves, construction dust, open burning of vegetation, and airborne salts and other particulate matter naturally generated by ocean surf.

PM10 and PM2.5 include primary pollutants (emitted directly to the atmosphere) as well as secondary pollutants (formed in the atmosphere by chemical reactions among precursors). Generally speaking, PM2.5 is emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM10 sources include these same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust in the Air Basin.

Ozone is not emitted directly into the air, but is a regional pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, Reactive Organic gases (ROG) and Oxides of Nitrogen (NOx), react in the atmosphere in the presence of sunlight to form ozone.

Construction emissions for all near-term improvements were estimated using the CalEEMod version 2022.1.1.46 (see Appendix B, CalEEMod Output). Long-term improvement Alternative 3 for the Escalon-Bellota Road Segment was identified as the 'maximum-impact' long-term improvement construction analysis. Alternative 3 for the Escalon-Bellota Road Segment would result in the largest footprint of construction activity, and would likely require the longest construction timeframe, as it would widen approximately 1.9 miles of existing road to 5 lanes (4 lanes with a two-way left turn lane). Therefore, construction emissions for Alternative 3 for the Escalon-Bellota Road Segment were estimated using CalEEMod.

Operational emissions are addressed qualitatively.

a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

This impact relates to consistency with the adopted attainment plans, which include the following:

2026 Extreme Ozone State Implementation Plan (SIP) Revision

2024 Plan for the 2012 PM2.5 Standard (2024 PM2.5 Plan)

2022 Plan for the 2015 8-hour Ozone Standard (2022 Ozone Plan)

In July 2026, the California Air Resources Board (CARB) adopted the 2026 SIP Revisions for the California Extreme Ozone Nonattainment Areas. The plan includes revisions to the measure commitments originally included in the 2022 State SIP Strategy and commitments to achieve emissions reductions for nonattainment areas for the federal ozone ambient air quality standard.

The 2024 PM2.5 Plan was developed by the SJVAPCD to meet the nonattainment area requirements under the Clean Air Act for the federal PM2.5 ambient air quality standard. The plan demonstrates attainment of the PM2.5 standard by 2030.

The 2022 Ozone Plan was developed by the SJVAPCD and includes a number of measures to control emissions from stationary sources, as well as commitments to reduce emissions from mobile sources, consumer products, pesticides, and primarily-federally and internationally regulated sources.

Per the SJVAPCD, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the applicable air quality plan (SJVAPCD 2015). As detailed in Impacts 3.3 (b) and 3.3 (c) below, Project construction and operation would not exceed the SJVAPCD's recommended thresholds of significance.

Additionally, the Project would not result in an increase in population or increase vehicle trips or miles traveled, and no land use or transportation control measures from the air quality plans are applicable. Therefore, the Project would not conflict with the air quality plans. No impact would occur.

b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than Significant Impact)

San Joaquin County is currently designated as nonattainment for the federal and state ambient air quality standards for ozone and PM2.5 standards, and the state PM10 standard. The county is designated as attainment or unclassified for all other federal and state ambient air quality standards. Therefore, the non-attainment pollutants of concern for this impact are ozone, PM10, and PM2.5.

Ozone is not emitted directly into the air, but is a regional pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, NOx and ROG, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the SJVAPCD does not have a recommended ozone threshold, but has regional thresholds of significance for project-emitted NOx and ROG. In developing thresholds of significance for air pollutants, SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (SJVAPCD 2015).

Construction

Construction of near-term improvements is expected to occur within the first 10 years after Specific Plan adoption. Construction of the long-term improvements is anticipated to commence after 2035 and would be implemented based on funding availability. Specific construction phasing is unknown. Emissions quantification assumed that near-term improvements would be installed in one calendar year and require up to 40 working days total. Emissions quantification for the maximum-impact long-term improvement, identified as Alternative 3 for the Escalon-Bellota Road widening, is estimated to require approximately 1 year of construction activity. For the purposes of conservative analysis, it was assumed that construction of the long-term improvement would begin in 2035.

The types of air pollutants generated by construction activities are typically NOx and particulate matter, such as dust and exhaust. Construction activities could temporarily increase levels of PM2.5 and PM10 downwind of construction activity. These are temporary emissions that vary considerably from day-to-day and by the type of equipment and weather. In addition, carbon monoxide (CO) and ROG are emitted during operation of gas and diesel-powered construction-equipment.

Project construction would result in regional air pollutant and precursor emissions from equipment exhaust and worker trips to the Project site. Construction criteria pollutant emissions were calculated by using CalEEMod. Details regarding the equipment inventory and activity used to calculate construction-related air quality emissions are available in Appendix B, CalEEMod Output.

Table 3.3-1 provides the Project's estimated construction emissions from near-term improvements and the maximum impact long-term improvement. As shown in the table, construction of the Project improvements would not exceed the thresholds of significance. Therefore, construction emissions from implementation of the Project improvements are considered to have a less than significant impact.

Table 3.3-1 Construction Air Pollutant Emissions

Construction Activity	Annual Emissions (tons per year)					
	CO	NOx	ROG	SOX	PM10	PM2.5
Near-Term Improvements (2028)	0.04	0.03	<0.01	<0.01	0.11	0.01
Long-Term Improvements (2035)	2.96	1.60	0.22	<0.01	0.14	0.06
SJVAPCD Threshold	*100*	*10*	*10*	*27*	*15*	*15*
Project Exceed Threshold?	No	No	No	No	No	No

Operation

Following construction, the Project would not include any stationary sources of air emissions. As provided in 1.3, Location and Existing Setting, growth utilized to estimate projected trips through the Project Corridor would be occurring separately and without implementation of the Project. Without implementation of the Project, roadway operation and safety along the Project Corridor are projected to degrade under projected trip volumes. The proposed Project would not generate new vehicle trips. The improvements proposed by the Specific Plan are identified to improve safety in the near-term, and safety and operations in the long-term.

Vehicle trips associated with operation and maintenance of the proposed Project would include maintenance and monitoring as described in the Project Description and would be consistent with the existing maintenance and monitoring of the existing roadway and associated facilities. The Project would not result in long-term operational emissions of criteria air pollutants above existing conditions. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. Operation of the Project would not result in impacts to air quality.

c) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant Impact)

Sensitive receptors are defined by the California Air Resources Board (CARB) as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Sensitive receptor land uses include schools, daycare, playgrounds, retirement community, nursing homes, medical facilities/offices, public and private exercise facilities, parks. There are multiple sensitive receptors within 1,000 feet of the Project Corridor.

The near-term improvements would not change the distance between roadway travel lanes and existing sensitive receptors, or result in prolonged use of heavy-duty construction equipment for installation. Therefore, a detailed description of sensitive receptors and their location relative to near-term improvements is not warranted. For the Project's long-term improvements, existing sensitive receptors in vicinity of the proposed improvements and changes in distance, if any, between the receptor and the revised travel lanes as a result of implementation of the Project improvements are provided below.

Site 1: Mariposa Road Segment west of Jack Tone Road (Alternative 2 Evaluated)

Multiple existing residencies are located south of Mariposa Road, varying in distance from approximately 40 feet to more than 300 feet from the edge of travel lanes. Scattered residencies are located north of Mariposa road, varying in distance from 60 feet to more than 400 feet from the edge of travel lanes. Additionally, the Collegeville Elementary School is located approximately 300 feet from the edge of Mariposa Road's travel lane.

The roadway would be widened to the north, primarily through agricultural fields. The existing bridges at Kaiser Road and just easterly of Kaiser Road would be widened or reconstructed. As shown in Table 1-6, Distance to Structures at Site 1 with Long-Term Improvement Alternative 2, the distance between the edge of travel lane and the receptors (residential buildings and elementary school) would be reduced by approximately 23 feet.

Site 2: Intersection of Mariposa Road and Gawne Road / Murphy Road (Alternative 3 Evaluated)

An existing residence is located more than 550 feet north of Gawne Road. An existing residence is located approximately 130 feet south of Mariposa Road and 190 feet east of Murphy Road. The proposed long-term improvements at Site 2 would not change the distance between the existing residences and the roadways.

Site 3: Intersection of Mariposa Road and Skiff Road (Alternative 1 Evaluated)

Existing residences are located approximately 60 feet south of Skiff Road, and north of Mariposa Road. Neither Alternative 1 or Alternative 2 would reduce the distance between the existing residences and the roadways.

Site 4: Intersection of Mariposa Road and Van Allen Road (Alternative 2 Evaluated)

North of Mariposa Road, an existing residence is approximately 50 feet west of S Van Allen Road. South of Mariposa Road, two existing residences are located approximately 38 feet west of S Van Allen Road. None of the Alternatives would reduce the distance between the existing residences and the roadways.

Site 5: Intersection of Mariposa Road and Dodds Road (Alternative 2 Evaluated)

The existing residence nearest to the intersection of Mariposa Road and Dodds Road is located approximately 60 feet south of Mariposa Road. Neither Alternative 1 or Alternative 2 would reduce the distance between the existing residence and the roadways.

Site 6: Intersection of Mariposa Road and Escalon-Bellota Road (Alternative 1 Evaluated)

The nearest sensitive receptors to the proposed improvement at Site 6 are existing residences south of Mariposa Road. Existing residences are approximately 18 feet to 60 feet from the roadway. Additionally, an existing residence north of the intersection of Mariposa Road and Escalon-Bellota Road is approximately 50 feet west of Escalon-Bellota Road. Neither Alternative 1 or Alternative 2 would reduce the distance between the existing residences and the roadways.

Site 7: Escalon-Bellota Road Segment (Alternative 3 Evaluated)

Multiple residences are located along the proposed long-term Escalon-Bellota Road improvements. The receptors nearest to the roadway are residences north-east of the intersection of Escalon-Bellota Road, which are approximately 20 feet from the edge of the travel lanes of Escalon-Bellota Road. The proposed improvements would not reduce the distance between the roadway and those receptors. However, at other locations along the segment, distances between the edge of travel lanes and existing residences may reduce by approximately 5 to 8 feet, dependent upon final design.

Construction-period Diesel Particulate Matter

Construction equipment and heavy-duty truck traffic generate diesel particulate matter (DPM) exhaust, which is a known toxic air contaminant. DPM from equipment exhaust pose potential health impacts to nearby receptors if those receptors have prolonged exposure to substantial emissions. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the health risk relative to exposure of sensitive receptors to toxic air contaminant emissions, should be based on a 24 hour a day, 7 days per week, 365 days per year,

30-year exposure period (i.e., chronic lifetime) when assessing TACs (such as DPM) that have cancer or chronic non-cancer health effects (OEHHA 2015).

As required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]), construction contractors would be required to minimize idling times for trucks and equipment to five minutes, as well as to ensure that construction equipment is maintained in accordance with manufacturer's specifications.

The near-term improvements would be limited in construction scope and activity. Construction of the proposed near-term improvements would not require use of heavy-duty off-road construction equipment for an extended period of time in proximity to existing sensitive receptors. Therefore, construction of the near-term improvements would result in a less than significant impact.

The long-term improvements are anticipated to be constructed after 2035, and would be implemented based on funding availability. The long-term improvement with the longest construction duration would be for Site 7, which would widen Escalon-Bellota Road. It is estimated that overall construction of Site 7 improvements would take approximately 1 year. However, construction would shift along the corridor for this linear Project, with construction duration being shorter at any one location. Given the limited overall activity for construct, and the limited duration of use as activity shifts, prolonged exposure of sensitive receptors to substantial pollutant concentrations would not occur. The impact to sensitive receptors during construction would be less than significant.

Operational Mobile Source Air Toxics

Mobile Source Air Toxics (MSAT) are a subset of the 188 air toxics defined by the Clean Air Act. MSAT are compounds emitted from highway vehicles and non-road equipment. Of the 21 identified MSAT compounds, the EPA has listed seven as "priority" MSATs: benzene, formaldehyde, DPM/diesel exhaust organic gases, acrolein, 1,3-butadiene, naphthalene, and polycyclic organic matter. Implementation of the Project is not anticipated to change the volume of trips that would otherwise occur on the Project Corridor roadways. As shown in Table 1-1, the traffic volumes along the Project Corridor vary between 6,722 daily trips to 11,324 daily trips under existing (2024) conditions, and are projected to increase to between 8,600 daily trips and 14,400 daily trips at the design year (2045).

For reference, the CARB Air Quality and Land Use Handbook: A Community Health Perspective (Land Use Handbook) provides CARB's recommendations regarding the siting of new sensitive land uses near facilities that are associated with health risks, particularly from air toxic emissions. The Land Use Handbook has siting guidance for freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. Although this guidance is for siting new locations of sensitive receptors, the facility distance and size guidance may be used as a screening level to identify when additional analysis is warranted during environmental review, including CEQA.

The Land Use Handbook advisory recommendation for relevant land uses are:

Freeways and High Traffic Roads

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

At an estimated high of 14,400 daily trips along the southern portion of Site 7, Escalon-Bellota Road, the projected vehicle activity would comprise approximately 29 percent of the sizes warranting

recommended distances as contained in the CARB's Land Use Handbook. Due to the low volume of anticipated vehicle trips, the minor change in distance between receptors and the edge of travel lanes, and the anticipated continued reduction in mobile source emissions rates (due to regulations and market changes that reduce emissions from on-road vehicles), exposure of sensitive receptors to substantial pollution concentration during operation would be less than significant.

Valley Fever

Valley Fever (Coccidioidomycosis) is a disease caused by a fungus in the soil throughout the San Joaquin Valley. When soil is disturbed by any variety of factors (such as construction, wind, etc.) fungal spore can drift into the air, inhaled by people and animals, infect the lungs, and spread to other parts of the body. The spores can infect lungs, and in some cases spread to other parts of the body. In less than 1% of cases, Valley Fever can be fatal.

According to the San Joaquin County Public Health Services, the counties with the highest rates of Valley Fever in the Central Valley are Fresno through Tulare Counties. Dust control measures laid out in Section 1.7, Compliance with Existing Regulations and Standard BMPS, are required to comply with SJVAPCD's Regulation VIII (Fugitive Dust Prohibitions). Compliance with this regulation would minimize potential exposure to Valley Fever spores and therefore the impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less than Significant Impact)

Implementation of the Specific Plan would not result in new sources of odor. Roadways are not one of the common types of facilities known to produce odors (i.e., landfill, coffee roaster, wastewater treatment facility, etc.). Minor odors from the use of equipment during construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. In addition, implementation of the Specific Plan would not result in locating sensitive receptors near an existing odor source. Thus, the Specific Plan would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

3.4 Biological Resources

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Regulatory Setting

U.S. Endangered Species Act of 1973, California Endangered Species Act

The federal Endangered Species Act (ESA) was passed by Congress to identify and protect special-status species and their habitats nationwide in order to protect them from extinction; it is administered by the U.S. Fish and Wildlife Service (USFWS). The California Endangered Species Act of 1970 (CESA) likewise identifies and protects such species within California and is administered by California Department of Fish and Wildlife (CDFW). Special-status species include:

- USFWS-designated listing of threatened or endangered species, as well as candidate species;
- CDFW-designated listing of rare, threatened, or endangered species, as well as candidate species;
- Species considered to be rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as those identified in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society; and
- Other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing, or rejection for state or federal status, such as Species of Special Concern designated by the CDFW.

The USFWS and CDFW both publish lists of special-status species, which satisfy criteria classifying them as endangered. Species that have been proposed for listing, but have not yet been accepted are classified as candidate species. Generally, the term endangered (federal, state) refers to a species that is in danger of becoming extinct throughout all or a significant portion of its range, while a threatened (federal, state) or rare (state) species is one that could become endangered in the foreseeable future.

U.S. Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The Migratory Bird Treaty Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service. Most non-game wild birds are protected under the MBTA.

California Fish and Game Code

The CDFW provides protection from take for state-listed and non-listed species. The California Fish and Game Code (CFGC) defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CFGC Section 2080 prohibits take of a species listed as endangered or threatened under the CESA and CFGC Section 2081 allows CDFW to issue an incidental take permit in accordance with Title 14 California Code of Regulations (CCR) Section 783.4(a -b) and Section 2081(b). Eggs and nests of all birds are protected from take under CFGC Section 3503. Raptors and raptor nests or eggs are protected from take under CFGC Section 3503.5. Migratory birds are expressly prohibited from take under CFGC Section 3513, and species designated by

CDFW as fully-protected species are protected from take under CFGC Sections 3511, 4700, 5050, and 5515.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

U.S. Rivers and Harbors Act of 1889

The U.S. Army Corps of Engineers (Corps) has primary federal responsibility for administering regulations that concern waters of the U.S., including wetlands and drainages. The Corps acts under two statutory authorities: the Rivers and Harbors Act (Sections 9 and 10), which governs specified activities in “navigable waters of the U.S.,” and the Clean Water Act (CWA) Section 404, which governs specified activities in waters of the U.S. The Corps requires that a permit be obtained if a Project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the United States (WOUS), including adjacent wetlands. The Environmental Protection Agency (EPA), USFWS, and several other agencies provide comment on Corps permit applications.

California Porter-Cologne Water Quality Control Act of 1970

The State’s authority in regulating activities in WOUS and/or waters of the State of California, including wetlands, resides primarily with the State Water Resources Control Board (SWRCB). SWRCB, acting through Regional Water Quality Control Board (RWQCB), must certify that a Corps permit action meets state water quality objectives under Section 401 of the CWA. RWQCB jurisdiction over waters of the state is extended through the Porter-Cologne Act, which defines waters of the state as any surface water or groundwater, including saline waters, within the boundaries of the state. In the absence of CWA Section 404 jurisdiction over isolated waters or other waters of the state, California retains authority to regulate discharges of wastes into any waters of the state. The Porter-Cologne Act provides a comprehensive framework to protect water quality in California. It requires any entity that plans to discharge waste where it might adversely affect waters of the state to first notify the RWQCB, which may impose requirements to protect water quality.

California Fish and Game Code Section 1600 (Lake and Streambed Alteration Program)

CDFW has jurisdiction over streams that support fish and wildlife resources. Section 1602 of California Fish and Game Code requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will do one or more of the following:

a. Substantially divert or obstruct the natural flow of any river, stream, or lake;
b. Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
c. Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, including seasonal drainages and intermittent streams.

When CDFW is notified, it will determine whether an activity might substantially adversely affect an existing fish and wildlife resource, and may require that a Lake or Streambed Alteration Agreement be obtained prior to proceeding with any work in areas subject to CDFW jurisdiction. The Lake or Streambed Alteration Agreement contains measures that are required to be implemented to protect fish and wildlife resources. CDFW jurisdiction extends beyond the ordinary high water mark of streams – it encompasses all portions of the bed, bank, and channel of a stream, and often includes adjacent riparian vegetation and floodplains. As such, CDFW's jurisdictional area is generally larger than the U.S. Army Corps of Engineers jurisdictional area.

San Joaquin County General Plan (December 2016)

The General Plan sets forth various goals and policies for natural resources, including biological resources, as follows:

- Goal NCR-1.1 states that "[t]he County shall protect, preserve and enhance important natural resource habitat, biological diversity, and the ecological integrity of natural systems in the County."
- Goal NCR-2.1 calls for protecting significant biological and ecological resources,
- Goal NCR-2.5 requires that no net loss of wetlands results from development,
- Goal NCR-2.6 lists requirements for development projects that could fill wetlands, and
- NCR-2.7 requires vegetated natural open space buffers along natural waterways to protect waterfowl and water quality.

The General Plan Land Use Diagram (Figure LU-1) indicates that virtually all riparian corridors are designated "Open Space/Resource Conservation" (OS/RC).

San Joaquin County Riparian Habitat Ordinance

The San Joaquin County Development Title contains provisions to preserve county natural resources, including riparian habitat (San Joaquin County Code of Ordinances, Title 9, Division 15. These provisions apply to all development projects requiring discretionary approval. Sections 9-1510.1 through 9-1510.5 contain measures to avoid, protect, and mitigate impacts to riparian habitat. Included in these sections is a description for a Riparian Habitat Mitigation Plan. The creation of such a plan would be part of the conditions for approval which would be required when an action is proposed that had the potential to destroy, eliminate, or degrade riparian habitat in the county. Components of the plan would include description of on-site riparian habitat (as well as protection measures), mitigation sites, contribution to an existing off-site habitat site, replacement vegetation, maintenance, and conservation easements. This plan would address the potential impacts to or loss of existing riparian habitat in addition to a planning approach for habitat restoration or replacement, as necessary. The establishment of natural bank buffers is also part of this provision. This would require that a natural open space for riparian habitat and waterway protection be established parallel to any natural bank of a waterway approximately 100 feet from the mean high-water level. This requirement would provide protection for potential wildlife habitat and water quality.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), adopted November 14, 2000, is a combined HCP and Natural Community Conservation Plan

(NCCP) covering approximately 1,400 square miles and more than 900,000 acres within San Joaquin County, including 43 percent of the Sacramento- San Joaquin Delta's Primary Zone (SJCOG 2000). The plan provides Incidental Take Permit (ITP) coverage under FESA Section 10(a)(1)(B) and incidental take authorization under CESA Section 2081(b) for a suite of covered species for defined permitted activities within the plan area. Participation in the SJMSCP is voluntary for most project applicants but is strongly encouraged as the most efficient and legally certain pathway for achieving regulatory compliance for open space conversions in San Joaquin County.

The SJMSCP covers 58 plant, fish, wildlife, and natural community species and is specifically designed to address the cumulative effects of land conversion within the county on these resources, including Swainson's hawk (Buteo swainsoni), one of the plan's primary target species (SJMSCP 2000, Section 2.2.2).

The SJMSCP divides the County into index zones reflecting ecological conditions and species distributions; the Mariposa Road and Escalon-Bellota Specific Plan area is located within the Central Zone, which encompasses the agricultural heartland of the San Joaquin Valley between Stockton and the Sierra Nevada foothills and supports the core of San Joaquin County's Swainson's hawk breeding population (SJMSCP 2000, Section 5.1.2.2).

The SJMSCP establishes both incidental take minimization measures and compensation requirements for covered activities that result in open space conversion. For Swainson's hawk, the SJMSCP JPA requires: (1) preconstruction surveys conducted by SJCOG JPA-coordinated biologists prior to ground disturbance; (2) a no-disturbance buffer of one-half mile around any active nest site during the breeding season (March 15 to September 15); and (3) compensation for loss of foraging habitat through payment of per-acre fees to the JPA, dedication of replacement lands as conservation easements, or purchase of mitigation bank credits from an SJMSCP-approved bank (SJMSCP 2000, Sections 5.2.4.11, 5.3.2). Central Zone foraging habitat compensation is achieved through acquisition of Row and Field Crop/Riparian Preserves consistent with the design criteria in SJMSCP Section 5.4.4.4. For northwestern pond turtles (also a covered species under the SJMSCP) the plan requires preconstruction surveys and relocation of any individuals found within a project footprint prior to ground disturbance (SJMSCP 2000, Section 5.2.4.10).

San Joaquin County General Plan

The San Joaquin County General Plan 2035, Natural and Cultural Resources Element (December 2016) establishes goals and policies for the protection of biological resources within the county. Goal NCR-2 directs the County to preserve and protect wildlife habitat areas for the maintenance and enhancement of biological diversity and ecological integrity. Relevant implementing policies include NCR-2.1 (protect wetlands, riparian areas, significant oak woodlands, and heritage trees), NCR-2.3 (continue implementation of the SJMSCP), NCR-2.4 (requires new development near significant oak groves to maximize long-term preservation), NCR-2.5 (no net loss of riparian or wetland habitat), and NCR-2.8 (requires a natural open space buffer along natural waterways). These policies apply to discretionary project approvals by San Joaquin County and inform the CEQA significance thresholds applicable to this Project.

San Joaquin County Development Title 9 Chapter 9-400.080 (Tree Ordinance)

San Joaquin County Development Title 9, Chapter 9-400.080 (Tree Ordinance) requires that removal of any Native Oak Tree, Heritage Oak Tree, or Historical Oak Tree be subject to an approved Improvement Plan application. Native oak removal is permitted subject to staff review but requires replacement at a 3:1 ratio (three replacement trees or acorns per tree removed), planted within 18

months, and maintained for a minimum of three years. Heritage and historical oak removal is permitted only under limited circumstances (including when removal is in the public interest or is required to facilitate repair and maintenance of existing roads) and requires 5:1 replacement. Development constraints applicable to all subject trees include: no grade changes within 6 feet of the trunk or exceeding 6 inches within the protected zone, installation of a 5-foot chainlink protective fence at the outermost dripline prior to grading, no trenching within the protected zone, and minimization of paving within the dripline with porous materials where paving is unavoidable.

San Joaquin County Development Title 9 Chapter 9-707.030 (Riparian Habitat Ordinance)

San Joaquin County Development Title 9, Chapter 9-707.030 (Riparian Habitat Ordinance) prohibits any action that would destroy, eliminate, or degrade riparian habitat unless the County's review authority finds the action is in the public interest and requires a Riparian Habitat Mitigation Plan as a condition of approval. Mitigation requirements include at-minimum 2:1 replacement with native vegetation, maintained for five years, with assurance of preservation secured through a conservation easement or equivalent instrument. Section 9-707.030 establishes a 100-foot natural open space buffer measured from the mean high-water level of any natural bank, or 50 feet from existing riparian habitat, whichever is greater; water-dependent uses may be permitted within this buffer.

Background

A Biological Resources Report (BRR) was prepared by GHD on May 22, 2026 (GHD 2026) for the Project. The BRR is provided as Appendix C. The BRR assessed sensitive biological resources (including aquatic resources, sensitive natural communities, and special-status plant and wildlife species and their habitats) within and adjacent to the Mariposa Road & Escalon-Bellota Specific Plan corridor. The analysis focuses on species listed as endangered or threatened under the federal and California Endangered Species Acts (FESA and CESA), their designated critical habitats, other California special-status species, and sensitive or jurisdictional habitats/sensitive natural communities (SNC). The BRR considers the Project footprint plus a 25-foot buffer around the full extent of the proposed impact footprint, which comprises the Biological Study Area (BSA). See Figure 1.5 through Figure 1.11 for the BSA.

The BSA includes paved roadway, adjacent landscaping, and agricultural lands. There is one perennial stream crossing (Lone Tree Creek) and seven unnamed irrigation canals that occur within the BSA. The BSA and Project Corridor have a narrow and minor footprint within the 13.5-mile stretch of Mariposa Road and Escalon-Bellota Road. The Project footprint is considered the area of estimated ground disturbance necessary to implement the Project improvements. At this time, it’s estimated that up to 34.6 acres may disturbed by the Project.

At this stage, because the Specific Plan is programmatic and improvement concepts are not finalized, the intensity and footprint of future ground disturbance cannot be precisely defined. If corridor improvements are implemented in the future, activities typically associated with roadway and intersection upgrades could include localized grading and excavation within and adjacent to the existing roadway prism, shoulder improvements, potential widening within future right-of-way, installation or modification of traffic control devices (e.g., signalization), and construction staging/ temporary access within previously disturbed roadside areas.

An analysis of potential impacts to special-status plant and wildlife species was conducted within the Project Corridor and a 25-foot buffer surrounding it, collectively referred to as the BSA. This buffer was established to account for adjacent and nearby habitats that could be directly or indirectly

affected by Project activities, and to include areas where special-status species may potentially occur.

Desktop Review

GHD conducted a review of multiple biological resource databases to identify special-status plant and wildlife species that may occur in the Project vicinity. Databases consulted included the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) RareFind 5 (CDFW 2025b), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants (CNPS 2025), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) species list (USFWS 2025a), the USFWS National Wetland Inventory (NWI) (USFWS 2025b), the National Marine Fisheries Service (NMFS) Critical Habitat Mapper (NMFS 2026), and the National Oceanic and Atmospheric Administration (NOAA) Essential Fish Habitat Mapper (NOAA 2026).

The CNDDB and CNPS queries included nine U.S. Geological Survey (USGS) quadrangles: *Farmington, Ripon, Peters, Stockton East, Riverbank, Salida, Manteca, Escalon, and Avena.*

In addition, citizen science platforms were reviewed for recent records of local wildlife and botanical observations within the BSA and surrounding areas, including Bumble Bee Watch (2025), eBird (Cornell Lab of Ornithology 2025), and iNaturalist (2025).

Physical resource data were also reviewed to characterize site conditions relevant to biological resources. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2025) was consulted to identify mapped soil types within the BSA and the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (FEMA 2025) was reviewed to determine flood zone designations within and adjacent to the Project area.

Field Survey

A reconnaissance-level biological survey of the Project Corridor and BSA was conducted over two days on March 5th and 6th, 2026 by GHD. The surveys covered the BSA and were performed by vehicle and on foot.

The primary objective was to evaluate the potential for biological resource impacts associated with potential Project activities.

Specifically, the survey aimed to:

A. Characterize existing biotic habitats and associated plant and wildlife communities.

B. Assess the Project Corridor’s potential to support special-status species and their habitats.

C. Identify potential jurisdictional and sensitive habitats, including waters of the U.S./state and riparian areas.

This was a general reconnaissance survey; no protocol-level surveys for special-status species were conducted.

Aquatic Resources

A formal aquatic resources delineation was not conducted as part of this Project. Aquatic resources within the BSA were identified through a combination of field reconnaissance and desktop review. Field observations focused on documenting physical indicators of aquatic features, including the

presence of defined bed and bank, ordinary high-water mark (OHWM) indicators, channel morphology, hydrologic characteristics (e.g., evidence of flow), substrate composition, and associated riparian or hydrophytic vegetation. Observations of surrounding land use and infrastructure were also used to distinguish between natural watercourses and constructed conveyance features.

Desktop review included evaluation of available geospatial data and mapping resources (e.g., USGS topographic maps, aerial imagery, and hydrographic datasets) to support preliminary characterization of aquatic features and assess potential hydrologic connectivity. Regulatory applicability was evaluated qualitatively based on observed physical characteristics and current regulatory frameworks, including California Department of Fish and Wildlife (CDFW) jurisdiction under Fish and Game Code Section 1602, Regional Water Quality Control Board (RWQCB) authority under the Porter-Cologne Water Quality Control Act, and potential U.S. Army Corps of Engineers (USACE) jurisdiction under Clean Water Act Section 404, as informed by the continuous surface connection standard described in Sackett v. EPA (2023). A formal aquatic resources delineation and jurisdictional determination would be required to confirm the extent and regulatory status of any aquatic resources, if necessary for Project permitting.

A total of seven water features were identified within the BSA during field reconnaissance and desktop review of USGS 7.5-minute topographic mapping, NWI mapping, the CDFW California Streams layer (BIOS), and aerial imagery (Table 3.4-1). These features include one named perennial stream (Lone Tree Creek), one named irrigation lateral (Sweet Lateral), one unnamed perennial irrigation lateral, and four unnamed irrigation laterals. Several of these features are part of the South San Joaquin Irrigation District (SSJID) distribution system, which conveys surface water from Woodward Reservoir through an extensive network of laterals throughout the Project vicinity. See Figures 3.1 through 3.6 for site habitat and aquatic resources.

Table 3.4-1 Aquatic Resources in the BSA

Feature ID	Feature Type	Flow Regime	Riparian/Aquatic Vegetation	Crossing Location
Irrigation Feature 1	Unnamed irrigation lateral	Perennial	Dense cattail and common reed; slow flowing water observed March 2026	Mariposa Road
Irrigation Feature 2	Unnamed irrigation lateral	Managed / ephemeral	Developed / unvegetated mixed with ruderal and disturbed; large valley oaks present	Murphy Road
Irrigation Feature 3	Unnamed irrigation laterals	Managed / ephemeral	Developed / unvegetated mixed with ruderal and disturbed, cattails in some portions	Mariposa Road / Dodds Road
Irrigation Feature 4	Unnamed irrigation lateral	Managed / ephemeral	Developed / unvegetated mixed with ruderal and disturbed	Mariposa Road / Escalon-Bellota Road intersection
Irrigation Feature 5 (Sweet Lateral)	Named irrigation lateral	Managed / ephemeral	Developed / unvegetated mixed with ruderal and disturbed	Near Lone Tree Road

Feature ID	Feature Type	Flow Regime	Riparian/Aquatic Vegetation	Crossing Location
Lone Tree Creek	Named perennial stream / irrigation conveyance	Perennial	Riparian – valley oak and willow	Escalon-Bellota Road
Irrigation Feature 6	Unnamed irrigation lateral	Managed / ephemeral	Developed/unvegetated mixed with ruderal and disturbed	Escalon-Bellota Road

Irrigation Feature 1

Irrigation Feature 1 is an unnamed perennial irrigation lateral crossed by Mariposa Road at one location within the BSA. The CDFW California Streams layer (BIOS) classifies this feature as a fluvial riverine natural feature; however, field observations indicate that it currently functions as an irrigation conveyance lateral. The feature supports perennial flow and dense emergent vegetation dominated by cattail and common reed, with standing water observed during field reconnaissance in March 2026. This feature provides the highest-quality aquatic and riparian habitat of the seven water features within the BSA and represents the most likely location for northwestern pond turtle occurrence.

Irrigation Feature 2

Irrigation Feature 2 is an unnamed irrigation lateral crossed at Murphy Road within the BSA. The feature is managed and ephemeral, and was dry during field reconnaissance in March 2026. Vegetation at the crossing consists of developed/unvegetated land mixed with ruderal and disturbed species. No functional aquatic or riparian habitat was observed at this crossing.

Irrigation Feature 3

Irrigation Feature 3 is an unnamed irrigation lateral crossed at the Mariposa Road and Dodds Road intersection within the BSA. The feature is managed and ephemeral, and was dry during field reconnaissance in March 2026. Vegetation at the crossing consists of developed/unvegetated land mixed with ruderal and disturbed species. No functional aquatic or riparian habitat was observed at this crossing.

Irrigation Feature 4

Irrigation Feature 4 is an unnamed irrigation lateral crossed at the Mariposa Road and Escalon-Bellota Road intersection within the BSA. The feature is managed and ephemeral, and was dry during field reconnaissance in March 2026. Vegetation at the crossing consists of developed/unvegetated land mixed with ruderal and disturbed species. No functional aquatic or riparian habitat was observed at this crossing.

Irrigation Feature 5 – Sweet Lateral

Irrigation Feature 5 is Sweet Lateral, a named irrigation lateral identified on the USGS Escalon 7.5-minute topographic quadrangle and the CDFW California Streams layer (BIOS). The feature is

crossed near Lone Tree Road within the BSA. Sweet Lateral is managed and ephemeral, and was dry during field reconnaissance in March 2026. Vegetation at the crossing consists of developed/unvegetated land mixed with ruderal and disturbed species. No functional aquatic or riparian habitat was observed at this crossing.

Lone Tree Creek

Lone Tree Creek is a named perennial stream mapped on USGS 7.5-minute topographic quadrangles that crosses the BSA at one location along Escalon-Bellota Road. The creek flows within a defined channel with a moderate riparian fringe supporting willows (*Salix* spp.) and dense emergent and ruderal vegetation along its banks. Lone Tree Creek also functions in part as an irrigation conveyance feature and exhibits modified channel morphology reflecting decades of agricultural water management. Despite these modifications, the feature retains a defined bed and bank and supports perennial flow.

Irrigation Feature 6

Irrigation Feature 6 is an unnamed irrigation lateral crossed at Escalon-Bellota Road within the BSA. The feature is managed by SSJID and ephemeral, and was dry during field reconnaissance in March 2026. Vegetation at the crossing consists of developed/unvegetated land mixed with ruderal and disturbed species. No functional aquatic or riparian habitat was observed at this crossing feature.

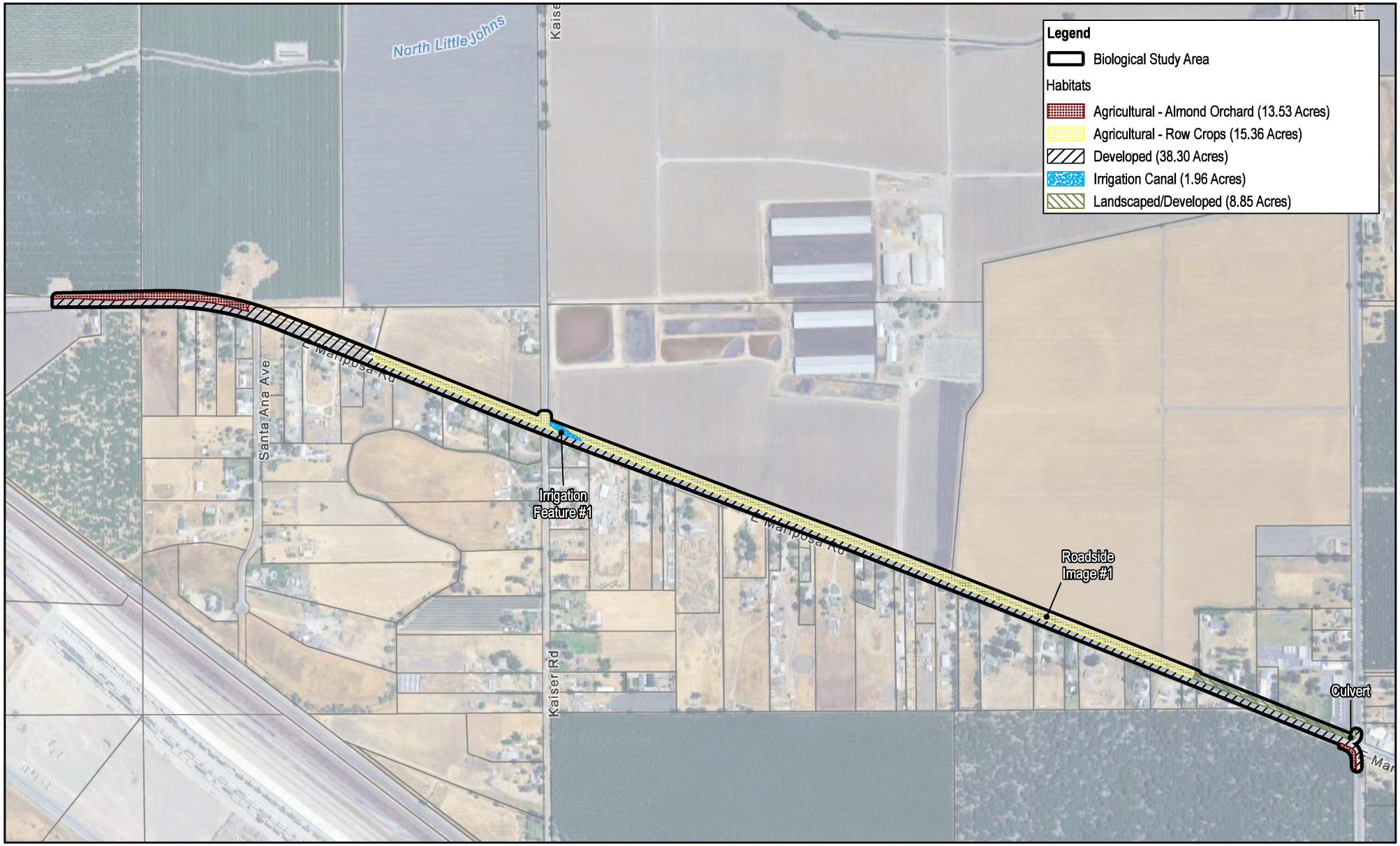
Habitat Types

Vegetation communities and land cover types within the BSA were mapped using a combination of aerial photo interpretation and field verification following guidance from the CNPS's *Guidelines for Mapping Sensitive Natural Communities* (SNC) (CNPS 2023). Prior to field surveys, potential vegetation community boundaries were delineated using high-resolution aerial imagery and existing vegetation mapping data, including CNDDB records and Vegetation Classification and Mapping Program (VegCAMP) datasets (CDFW 2025d). Vegetation was classified in accordance with the *Manual of California Vegetation* (MCV, 2nd edition) and the National Vegetation Classification System (NVCS) at the alliance level, with association-level classification applied where floristic composition could be confidently determined. Sensitive natural communities were identified as those with a state rarity rank of S3 or below, following NatureServe and CDFW ranking conventions (Faber-Langendoen et. al. 2012); all wetland and tidal marsh communities were treated as sensitive regardless of rarity rank due to their limited distribution and regulatory status.

Field verification was conducted during the reconnaissance survey to confirm vegetation community boundaries, assess species composition and cover by stratum, and document the presence of any sensitive natural communities. Vegetation polygons were attributed with alliance and association names, dominant species, percent cover by vegetation layer, and confidence level. A minimum mapping unit of 0.25 acre was applied for upland communities, with smaller features such as stream and potential SNC habitats mapped at finer resolution where discernible. Refer to Table 3.4-2 for habitat types identified within the BSA.

Table 3.4-2 Habitat/Land Cover Types Observed in the BSA

Habitat Type / Land Cover	Acreage	Area of BSA (percent)	Description
Agricultural — Row Crop	15.35	20%	Actively cultivated fields dominated by winter wheat and unidentified field crops; primary Swainson's hawk foraging habitat within Project vicinity
Agricultural — Almond Orchard	13.53	17%	Mature almond orchard constituting dominant tree crop along the corridor; not suitable foraging habitat for Swainson's hawk
Agricultural — Valley Oak Component	0.27	0.3%	Discrete polygon within almond orchard matrix and adjacent to a rural residential property retaining several large valley oaks (10 to 30 inches dbh); potential Swainson's hawk nest trees protected under SJC Development Title Section 9-400.080
Riparian — Valley Oak/Willow/Ruderal	0.05	-%	Structurally simplified riparian fringe along Lone Tree Creek. A single large valley oak was observed at top of bank. Understory and adjacent riparian dominated by ruderal and non-native grass and shrub species
Fremont Cottonwood	0.18	0.2%	Small stand of approximately 15 Fremont cottonwood (8 to 15 inches dbh) within proposed Skiff Road intersection rerouting footprint
Irrigation Canal	1.96	2.5%	Five water features within road right-of-way mapped as small polygons encompassing water surface and adjacent bank; individually small in area but significant biologically and regulatorily
Landscaped/Developed	8.85	11%	Rural residential properties with ornamental landscaping abutting road right-of-way at several locations along the corridor
Developed	38.29	49%	Paved road surface, compacted gravel and dirt shoulders and driveways, road fill, and associated infrastructure comprising existing road prism
Total BSA	**78.48**	**100%**	



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Map Projection: Lambert Conformal Conic
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GHD

County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

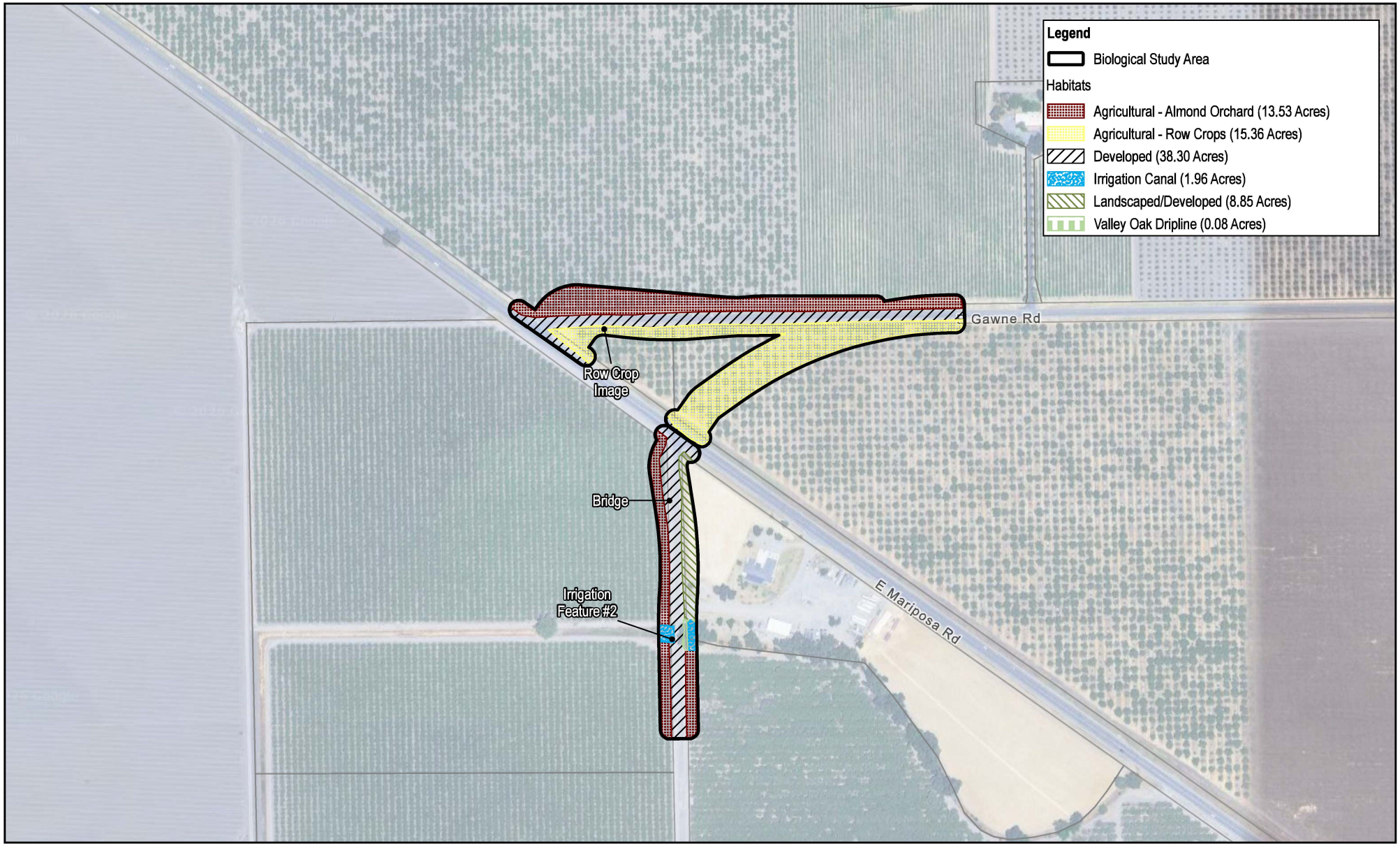
Project No. **12635063**
Revision No. **-**
Date **May 2026**

Site 1 Habitat and Aquatic Resources

FIGURE 3.1

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Habitat_Type_Polygon:
Reference - Full (Road Labels Above):
Tiled service layer: © OpenStreetMap (and) contributors, CC-BY-SA. Created by: ethompson3



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Map Projection: Lambert Conformal Conic
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GHD

County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

Project No. **12635063**
Revision No. **-**
Date **May 2026**

Site 2 Habitat and Aquatic Resources

FIGURE 3.2

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Tiled service layer: © OpenStreetMap (and) contributors, CC-BY-SA. Created by: ethompson3



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Map Projection: Lambert Conformal Conic
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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

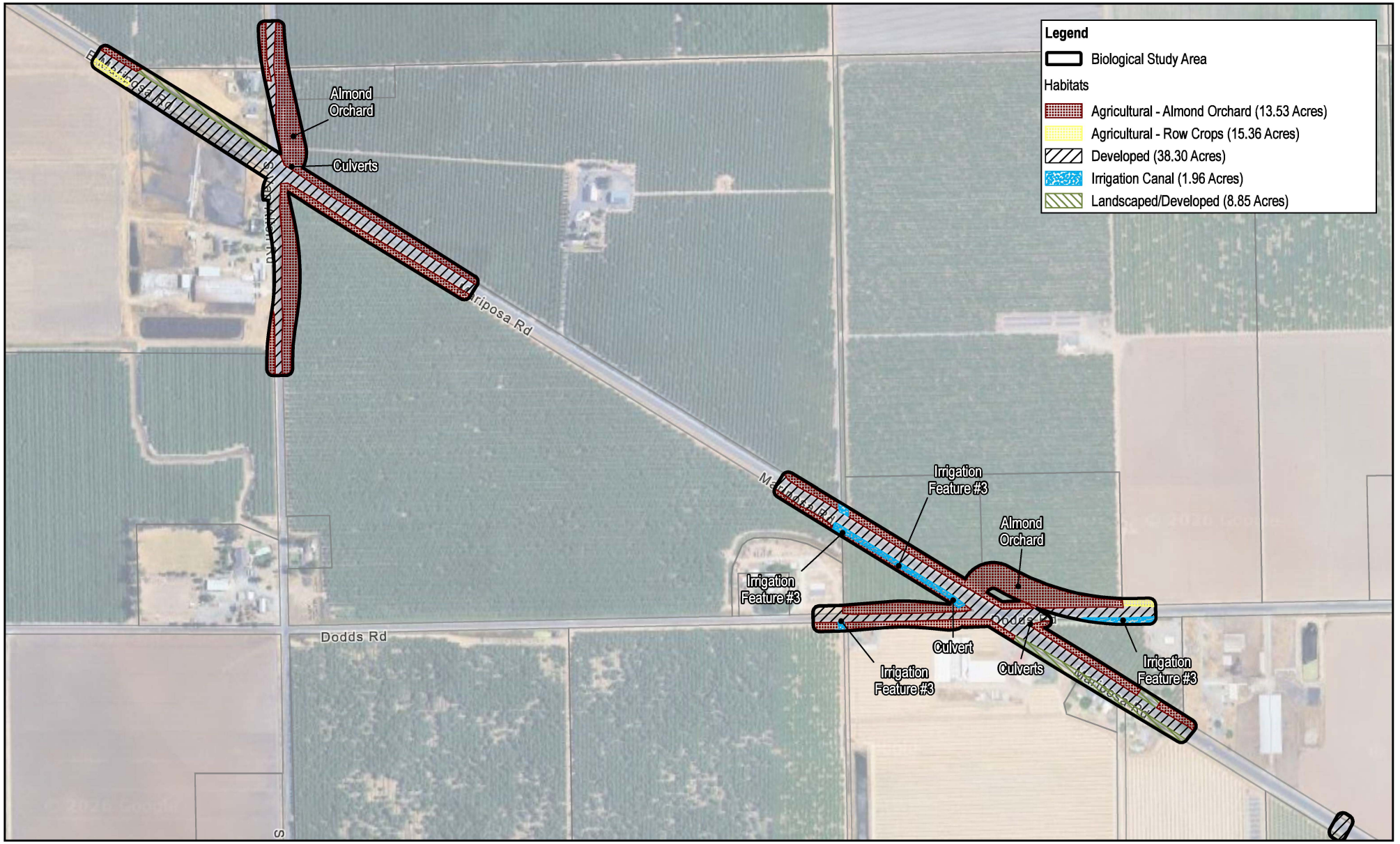
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Revision No. **-**
Date **May 2026**

Site 3 Habitat and Aquatic Resources

FIGURE 3.3

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Habitat_Type_Polygon:
Reference - Full (Road Labels Above):
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Paper Size ANSI A

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Map Projection: Lambert Conformal Conic
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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

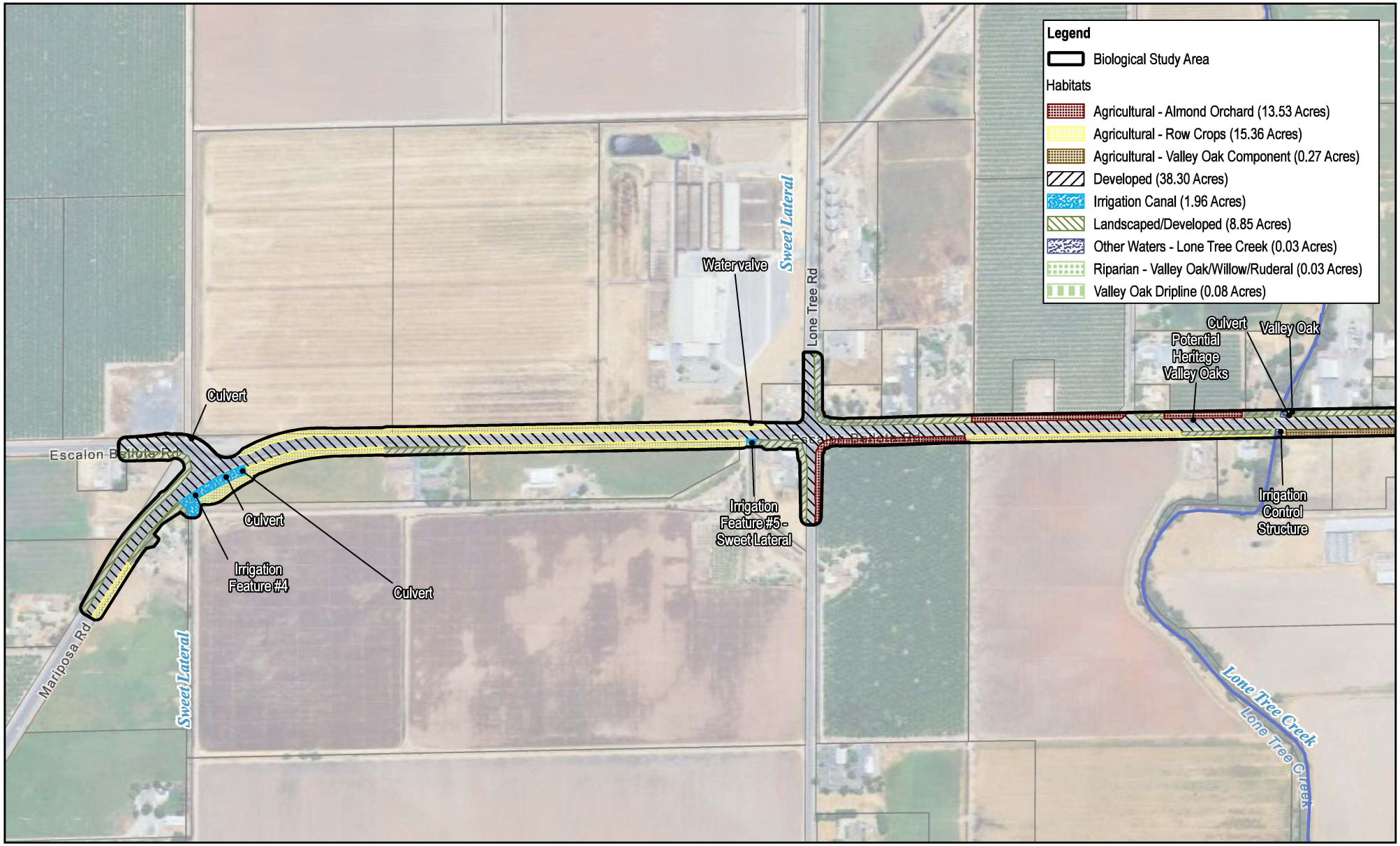
Project No. **12635063**
Revision No. **-**
Date **May 2026**

Site 4 and Site 5 Habitat and Aquatic Resources

FIGURE 3.4

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Print date: 22 May 2026 - 11:15

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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

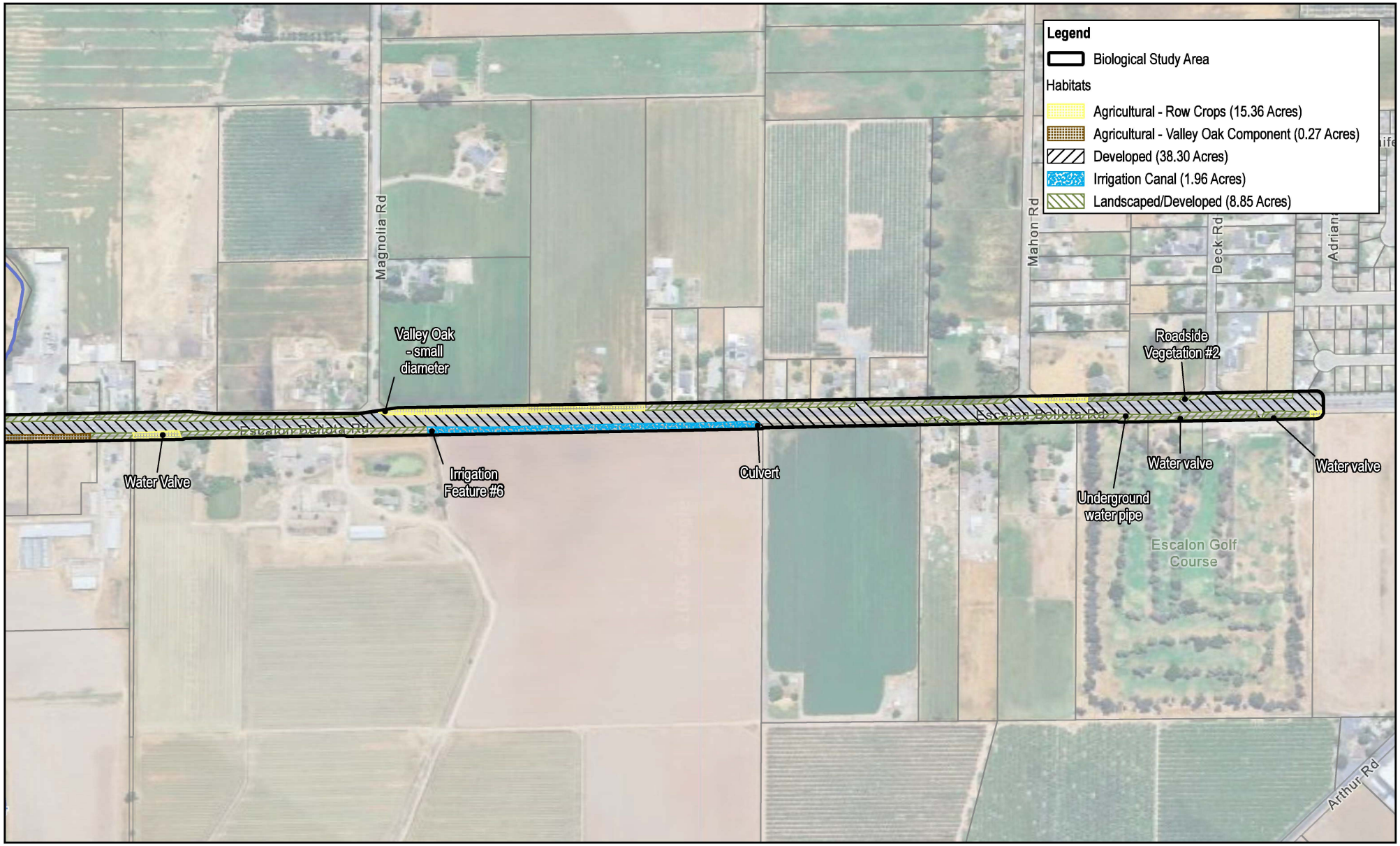
Site 6 and 7
Habitat and Aquatic Resources

Project No. **12635063**
Revision No. **-**
Date **May 2026**

FIGURE 3.5

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Print date: 22 May 2026 - 11:15

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Tiled service layer: © OpenStreetMap (and) contributors, CC-BY-SA. Created by: ethompson3



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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
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County of San Joaquin
Mariposa Road and Escalon-Bellota Road Specific Plan

Project No. **12635063**
Revision No. **-**
Date **May 2026**

Site 7 Habitat and Aquatic Resources

FIGURE 3.6

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Print date: 22 May 2026 - 11:15

Data source: Field_Notes_Point:
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Habitat_Type_Polygon:
Reference - Full (Road Labels Above):
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Special Status Species

Results of the CNDDB 9-quadrangle database search, USFWS IPaC review, and CNPS Rare Plant Inventory query identified 8 plant species, 12 invertebrate species, 3 fish species, 2 amphibian species, 3 reptile species, 6 bird species, 4 mammal species, and 5 sensitive natural communities.

Of these, 31 were assigned a no potential rating based on the absence of suitable habitat within the BSA — principally the lack of vernal pools, alkaline or saline soils, blue elderberry, sandy substrates, and fish passage connectivity that most database-identified species require. No special-status plant species were observed during field reconnaissance, consistent with the dominance of ruderal, agricultural, and landscaped vegetation throughout the BSA.

Ten wildlife and eight plant species were assigned a low potential rating, reflecting the marginal character of available habitat and the low likelihood of regular or breeding occurrence. These species were addressed in the BRR; however, they are not carried forward for impact analysis because the low likelihood of the species occurring along within the BSA.

Two special-status wildlife species were assessed as having moderate or high potential to occur within the BSA and are discussed in detail in the species accounts below: Swainson's hawk and northwestern pond turtle.

Swainson’s Hawk

Swainson's hawk is listed as threatened under the CESA; however, it has no formal federal status. It is among the most ecologically significant covered species under the San Joaquin County Multi-Species Conservation and Open Space Plan (SJMSCP), and that plan is the primary regulatory framework governing potential Project impacts to this species within San Joaquin County (SJMSCP 2000). Large valley oaks within the BSA constitute suitable nest trees and multiple active CNDDB-documented nest sites occur in the Project vicinity. Wheat fields northeast of Mariposa Road represent high-quality foraging habitat subject to SJMSCP compensation requirements.

Northwestern Pond Turtle

The northwestern pond turtle is listed as a proposed federally threatened species, and as a CDFW Species of Special Concern. This species has Moderate Potential to occur in Lone Tree Creek and Irrigation Feature 1. In the Central Valley, northwestern pond turtles are commonly found in slow-moving or still water bodies including streams, rivers, sloughs, ponds, stock ponds, and agricultural canals and drainage ditches. The species requires three primary habitat components: (1) aquatic habitat with slow to moderate flow for foraging, thermoregulation, and refuge; (2) basking sites such as logs, woody debris, overhanging branches, or exposed banks; and (3) friable, well-drained upland soils within approximately 300 meters of water for egg-laying. Northwestern pond turtles are highly adaptable to modified aquatic habitats and are well documented using irrigation canals and agricultural drainage features throughout the Central Valley.

Bats

Bats currently have a low potential to occur within the BSA. Bats are known to roost in bridge structures and large trees. Given the long-term improvements would modify existing bridges and that existing smaller trees within the BSA could mature significantly by the time long-term improvements are implemented, potential impacts to bats are included in this analysis. Bat species are also covered under the SJMSCP.

Nesting and Migratory Birds

Native bird species protected under the FGC Section 3503, 3503.5, and 3513 and the Migratory Bird Treaty Act (MBTA) have potential to nest within the BSA. Suitable nesting habitat is present in several locations along the Project Corridor, including the valley oak stand along unnamed Irrigation Feature 2, willow scrub and emergent vegetation along Lone Tree Creek and Irrigation Feature 1, and the small stand of Fremont cottonwood within the proposed intersection rerouting footprint. The cottonwood stand may provide suitable nesting for riparian passerines and other native cavity and platform nesters during the breeding season (generally February 1 through September 15 for most species).

No active nests of special-status species were observed within the BSA during field reconnaissance. However, one active red-tailed hawk nest was documented at the top of a Fremont cottonwood tree in the backyard of a residence along Mariposa Road. Red-tailed hawks were observed at the nest during the March 2026 field survey. The nest is located approximately 250 feet north of the nearest proposed Project activity. Although the nest is not within the BSA, its proximity to the Project Corridor is noted for the following reasons:

A. Red-tailed hawks commonly reuse nests in successive breeding seasons, and this nest should be assumed active in future years until confirmed otherwise through pre-construction surveys.

B. Swainson's hawks frequently appropriate existing red-tailed hawk nests rather than constructing new ones. Given the documented presence of Swainson's hawk nesting habitat in the Project vicinity, this nest represents a potential Swainson's hawk nest site in future breeding seasons.

C. CDFW recommends pre-construction Swainson's hawk nesting surveys within a 0.5-mile radius of Project activities (CDFW 2000). Given the nest is within 0.5 mile of proposed construction activities, avoidance buffers may be required during the nesting season, potentially affecting Project scheduling.

Sensitive Natural Communities (SNCs)

Five SNCs were identified within the 9-quadrangle CNDDB search area and evaluated for potential occurrence within the BSA: Elderberry Savanna (G2S2.1), Great Valley Cottonwood Riparian Forest (G2S2.1), Great Valley Mixed Riparian Forest (G2S2.2), Great Valley Oak Riparian Forest (G1S1.1), and Northern Hardpan Vernal Pool (G3S3.1). All five communities were assigned a No Potential rating following field reconnaissance.

Although no sensitive natural communities, as formally defined by CDFW, were documented within the BSA, the native riparian fringe vegetation along Lone Tree Creek and the emergent aquatic vegetation of irrigation Feature 1 represent locally significant biological resources under San Joaquin County Development Title, Section 9-707.030 (Riparian Habitat Ordinance) and General Plan Policy NCR-2.5 (No Net Loss of Wetlands and Riparian Habitat).

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less than Significant with Mitigation)

Special-status Plant Species

No special-status plant species are anticipated to be present within the BSA based upon a lack of suitable habitat and field observations. Therefore, implementation of the Project would have no impact on special-status plant species.

Special-status Wildlife Species

Swainson's Hawk

The BSA contains large valley oaks (10 to 30 inches dbh) along an unnamed irrigation ditch that constitute suitable Swainson's hawk nest trees, and CNDDB records document active nest sites within the Project vicinity. The proposed road widening improvements along Murphy Road (where the trees occur) are not anticipated to involve direct removal of any of the mapped valley oaks, as these trees occur along the ditch margin rather than within the primary road prism. However, this determination is contingent on confirmation of the final Project design footprint. If road widening or shoulder improvements encroach within the dripline of mapped valley oaks, direct impacts to potential nest trees could occur through root zone compaction, grade changes, or inadvertent mechanical damage during construction (all of which are regulated under San Joaquin County Development Title, Section 9-400.080).

The more significant nesting-related impact concern is indirect disturbance. Construction activities within one-half mile of an active Swainson's hawk nest during the breeding season (March 15 to September 15) could cause nest abandonment or reduced reproductive success, constituting take under CESA. The risk of this impact is currently unquantifiable because: (a) the construction schedule has not been confirmed, and (b) focused nesting surveys have not been conducted to determine whether an active nest is present within one-half mile of the Project footprint. If construction is proposed during the breeding season, focused nesting surveys consistent with Swainson's Hawk Technical Advisory Committee (SWHA TAC 2000) methodology are required prior to Project initiation. If an active nest is confirmed within one-half mile of proposed construction activities, the Project would be subject to the incidental take minimization measures established under SJMSCP Section 5.2.4.11, including maintenance of a no-disturbance buffer around the active nest until the nest is no longer active for the season.

The intersection rerouting component of the Project occurs through almond orchard and wheat fields and does not directly affect any other mapped valley oak trees. However, if the rerouting footprint extends within one-half mile of a subsequently confirmed active Swainson's hawk nest, the same indirect disturbance analysis applies.

The wheat fields northeast of Mariposa Road within and adjacent to the BSA constitute high-quality Swainson's hawk foraging habitat. The proposed road widening involves conversion of a strip of road shoulder and ruderal ditch margin to paved road surface. Ruderal roadsides and ditch margins are of negligible foraging value for Swainson's hawk; accordingly, the direct conversion of these cover types does not constitute a significant loss of foraging habitat in isolation.

The intersection rerouting component of the Project involves conversion of almond orchard and wheat field to road infrastructure. Almond orchard is not suitable Swainson's hawk foraging habitat, but wheat field is among the highest-value foraging cover types identified in the SJMSCP for Central Zone Swainson's hawk populations (SJMSCP 2000, Section 5.4.4.4). Any permanent conversion of wheat field acreage within the intersection rerouting footprint constitutes a direct loss of Swainson's hawk foraging habitat subject to SJMSCP compensation requirements. The total acreage of wheat field converted by the intersection rerouting is estimated at approximately 0.35 acre pending final Project design drawings.

Additionally, the road widening improvements along the corridor, even where confined to the existing road prism and ruderal margins, occur within the foraging range of Swainson's hawks nesting at documented sites in the Project vicinity. The SJMSCP establishes that loss of foraging habitat within the Central Zone through permitted activities is a covered impact compensated through the plan's fee and land dedication program, regardless of cover type quality, provided the Project is enrolled in the SJMSCP. Project enrollment through the SJCOG JPA is the recommended compliance pathway for all foraging habitat impacts.

With implementation of General Mitigation Measures BIO-1 through BIO-5, and Swainson Hawk Mitigation Measures BIO-10 through BIO-12, potential impacts to Swainson Hawk would be less than significant with mitigation.

Northwestern Pond Turtle

Road widening activities at the two perennial water feature crossings (Lone Tree Creek and Irrigation Feature 1) have the potential to directly and indirectly affect northwestern pond turtle. The ephemeral drainage crossing is not considered to provide suitable pond turtle habitat and is not evaluated further in this analysis.

Road shoulder widening at perennial crossings involves approximately 3,667 square feet of disturbance at the edge of the existing road prism. If this disturbance extends to within the OHWM of either feature, direct physical impacts to aquatic habitat, bank structure, and potential nesting areas on adjacent upland banks could occur. Construction equipment operating at bank edges during the active season (April to October) poses a direct risk of crushing or entrapment of individual turtles on adjacent banks, road shoulders, or within the construction zone, constituting take under the FESA (if listing is finalized) and implicating CDFW SSC protections under CEQA.

Construction-related sedimentation and turbidity at water feature crossings could temporarily degrade aquatic habitat quality within Lone Tree Creek and the Irrigation Feature 1.

With implementation of General Mitigation Measures BIO-1 through BIO-5, and Northwestern Pond Turtle Mitigation Measures BIO-13 through BIO-16 potential impacts to Northwestern Pond Turtle would be less than significant with mitigation.

Migratory and Nesting Birds

Valley oaks, Fremont cottonwood, willows, and dense emergent vegetation within the BSA provide nesting habitat for a variety of native birds protected under FGC Sections 3503, 3503.5, and 3513 and the MBTA. Construction activities during the breeding season (generally February 1 to September 15 for most passerines and riparian species; March 15 to September 15 for Swainson's hawk, as discussed above) within or immediately adjacent to occupied nesting habitat could result in

nest abandonment, failure, or direct destruction of nests with eggs or young, constituting take under the FGC and a violation of the MBTA.

If the trees within the Project Corridor, in particular the Fremont cottonwood stand, support active nests at the time of clearing, direct nest destruction would occur. The small stand of approximately 15 cottonwood trees, while not large enough to support Swainson's hawk nesting, provides suitable nesting substrate for several riparian passerine species and could support nesting yellow warbler (*Setophaga petechia),* western kingbird (*Tyrannus verticalis*), or other species during the breeding season.

With implementation of General Mitigation Measures BIO-1 through BIO-5, and Nesting and Migratory Birds Mitigation Measures BIO-17 through BIO-19, potential impacts to nesting and migratory birds would be less than significant with mitigation.

Bats

The potential for bats to utilize the bridges within the Project Corridor is low. However, utilizing the SJMSCP through the San Joaquin Council of Governments (SJCOG) Joint Powers Authority (JPA) process is an efficient way to meet regulatory requirements such as any potential incidental take. Implementation of SJMSCP incidental take minimization measures would satisfy the applicable requirements under FGC Section 4150 for this Project. With compliance with the adopted SJMSCP, potential impacts to bats would be less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (Less than Significant with Mitigation)

The Project would not have a substantial adverse effect on riparian habitat or other SNCs identified locally or by CDFW and USFWS. No SNCs as formally defined by CDFW were documented within the BSA. The riparian fringe vegetation along Lone Tree Creek and the emergent aquatic vegetation of Irrigation Feature 1, while not qualifying as SNCs, constitute locally significant biological resources.

The riparian fringe along Lone Tree Creek is subject to the 100-foot natural open space buffer requirement of San Joaquin County Development Title Section 9-707.030. Road widening activities that encroach within this buffer zone would require findings by the County's Review Authority that the activity is in the public interest and would trigger a requirement for a Riparian Habitat Mitigation Plan with minimum 2:1 replacement of any riparian habitat disturbed. The extent of encroachment within the 100-foot buffer at the Lone Tree Creek crossing has not been confirmed.

With implementation of General Mitigation Measures BIO-1 through BIO-4, and Riparian Habitat Mitigation Measures BIO-6 through BIO-9, impacts to riparian habitat would be less than significant with mitigation.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less than Significant with Mitigation)

The road widening at the five water feature crossings within the BSA has the potential to result in direct and indirect impacts to Waters of the State and potentially WOTUS.

Work at Lone Tree Creek and Irrigation Feature 1 that encroaches within the bed, bank, or riparian zone of these features would constitute a regulated activity under CDFW Fish and Game Code Section 1602, potentially requiring a Lake and Streambed Alteration Agreement (LSAA) or RWQCB Waste Discharge Requirements, prior to Project initiation. If any fill material is placed within waters of the United States (which, at minimum, may include Lone Tree Creek pending formal jurisdictional determination), a USACE Section 404 permit and RWQCB Section 401 Water Quality Certification would be required. Based on preliminary engineering design, the total area of disturbance within waterways associated with proposed roadway widening, embankment fill, and drainage improvements is approximately 3,667 square feet (approximately 0.08 acre). The relatively limited disturbance footprint at these crossings may be addressable under a Nationwide Permit (e.g., NWP 14 - Linear Transportation Projects); however, permit applicability should be confirmed with USACE based on final engineering design and a formal jurisdictional determination.

Sweet Lateral and the four unnamed irrigation laterals function as managed, ephemeral conveyance features associated with the SSJID distribution system. As constructed irrigation infrastructure with managed and ephemeral flow regimes, these features may not meet the definition of "relatively permanent, standing or continuously flowing bodies of water" under the current WOTUS framework, as amended by EPA and USACE to conform to the Supreme Court's decision in Sackett v. EPA, 598 U.S. 651 (2023) (88 FR 61964, effective September 8, 2023). However, as noted earlier in this section, several of these laterals convey surface water originating from Woodward Reservoir through the SSJID canal system, and hydrologic connectivity to waters of the United States or State may exist. Jurisdictional status should be confirmed through a formal aquatic resources delineation and jurisdictional determination.

Impacts to state or federally jurisdictional aquatic resources could be significant without mitigation. With implementation of General Mitigation Measures BIO-1 through BIO-5, and Aquatic Resources Mitigation Measures BIO-6, BIO-8, and BIO-9, potential impacts to jurisdictional aquatic resources would be less than significant with mitigation.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (No Impact)

The Project would not substantially interfere with the movement of any native or resident migratory fish or wildlife species, wildlife corridors, or impede the use of native wildlife nursery sites. The Project Corridor is not located within or adjacent to any migratory corridors for wildlife species. Implementation of the Project would not result in any impact to native resident or migratory fish or wildlife species.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The Project would abide by local policies and ordinances to protect biological resources, including the San Joaquin County General Plan and San Joaquin County Riparian Habitat Ordinance and Tree Ordinance. Based on field observations and preliminary Project information, direct removal of mapped valley oaks is not expected or anticipated to be required by road widening improvements, because the trees occur along the ditch margin and are likely outside the primary improvement footprint. However, road widening that extends within the dripline of these trees could constitute a regulated activity under Section 9-400.080, requiring installation of protective fencing at the dripline prior to grading, no grade changes within 6 feet of the trunk, and prohibition on trenching within the protected zone. As native oak trees under the ordinance, removal requires an approved Improvement Plan application and 3:1 replacement. If any mapped oaks qualify as heritage oak trees based on size or designation, removal is subject to a higher threshold of necessity and 5:1 replacement.

The small stand of approximately 15 Fremont cottonwood trees are not protected under SJC Section 9-400.080. Therefore, the removal of the cottonwood trees would not be subject to the riparian habitat provisions of SJC Development Title, Section 9-707.030.

Design of the Project improvements would comply with the San Joaquin County General Plan and San Joaquin County Riparian Habitat Ordinance, including installation of protective fencing at the dripline prior to grading, no grade changes within 6 feet of the trunk, and prohibition on trenching within the protected zone. As a result, the Project would not conflict with the local policies and there would be no impact.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)

The Project is not anticipated to conflict with the provisions of the 2000 SJMSCP and Open Space Plan. Prior to ground disturbance, SJCDPW would enroll the Project in the SJMSCP by submitting a Request for Project Coverage Form to the SJCOG JPA. The Plan sets forth goals, strategies, and mitigation measures for conserving natural resources within the County, particularly for sensitive plant, fish, and wildlife species. The General Plan Land Use Diagram (Figure LU-1) indicates that virtually all riparian corridors are designated “Open Space/Resource Conservation” (OS/RC).

With enrollment in the SJMSCP, where applicable, individual Project improvements would not conflict with the Plan. There would be no impact.

Mitigation Measures

General Measures

Mitigation Measure BIO-1: Minimize Construction Footprint

San Joaquin County Department of Public Works (SJCDPW) shall minimize the construction disturbance footprint to the maximum extent practicable. Construction staging areas, equipment storage, and access routes shall be sited within previously disturbed areas of the road prism and right-of-way to the extent feasible and shall minimize impacts within the

dripline of valley oak trees, minimize impacts to the riparian buffer of Lone Tree Creek, and minimize impacts to the bank edge of all perennial water features.

Mitigation Measure BIO-2: Limit Vegetation Clearing

SJCDPW shall limit vegetation clearing to the minimum area necessary to accomplish Project objectives. Clearing of native vegetation, including riparian fringe vegetation along Lone Tree Creek and Irrigation Feature 1, and native trees within the Project footprint, shall not commence until all applicable permits and agreements have been obtained and all applicable pre-construction surveys required by these measures have been completed.

Mitigation Measure BIO-3: Worker Environmental Awareness Training

Prior to commencement of ground disturbance, SJCDPW shall implement a Worker Environmental Awareness Program (WEAP), as may be applicable for each improvement. Where applicable, all construction personnel shall participate in a WEAP conducted by a qualified biologist. The WEAP shall include at minimum: an overview of the sensitive biological resources present within and adjacent to the BSA, including Swainson's hawk, northwestern pond turtle, nesting birds, native trees, and jurisdictional water features; identification of established avoidance buffers, exclusion zones, and environmentally sensitive area boundaries; protocols for reporting wildlife observations or potential violations to the biological monitor; and requirements for trash management, food storage, and prevention of wildlife attractants within the construction zone. Documentation of WEAP completion shall be maintained by the SJCDPW and made available to the lead agency upon request.

Mitigation Measure BIO-4: Biological Monitor

Where special-status animals may be impacted by project improvements, a qualified biological monitor shall be retained by SJCDPW to oversee implementation of the biological resource protection measures specified in this section. The biological monitor shall be present during all initial ground disturbance and vegetation clearing activities, during all work within 50 feet of perennial water features, and at any other times specified in the LSAA or SJMSCP incidental take minimization measures. The biological monitor shall have authority to halt construction if sensitive biological resources are encountered and shall submit a monitoring report to San Joaquin County Public Works and SJCOG JPA upon completion of Project construction.

Mitigation Measure BIO-5: Lighting Restrictions

If nighttime construction or permanent lighting is proposed as part of the Project, a lighting plan shall be prepared and submitted to San Joaquin County for review prior to Project construction. The lighting plan shall demonstrate that light spillover onto native vegetation, riparian areas, and agricultural lands used for Swainson's hawk foraging is minimized through the use of directional fixtures, full cutoff housings, and the minimum illumination levels necessary for safety. Warm-spectrum (amber or sodium vapor) lighting shall be used in preference to cool-spectrum (blue-white LED) lighting to minimize attraction of insects and nocturnal wildlife to the construction zone and permanent road corridor.

Aquatic Resources and Riparian Habitat

Mitigation Measure BIO-6: CDFW Section 1602 Notification

Prior to initiation of any Project improvement that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake within the BSA, the SJCDPW shall notify CDFW pursuant to Fish and Game Code Section 1602 (FGC Section 1602). The Section 1602 notification requirement applies to any river, stream, or lake, including those that are ephemeral or episodic, as well as watercourses with subsurface flow (CDFW 2025).

SJCDPW shall initiate early coordination with CDFW, where applicable, to determine notification requirements prior to finalizing construction plans at water feature crossings. No in-channel work or bank disturbance shall commence at any water feature crossing until a Lake and Streambed Alteration Agreement (LSAA) has been obtained or CDFW has confirmed in writing that notification is not required.

Mitigation Measure BIO-7: Riparian Protection

Project activities at the Lone Tree Creek crossing shall be designed to minimize encroachment on riparian vegetation and the natural bank to the maximum extent practicable, consistent with the intent of San Joaquin County General Plan Policy NCR-2.8 (Natural Open Space Buffer) and the riparian habitat protection provision of Development Title, Section 9-707.030. The applicability of the Section 9 riparian buffer standard to this public road improvement Project shall be confirmed with the San Joaquin County Community Development prior to finalizing the Project design at the Lone Tree Creek crossing. If the buffer standard is determined to apply, a Riparian Habitat Mitigation Plan shall be prepared consistent with Section 9-707.030.

Mitigation Measure BIO-8: Stormwater Best Management Practices

SJCDPW shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) consistent with RWQCB requirements prior to ground disturbance. The SWPPP shall include BMPs to minimize construction-related erosion, sedimentation, and turbidity at all five water feature crossings during and following construction. BMPs shall include at minimum: installation of silt fencing, straw wattles, or equivalent sediment barriers at the perimeter of disturbance areas adjacent to water features; designation of a concrete washout area and equipment fueling station at a minimum of 100 feet from any water feature; prohibition on stockpiling of soil or construction materials within the riparian buffer of Lone Tree Creek; and daily inspection of erosion control measures by the biological monitor or contractor's erosion control specialist.

Mitigation Measure BIO-9: In-Channel Work Timing Restriction

If in-channel work is required at Lone Tree Creek or Irrigation Feature 1, the timing of such work shall be consistent with the Incidental Take Minimization Measures (ITMMs) issued by SJCOG, Inc. pursuant to the SJMSCP (SJCOG 2000) and any conditions established in the Lake and Streambed Alteration Agreement (LSAA) obtained pursuant to Measure BIO-6.

If the Project does not participate in the SJMSCP, or if SJCOG does not prescribe species-specific timing restrictions for a particular crossing, in-channel work at water feature crossings supporting aquatic habitat (Lone Tree Creek and Irrigation Feature 1) should be scheduled to avoid the northwestern pond turtle restricted activity period identified in the SJMSCP Species Calendar (March 1 to May 31) to the extent practicable (SJCOG 2000). In-channel work during the pond turtle active season (April 1 to October 31) should also be avoided to the extent practicable to minimize potential disturbance to active individuals.

If in-channel work during restricted or sensitive periods cannot be avoided, pre-construction pond turtle surveys and exclusion measures consistent with Measures BIO-5 through BIO-7 shall be implemented immediately prior to and during in-channel activities, in coordination with CDFW and SJCOG.

Swainsons Hawk

Mitigation Measure BIO-10: Coverage Under SJMSCP and Preconstruction Survey Coordination

Prior to ground disturbance, the SJCDPW shall enroll the Project in the SJMSCP by submitting a Request for Project Coverage Form to the SJCOG JPA. As part of the enrollment process, the SJCOG JPA shall coordinate preconstruction biological surveys of the Project site consistent with SJMSCP Section 5.2.2. Survey results shall be used to determine the presence of Swainson's hawk nests within one-half mile of the Project disturbance footprint and to establish applicable incidental take minimization measures consistent with SJMSCP Section 5.2.4.11. The SJCDPW shall provide the SJCOG JPA with sufficient advance notice to allow surveys to be completed prior to the anticipated start of ground disturbance.

Mitigation Measure BIO-11: Implement Focused Swainson's Hawk Nesting Surveys and Nest Avoidance Buffers

If construction is proposed during the Swainson's hawk breeding season (March 15 to September 15), a qualified biologist shall conduct focused nesting surveys within one-half mile of the Project disturbance footprint prior to initiation of ground disturbance, consistent with the survey methodology and timing requirements established by the SWHA TAC (2000). Surveys shall include all suitable nest trees within one-half mile of the Project boundary, with particular attention to the large valley oaks (20 to 40 inches dbh) mapped along the unnamed irrigation ditch within the BSA. Survey results shall be submitted to SJCOG JPA and shall be incorporated into the SJMSCP preconstruction survey record. If construction is proposed outside the breeding season (September 16 to March 14), focused nesting surveys are not required, though SJMSCP preconstruction survey coordination per Measure BIO-10 would still be required.

If an active Swainson's hawk nest is confirmed within one-half mile of the Project disturbance footprint during surveys conducted pursuant to Measure BIO-11, a no-disturbance buffer of one-half mile shall be established around the active nest and maintained throughout the breeding season (March 15 to September 15) or until the nest is no longer active for the season, as determined by a qualified biologist in coordination with SJCOG JPA. No ground disturbance, vegetation clearing, equipment staging, or other construction activities shall occur within the no-disturbance buffer while the nest is active. The no-disturbance buffer may

be modified in size and shape based on site-specific conditions, topography, and intervening vegetation, subject to approval by SJCOG JPA and CDFW.

Mitigation Measure BIO-12: Foraging Habitat Compensation

The SJCDPW shall compensate for permanent conversion of Swainson's hawk foraging habitat (row crop and field crop cover types) within the Project disturbance footprint through payment of applicable SJMSCP mitigation fees to the SJCOG JPA, consistent with SJMSCP Sections 5.2.4.11 and 5.3.2. The total acreage of foraging habitat converted shall be determined from final Project design drawings and confirmed with SJCOG JPA prior to fee payment. Fee payment shall occur prior to or concurrent with ground disturbance consistent with SJMSCP Section 5.3.2.3. In lieu of fee payment, the SJCDPW may elect to dedicate replacement lands as conservation easements or purchase credits from an SJMSCP-approved mitigation bank, subject to SJCOG JPA approval.

Northwestern Pond Turtle

Mitigation Measure BIO-13: SJMSCP Preconstruction Pond Turtle Survey

Consistent with SJMSCP Section 5.2.4.10, the SJCOG JPA shall coordinate preconstruction surveys for northwestern pond turtle at the two perennial water feature crossings within the BSA (Lone Tree Creek and Irrigation Feature 1) prior to ground disturbance at each crossing. Surveys shall be conducted by a qualified biologist during the active season (April 1 to October 31) within 24 hours prior to the initiation of ground disturbance at each crossing location. If construction at water feature crossings is proposed outside the active season (November 1 to March 31), surveys shall still be conducted immediately prior to ground disturbance; however, the probability of turtle detection is reduced during cooler months when turtles may be dormant. The ephemeral drainage crossing does not provide suitable pond turtle habitat and pre-construction surveys are not required at that location.

Mitigation Measure BIO-14: Pond Turtle Exclusion Fencing

Coverage through participation in the SJMSCP. Avoidance and minimization measures for northwestern pond turtle (western pond turtle under the SJMSCP) at water feature crossings shall be implemented in accordance with the Incidental Take Minimization Measures (ITMMs) issued by SJCOG, Inc. pursuant to SJMSCP Section 5.2.4.10 (Pond Turtles) and the SJMSCP Species Calendar (SJCOG 2000). The ITMMs may include, but are not limited to, pre-construction surveys, biological monitoring, species-specific timing restrictions, and capture and relocation protocols. The SJCDPW shall sign and adhere to all ITMMs as issued by SJCOG prior to ground disturbance at water feature crossings.

Mitigation Measure BIO-15: Pond Turtle Relocation

If a northwestern pond turtle is detected within the Project disturbance footprint during surveys conducted pursuant to Measure BIO-13 or during biological monitoring, the individual shall be relocated to suitable habitat away from the construction zone by a qualified biologist prior to ground disturbance. Relocation shall occur to the nearest suitable aquatic habitat outside the disturbance footprint, at a location determined by the qualified biologist in coordination with SJCOG JPA. Relocated individuals shall not be moved more than 300 meters from the point of capture. Relocation activities shall be documented and reported to SJCOG JPA consistent with SJMSCP reporting requirements.

Mitigation Measure BIO-16: Biological Monitoring at Water Feature Crossings

A qualified biological monitor shall be present during all ground disturbance activities within 50 feet of the bank of Lone Tree Creek and Irrigation Feature 1. The biological monitor shall have authority to halt construction if a pond turtle or other sensitive aquatic species is observed within the disturbance zone. The biological monitor shall document all wildlife observations during monitoring and submit a monitoring report to SJCDPW and SJCOG JPA upon completion of construction activities at each crossing.

Nesting Birds and Migratory Birds

Mitigation Measure BIO-17: Pre-Construction Nesting Bird Survey

If vegetation clearing, tree removal, or ground disturbance is proposed during the bird breeding season (February 1 to September 15), a qualified biologist shall conduct a pre-construction nesting bird survey within the Project disturbance footprint and a 250-foot buffer for raptors and a 50-foot buffer for all other nesting bird species no more than seven days prior to initiation of clearing or disturbance activities. The survey shall document all active nests within the survey area, including nests of raptors protected under FGC Section 3503.5 and nests of migratory birds protected under the MBTA. If active nests are detected, the qualified biologist shall establish species-appropriate no-disturbance buffers based on species sensitivity, nest location, line of sight to construction activities, and existing ambient disturbance levels. Buffer distances may be adjusted at the discretion of the qualified biologist based on site-specific conditions and observed bird behavior. Survey results and buffer recommendations shall be submitted to the SJCDPW prior to commencement of clearing.

Mitigation Measure BIO-18: Nesting Season Avoidance

If practicable, vegetation clearing and tree removal — particularly removal of the Fremont cottonwood stand within the intersection rerouting footprint — shall be scheduled outside the bird breeding season (September 16 to January 31) to avoid the potential for nest disturbance or destruction. If clearing outside the breeding season is not practicable, pre-construction nesting bird surveys shall be conducted pursuant to Measure BIO-17.

Mitigation Measure BIO-19: Active Nest Avoidance Buffer

If an active nest is identified during surveys conducted pursuant to Measure BIO-17, a no-disturbance buffer shall be established around the nest and maintained until the nest is no longer active, as determined by the qualified biologist. Buffer distances shall be established by the qualified biologist based on the nesting species, nest location, line of sight to construction activities, existing ambient disturbance levels, and surrounding site conditions. The following minimum buffer distances are provided as general guidelines:

- Raptors nesting in trees — 500 feet
- Passerines nesting in riparian or emergent vegetation — 100 feet
- Ground-nesting birds — 50 feet

These distances may be increased or reduced by the qualified biologist based on species sensitivity, observed bird behavior, and site-specific conditions, provided that any reduction is supported by documented observations confirming that construction activities are not causing visible signs of disturbance to the nesting pair (e.g., flushing, agitation, nest

abandonment). No construction activities shall occur within the established buffer while the nest is active.

Trees

Mitigation Measure BIO-20: Valley Oak Dripline Protection

Prior to ground disturbance, all valley oaks mapped within or adjacent to the Project disturbance footprint shall be surveyed by a qualified arborist or biologist to confirm their location, size, and condition, and to delineate the protected zone (dripline) of each tree. A minimum 5-foot-high chain link fence or equivalent protective barrier shall be installed at the outermost edge of the dripline of each mapped valley oak prior to commencement of grading operations, consistent with San Joaquin County Development Title, Section 9-400.080. Protective fencing shall remain in place throughout the construction period. No grading, trenching, filling, equipment staging, or storage of materials shall occur within the protected zone. No grade changes shall occur within 6 feet of the trunk of any subject tree, and no grade changes exceeding 6 inches shall occur within the protected zone. If underground utility installation is required within the protected zone of any oak, a conduit shall be installed by boring or directional drilling rather than open trenching.

Mitigation Measure BIO-21: Valley Oak Removal Authorization and Replacement

If final Project design confirms that removal of one or more native oak trees is required, the SJCDPW shall obtain an approved Improvement Plan application from San Joaquin County Community Development Department prior to tree removal, consistent with San Joaquin County Development Title Section 9-400.080. Each native oak tree removed shall be replaced with three replacement trees or acorns of the same or approved species, planted between October 1 and December 31 within 18 months of removal, and maintained for a minimum of three years consistent with Section 9-400.080. If any mapped oaks meet the criteria for heritage oak tree designation based on size or other characteristics, the higher threshold for removal authorization and 5:1 replacement ratio shall apply.

Mitigation Measure BIO-22: Fremont Cottonwood Replacement

Removal of Fremont cottonwood trees within the intersection rerouting footprint shall be mitigated through 2:1 replacement planting at the same site. The trees are currently providing potential nesting and roosting habitat for native birds and Swainson' hawk directly adjacent to a wheat field, considered good foraging habitat for Swainson's hawk. Removal of cottonwood trees shall be timed to avoid the bird breeding season consistent with Measure BIO-18, or pre-construction nesting bird surveys shall be conducted pursuant to Measure BIO-17 if removal cannot be avoided during the breeding season. Replacement planting shall be installed concurrent with Project completion, maintained for a minimum of three years, and documented in a mitigation monitoring report submitted to San Joaquin County each year.

3.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

Regulatory Setting

National Historic Preservation Act (NHPA) of 1966

The NHPA was enacted to avoid unnecessary harm to historic properties, NHPA includes regulations that apply specifically to federal landholding agencies, but also includes regulations (Section 106) which pertain to all "undertakings" funded, permitted, or approved by any federal agency that have the potential to affect cultural resources. Provisions of NHPA establish the National Register of Historic Places (NRHP), the Advisory Council on Historic Preservation, State Historic Preservation Offices, and the federal grants-in-aid programs.

American Indian Religious Freedom Act of 1978 and Native American Graves and Repatriation Act of 1990

These acts establish as National policy that Native American traditional religious practices and beliefs, sacred lands (including right of access), and the use of sacred objects shall be protected and preserved. Native American remains are further protected by the Native American Graves Protection and Repatriation Act of 1990.

U.S. Secretary of the Interior Standards

The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in, or eligible for listing in, the NRHP. The 1992 Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) apply to all grants-in-aid projects assisted through the National Historic Preservation Fund, and are intended to be applied to a wide variety of resources, including buildings, structures, sites, objects, and districts. The standards address four treatments:

- *Preservation* means the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses on the ongoing maintenance and repair of historic materials and features, rather than extensive replacement and new construction.

- *Rehabilitation* means the act or process of making possible an efficient compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- *Restoration* means the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.
- *Reconstruction* means the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

National Register of Historic Places (NRHP)

Archaeological and historical sites can be given a measure of protection if they are eligible for the NRHP (36 CFR 60.4, 36 CFR 800). Significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that are associated with events that have made a significant contribution to the broad patterns of our history; or are associated with the lives of persons significant in our past; or embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or have yielded, or may be likely to yield, information important to prehistory or history (36CFR60.4 (a-d)).

Traditional Cultural Properties (TCP)

TCPs are properties that are eligible for NRHP listing, exhibit one or more of these criteria:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

California Public Resources Code § 21000 et. seq (California Environmental Quality Act)

CEQA incorporates provisions that provide for the documentation and protection of significant prehistoric and historic resources. Prior to the approval of discretionary projects and/or beginning work on a public infrastructure project or other public facility, the potential impacts of the project on archaeological and historical resources must be considered (Public Resources Code §§ 21083.2 and 21084.1 and the CEQA Guidelines [California Code of Regulations Title 14, § 15064.5]).

The CEQA Guidelines define a significant historical resource as “a resource listed or considered eligible for listing on the California Register of Historical Resources” (CRHR) (Public Resources Code § 5024.1). A cultural resource may be eligible for listing on the CRHR if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

California Health and Safety Code Section 7050

Section 7050 sets forth procedures and penalties for dealing with human remains discovered outside of a designated cemetery. If human remains are discovered during site reconnaissance or excavation, § 7050(b) requires all work within the area stop and that the San Joaquin County Coroner and a professional archaeologist be contacted to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving a notice of discovery on private or state lands (Health & Saf. Code § 7050.5(b)). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making the determination (& 7050(c)).

California Public Resources Code Section 5097.98.

Section 5097.98 sets forth detailed procedures for follow-up action after Native American remains are discovered. The principal requirements include identification of and contacting the Most Likely Descendant, and site inspection by descendants (with a landowner’s permission). Descendants are required to inspect the site and make recommendations for treatment of the remains within 48 hours of being granted access to the site.

Background

Applied EarthWorks Inc. (*Æ*) prepared a cultural resource inventory report in support of the Project (AE 2026). *Æ*’s inventory and analysis covered the full length of the 13.5-mile-long Project Corridor, extending 100 feet in either direction from the road’s centerline, and the locations of proposed intersection improvements. That area is referred to herein as the cultural resources study area and has a total acreage of 348.94-acres. Please note that the cultural resources study area contains portions of the Project Corridor where no improvements are proposed, as well as extends into adjacent land uses where no improvements are proposed. As such, the cultural resources study area is larger than the Biological Study Area (BSA) discussed in Section 3.4, Biological Resources.

Background research revealed that the cultural resources study areas have primarily been used for agriculture with some historic-era farms and residences along the road corridor. A historic residence near Project Site 2 and a historic-era farm near Project Site 4 are depicted on historic aerial photographs as early as 1957. Aerial photographs from the late 1970s onward show increased development around Collegeville and north of Escalon. The few extant historic buildings and structures depicted on USGS topographic maps and historic aerials are distanced from the road and are on private land.

Historical resources are buildings, sites, structures, objects, or districts, each of which may have historical, precontact, architectural, archaeological, cultural, or scientific importance and are listed or eligible for listing in the California Register of Historical Resources (CRHR). Where substantial adverse change is unavoidable and the historical resource cannot be preserved in an undisturbed state, the lead agency shall require mitigation measures to minimize substantial adverse changes to the resource's significance (Public Resource Code [PRC] Section 21083.2[c]). It is further stipulated that the "lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures" (14 CCR Section 15064.5[b][4]; PRC Section 5020.1[q]).

For the purposes of this analysis, a cultural resource is defined as a precontact or historic-era (i.e. 45 years old or older) archaeological site or a historical building, structure, or object. The importance or significance of a cultural resource depends on whether it qualifies for inclusion in the CRHR. Cultural resources determined eligible for listing in the CRHR are called "historical resources" (Title 14, Chapter 3, Article 5, Section 15064.5 of the CCR). The determination of eligibility is based on a set of significance criteria (14 CCR 15064.5).

Desktop Review

A search of Caltrans' State Bridge Inventory found that eight recorded bridges are in the cultural resources study area. Two bridges (29C0365 and 29C0174) are along Mariposa Road and two (29C0322 and 29C0177) are on Murphy Road. None of the bridges have been evaluated for inclusion in the CRHR.

The Central California Information Center (CCAIC) of the California Historical Resources Information System (CHRIS) at California State University, Stanislaus, conducted a records search of the entire corridor, to identify any previously recorded cultural resources within the cultural resources study area and surrounding 0.25-mile search radius. The records search included the entire length of the cultural resources study area to assist in identifying all known previously recorded resources for planning purposes. Sources consulted by the CCAIC personnel include archaeological site and survey base maps, reports of previous investigations, and cultural resource records.

The CCAIC identified 12 previous cultural resource studies in the cultural resources study area, 8 of which are in proposed improvement areas. Two previously recorded cultural resources were identified within the cultural resources study area and five cultural resources in a 0.25-mile search radius. The two historic-era sites are a segment of a historic railroad (P-39-000112) and a historic telegraph line (P-39-004245) that runs parallel to the railroad. Both resources are beneath an overpass on Mariposa Road at the western end of the cultural resources study area. P-39-000112 has been determined not eligible for inclusion in the CRHR and P-39-004245 is unevaluated.

After the initial record search was conducted, the cultural resources study area was modified to include 50 feet in either direction from the road's centerline. Two additional previously recorded cultural resources were identified and include a historic-era cemetery (P-39-000439), and the original location of Collegeville School (P-39-004957). Both resources are east of the intersection of Mariposa Road and Jack Tone Road. The original Collegeville School structure was demolished, and the site was never formally recorded. Both the school and cemetery are unevaluated for inclusion in the CRHR.

Field Investigation

An intensive archaeological pedestrian field survey of the cultural resources study area was conducted on February 17 and 18, 2026. In total, 180.57-acres of the cultural resources study area were surveyed. Much of the cultural resources study area is currently in use as agricultural fields and orchards. The residential community of Collegeville and modern developments in northern Escalon have greatly disturbed portions of the cultural resources study area. Little Johns Creek bisects the cultural resources study area 0.4 mile northwest of the intersection of Skiff Road. The banks surrounding the creek were negative for artifacts or features and have been disturbed by modern development and flood control. Æ was not able to survey approximately 168 acres of the cultural resources study area, due to limitations related to access and private property.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (No Impact)

Æ confirmed the two previously recorded historic cultural resources (P-39-000112 and P-39-004245) intersect the western end of the Project Corridor. Both resources are beneath the Mariposa Road rail overpass and would not be impacted by Project activities.

The Project is not anticipated to result in substantial adverse changes to the significance of historical resources pursuant to §15064.5. Æ's cultural resource inventory found no historical resources within the cultural resources study area that could be impacted by the proposed development. There would be no impact.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant with Mitigation)

Although modern refuse was observed throughout, no previously unrecorded precontact or historic-era archaeological sites, features, or isolated artifacts were identified in the survey area. Much of the cultural resources study area has been heavily disturbed by modern agricultural activities and modern development. However, only a portion of the cultural resources study area could be surveyed in the field due to access issues. In addition, it cannot be ruled out that inadvertent discovery of cultural resources beneath the surface could be encountered.

Mitigation Measures CR-1 through CR-3 would be implemented during construction of individual Project improvements that involved ground disturbance, to protect archaeological resources that may be inadvertently discovered or encountered during construction of the Project. The impact from inadvertent discover of archaeological resources would be less than significant after mitigation.

c) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)

The Collegeville Cemetery, a historic-era cemetery (P-39-000439) is east of the intersection of Mariposa Road and Jack Tone Road. The cemetery was established in 1871. Community members were interred until at least 1905, with at least 24 internments (AE 2026). Proposed Project improvements would be located outside of the cemetery. Therefore, this cemetery is not anticipated to be impacted by the Project.

If human remains are found during Project construction, they would be inadvertent. Additionally, if human remains are discovered, Section 7050(b) of the California Health and Safety Code requires that all work within the area stop and that the San Joaquin County Coroner and a professional archaeologist be contacted to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving a notice of discovery on any location other than a dedicated cemetery (Health & Saf. Code § 7050.5(b)). If the coroner determines that the remains are those of a Native American, he or she will contact the NAHC by telephone within 24 hours of making that determination (Health and Saf.Code § 7050(c)). Following the coroner's findings, the archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments treated with appropriate dignity per Pub. Resources Code § 5097.98 (described above).

Mitigation Measure CR-4 would be implemented to protect any unknown human remains discovered during construction of Project improvements where ground disturbance is necessary. The impact from inadvertent discovery of human remains would be less than significant after mitigation.

Mitigation Measures

Implementation of Mitigation Measure CR-1, CR-2, and CR-3 would reduce potential impacts to a less-than-significant level by addressing discovery of unanticipated buried historical and archaeological resources and human remains following appropriate notification and evaluation procedures and requirements.

Mitigation Measure CR-1: Cultural Sensitivity Training

Cultural Sensitivity Training shall be conducted prior to any ground disturbing activities. The purpose of the training is to educate the construction crew and establish protocols for identifying and evaluating the significance of unanticipated finds. A SJCDPW-qualified archaeologist shall provide cultural resource awareness training to all field crew and field supervisors. The training will include a description of the types of resources that may be found in the cultural resources study area, the protocols to be used in the event of an unanticipated discovery, the importance of cultural resources to the Native American community, and the laws protecting significant archaeological and historical sites.

Mitigation Measure CR-2: Construction Monitoring

A Tribal cultural resource specialist and a SJCDPW-qualified archaeologist shall be present during ground-disturbing activities in the vicinity of the existing railroad and Little Johns and Lone Tree creeks. If previously unrecorded cultural resources are encountered during ground disturbance in any portion of the cultural resources study area, all work within 50 feet of the find should be halted until a Tribal cultural resource specialist and/or a qualified archaeologist can assess the discovery and provide management guidance to the SJCDPW.

Mitigation Measure CR-3: Inadvertent Discoveries

If precontact or historic-ear cultural resources are encountered during Project activities, all ground-disturbing activities within 50 feet of the find shall cease until a qualified archaeologist and a tribal cultural resources specialist can evaluate the significance of the resource and recommend appropriate management measures. Project redesign and preservation in place shall be the preferred means to avoid impacts to significant cultural resources (i.e., historical

resources). If it is demonstrated that a historical resource cannot be avoided, the qualified archaeologist shall develop measures to manage impacts to the resource, in consultation with the SJCDPW and interested tribes, which may include data recovery, capping, or other appropriate measures. If preservation in place is not possible and additional studies or data recovery is necessary, the qualified archaeologist shall prepare a summary of the proposed measures to submit to the SJCDPW and interested tribes for approval. After approval, the archaeologist will coordinate with the SJCDPW and interested tribes to implement the proposed measures. Construction can resume after implementation, based on the direction of the qualified archaeologist and with SJCDPW's concurrence. The archaeologist shall prepare a report documenting the results of any studies and/or additional management of all resources identified during Project development. A copy of the report shall be provided to SJCDPW and the CCAIC.

Mitigation Measure CR-4: Inadvertent Discovery of Human Remains

In the event human remains are uncovered during future Project activities, the San Joaquin County Coroner shall be notified to evaluate the remains, and follow the procedures and protocols set forth in 14 CCR 15064.5(e)(1). If the remains are identified to be those of a Native American person, California Health and Safety Code 7050.5 requires that the county coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendant, who will be afforded the opportunity to recommend means for treatment of the human remains following protocols in California PRC 5097.98.

3.6 Energy Resources

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

Background and Regulatory Setting

The California Public Utilities Commission (CPUC) adopted the first Energy Action Plan in 2003, which was replaced in 2005 with the Energy Action Plan II. The Energy Action Plan II was further updated in 2008. The Energy Action Plan contained the roadmap for CPUC and the California Energy Commission (CEC) to increase renewable energy and energy efficiency within California.

The first Energy Efficiency Action Plan was required by California Assembly Bill 758 in 2015. The 2021 Energy Efficiency Action Plan was covered in two documents, 1) The 2021 California Building Decarbonization Assessment, and 2) The final 2021 Integrated Energy Policy Report Volume I Building Decarbonization. The 2025 Building Energy Action Plan, the most recent version, was published in August 2026.

a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less than Significant Impact)

Construction of the Specific Plan near-term and long-term improvements would include a variety of earthwork and construction practices, involving the use of heavy equipment as discussed in Section 3.3, Air Quality. Construction would require the use of fuels, primarily gas, diesel, and motor oil. The localized storage of construction equipment and materials would reduce unnecessary energy associated with equipment and materials transport.

The precise amount of construction-related energy consumption is uncertain. However, construction would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements and the minimal number of construction vehicles and equipment, worker trips, and truck trips that would be required. Therefore, construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner; the impact would be less than significant.

After implementation of the Project, periodic maintenance of the Project improvements would be similar to existing conditions. These activities would generally be supported by small utility trucks, lifts, and use of hand-held tools. The use of fossil-fuel powered equipment to support these operational and maintenance activities would be periodic and short-term (occurring intermittently).

These activities would not result in a substantial increase in energy use, and would not result in inefficient, wasteful, or unnecessary consumption of fuels or other energy resources.

Implementation of the Project would not generate additional vehicle trips. If new lighting is installed, the operation of new luminaries would result in a minor increase in energy consumption; however, the luminaries would conform to the criteria defined in UFC 3-530-01 – Exterior Lighting Systems and Controls and the California Title 24 Energy Efficiency Standards. Potential future luminaires would likely be LED roadway lighting. As such, new luminaires would not result in wasteful, inefficient, or unnecessary consumption. The impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

There are no local plans for renewable energy that would apply to the Project. State plans for renewable energy and energy efficiency include the California Energy Commissions Existing Buildings Energy Efficiency Action Plan. The Project would not conflict with or inhibit the implementation of the State Energy Action Plan, or other State regulations. Implementation of the proposed improvements would not obstruct a state plan for renewable energy. The Project would not inefficiently utilize energy. The Project would temporarily require the use of equipment to construct Project improvements; however, these activities would be temporary and would not interfere with the broader energy goals of the State. After implementation, the Project improvements would not impact automobile-related energy consumption. If installed, lighting would comply with Title 24 Energy Efficiency Standards. The majority of California's energy-related plans are not directly applicable to the Project. The Project would therefore not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, as no component of the Project would require an energy source, beyond the temporary use of construction equipment. No impact would result.

3.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?			✓	
ii. Strong seismic ground shaking?			✓	
iii. Seismic related ground failure, including liquefaction?			✓	
iv. Landslides?			✓	
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

Background and Regulatory Setting

Geology

San Joaquin County is located in the San Joaquin Valley, which comprises the southernmost portion of the Great Valley Geomorphic Province of California. The Great Valley is an elongated alluvial plain bounded by the uplifted blocks of the Sierra Nevada on the east and the Coast Ranges to the west. The Sacramento River drains the Valley's northern portion and the San Joaquin River drains the southern portion (San Joaquin County 2014a).

Soils

The soil types in the Project area include Exeter sandy loam, Hollenbeck silty clay, Madera sandy loam, among other types (NRCS 2026). These soil types are moderately well-drained, with moderate to slow infiltration rates. These soils are also considered to be expansive (San Joaquin County 2014). Figures showing the Natural Resources Conservation Service (NRCS) soils series for the Project Corridor are available as Figures 3-1 through 3-6 in Appendix C, Biological Resources Report. Geologic Hazards

Geologic hazards in San Joaquin County associated with soil and slope characteristics include expansive soils, erosion, subsidence, and, infrequently, soil instability (landslides and slope failure). Expansive soils occur throughout the County, while subsidence and erosion potential are largely confined to the in the Delta region. Slope stability hazards occur in the foothills and mountain terrain that border the San Joaquin Valley, the steep banks of the major rivers which pass through the Valley floor, and the levees of the Delta.

Seismic hazards (earthquake-induced ground rupture, ground shaking, liquefaction, seiche or tsunami). There are six historically-active faults in the vicinity of San Joaquin County, but none within the County itself; there are numerous "potentially active" faults within the County, but these have not been documented to rupture within the past 11,000 years. The nearest active fault zone to the Project site is an unnamed fault, more than 50 miles west of the Project Corridor (San Joaquin County 2014b). The six active faults are the most likely to cause seismic hazards, particularly ground-shaking, liquefaction, and earthquake-induced settlement.

Liquefaction occurs when a water-saturated, cohesionless soil loses its strength and liquefies during intense and prolonged ground shaking. Areas which have the greatest potential for liquefaction occur where the water table is less than 50 feet below the surface and soils are predominantly clean, comprised of relatively uniform sands, and are of loose to medium density (San Joaquin County 2014b).

Settlement can occur during an earthquake when soils are rapidly shaken and then compact when the seismic shaking stops. Soils prone to settlement are typically loose, sandy sediments above the water table (San Joaquin County 2014b).

a.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Less than Significant Impact)

The Alquist-Priolo Act (Public Resources Code Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The purpose of the Act is

to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Project site is not located within an active Alquist-Priolo earthquake fault zone, in which the state requires special studies for structures for human occupancy, and no known active or potentially active faults occur within the Project site (CDC 2026).

There are no active faults within San Joaquin County, and there are likewise no mapped Alquist-Priolo zones near the Project Corridor (CDC 2026). Additionally, the Project would modify existing roadways for safety and operational improvements, and any risks associated with fault rupture would be similar to those that already exist. Due to the lack of nearby faults, the potential for ground surface fault rupture to occur at the Project site is considered low. The impact would be less than significant.

a.ii, -iii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? (Less than Significant Impact)

As noted above, localized ground shaking and liquefaction are the most significant seismic-related hazards in San Joaquin County, and could be expected to affect the Project. However, impacts associated with ground shaking and liquefaction are not anticipated to be significant, in part because the Specific Plan improvements would be constructed according to contemporary Federal Highway Manual and California seismic standards, which are designed to reduce or minimize risk from liquefaction or other seismic-related ground failure to people and structures. Finally, the Project long-term improvements would modify existing roadway facilities on flat land, and any risks associated with ground shaking and liquefaction would be similar to those that already exist. Therefore, the Project would result in a less than significant impact.

a.iv) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? (Less than Significant Impact)

Slope-stability hazards within San Joaquin County are mostly confined to three areas: 1) the foothills and mountain terrain which border the San Joaquin Valley, 2) the steep banks of the major rivers which pass through the Valley floor, and 3) the levees of the Delta. The Project Corridor is not located within one of these areas, and the surrounding terrain is level, unlikely to be subject to landslides. Therefore, the Project would result in a less than significant impact.

b) Result in substantial soil erosion or the loss of topsoil? (Less than Significant Impact)

Construction activities may include removal of vegetation, excavation, grading, soil compaction, and operation of heavy machinery would disturb soil and, therefore, could have the potential to cause erosion. As described in Section 1.7, Storm Water Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)(Order No 2022-0057-DWQ) would be prepared where required. SWPPP include best management practices to prevent soil erosion. Compliance with the NPDES permit requirements would ensure that potential impacts from soil erosion or loss of topsoil during construction would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse? (Less than Significant Impact)

See above discussion with regard to the potential for landslides, under Impact 3.7 (a). Although the Project area (as is the greater San Joaquin Valley) is located within an area underlain by alluvial deposits, which could liquefy under strong ground shaking from a large regional earthquake, the Project improvements would be constructed to current seismic standards, including standards for construction on soils subject to liquefaction or other instability. The impact would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? (Less than Significant Impact)

Expansive soils are defined as soils that undergo large volume changes (shrink or swell) due to variations in moisture content. Such volume changes may cause damaging settlement and/or heave of foundations, slabs-on-grade, pavements, etc. The Project Corridor is located within an area known to have expansive soils. However, the Project improvements would be designed and constructed in conformance with the site-specific recommendations that will be contained in subsequent Project improvements-related geotechnical reports. Incorporation of geotechnical report recommendations are further detailed in Section 1.7. With recommendations from the Geotechnical Report being included, the impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (No Impact)

The Project does not propose the installation or modification of septic tanks or wastewater disposal systems. Therefore, the Project would have no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation)

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata, are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (PRC Section 30244).

The vast majority of paleontological specimens from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range. However, remains of extinct animals such as mammoth, could be found virtually anywhere in the county, especially along watercourses such as the San Joaquin River and its tributaries (San Joaquin County 2014b).

The Project does not involve any deep excavation that would be likely to result in the inadvertent discovery of paleontological resources. Nonetheless, in the unlikely event that fossils or other paleontological resources are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities would be diverted away from the discovery within 50 feet of the find, and a professional paleontologist would be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. The potential to cause damage to paleontological resources is potentially significant. This impact would be reduced to less than significant with implementation of Mitigation Measure GEO-1.

Mitigation Measures

Implementation of Mitigation Measure GEO-1 would reduce the impact of construction activities on potentially unknown paleontological resources by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements. Therefore, implementation of Mitigation Measure GEO-1 would reduce this impact to a less than significant.

Mitigation Measure GEO-1: Inadvertent Discovery of Paleontological Resources

In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they would be properly curated and preserved.

3.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Background and Regulatory setting

The California Air Resources Board (CARB) 2022 Scoping Plan identifies a path to meet the SB 32 GHG, as well as reducing anthropogenic GHG emissions to 85 percent below 1990 levels by 2045, and achieving carbon neutrality by 2045 or earlier, consistent with Assembly Bill 1279 (AB 1279). The 2022 Scoping Plan includes measures to move to a zero-emissions (decarbonized) transportation sector and phasing out the use of natural gas in residential and commercial buildings. The 2022 Scoping Plan would also reduce emissions of short-lived climate pollutants and includes mechanical carbon dioxide (CO_2) removal and carbon capture and sequestration actions, as well as natural working lands management and nature-based strategies. The plan's measures are identified in Table 2-2 and Table 2-3 of the 2022 Scoping Plan. The measures are statewide and programmatic in nature. The 2022 Scoping Plan is largely advisory, as CARB does not directly regulate many of the sectors identified by the plan's measures.

The San Joaquin Council of Governments (SJCOG) has prepared the Regional Resiliency Implementation Plan and Adaptation Guidance to assist the SJCOG member jurisdictions, including San Joaquin County, in identifying strategies to adapt to climate change and improve regional resiliency (SJCOG 2022).

The City of Stockton has developed draft Comprehensive Climate Action and Adaptation Plan (CCAAP) that covers the Stockton Metropolitan Statistical Area (MSA). The MSA includes San Joaquin County and all incorporated cities within the county. The draft CCAAP contains county-wide emission reduction targets for 2030 and 2045. As of the date of this IS/MND analysis, the CCAAP has not be adopted.

a, b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan adopted for the purposes of reducing greenhouse gases? (Less than Significant Impact)

As provided above, a draft CCAAP has been prepared for the Project area. However, there are no adopted local climate action plans. The 2022 Scoping Plan adopted for reducing greenhouse gases do not contain measures or policies directly applicable to infrastructure projects. The Project improvements consist of modifications to the existing roadway corridor with similar improvements. Project construction would generate short-term greenhouse gas emissions, but these emissions

would be limited in duration, would cease after construction, and are not anticipated to cause significant impacts to the environment. Some Project improvements may require a small amount of electricity during operation such as traffic safety lighting at intersections and the proposed roundabout. However, the lighting would meet Title 24 Energy Efficiency Standards, using only a small amount of electricity.

The impact on greenhouse gas emissions during construction and operation would be less than significant.

3.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			✓	

Background and Regulatory Setting

Hazardous materials are substances that, because of their chemical, physical, or biological properties, may pose a risk to human health or the environment if improperly used, stored, transported, or disposed of. Hazardous materials include, but are not limited to, petroleum products,

fuels, solvents, pesticides, fertilizers, and other commercial or industrial chemicals. Hazardous waste is waste that may pose a substantial present or potential hazard to human health or the environment when improperly managed.

The use, storage, transportation, and disposal of hazardous materials and hazardous waste are regulated by federal, state, and local agencies, including the California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and Office of the State Fire Marshal (OSFM). Locally, hazardous materials programs are administered by the San Joaquin County Environmental Health Department (SJCEHD), while the San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates air emissions associated with contaminated soils and other hazardous materials activities.

To evaluate the potential presence of hazardous materials sites within the Project area, the DTSC EnviroStor Database and SWRCB GeoTracker Database were reviewed. These databases provide information regarding known hazardous materials contamination sites and sites identified pursuant to Government Code Section 65962.5 (Cortese List).

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less than Significant Impact)

Implementation of the Project would involve the temporary use and transport of common construction materials, including fuels, lubricants, asphaltic materials, concrete, paints, and solvents, during roadway, bridge, drainage, and utility improvement activities. These materials would be used, stored, transported, and disposed of in accordance with applicable federal, state, and local regulations governing hazardous materials. Operation of the completed roadway corridor improvements would not involve the routine use, transport, or disposal of hazardous materials beyond typical vehicle traffic occurring on public roadways. Therefore, the Project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less than Significant Impact)

Construction activities could result in the temporary use of hazardous materials such as fuels, oils, hydraulic fluids, and other construction-related substances. Accidental spills or leaks could occur during construction; however, contractors would be required to comply with applicable regulations regarding hazardous materials handling, storage, spill prevention, containment, and disposal. Standard construction best management practices (BMPs) would further minimize the potential for releases to soil, groundwater, or nearby waterways.

The Project includes improvements to existing transportation facilities and bridge crossings. While construction may involve demolition or removal of existing infrastructure, no known hazardous materials sites have been identified within the Project area, and implementation of the Project would not introduce substantial quantities of hazardous materials requiring long-term storage or use. With adherence to existing regulations governing the use, storage, transport, and disposal of hazardous materials, impacts are anticipated to be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Less than Significant Impact)

Schools are located within one-quarter mile of portions of the Project Corridor, including Collegeville Elementary School near the Mariposa Road and Jack Tone Road intersection. Construction activities would be temporary and would not involve the routine handling or storage of acutely hazardous materials. Any construction-related hazardous materials would be used, stored, and disposed of in accordance with applicable federal, state, and local regulations. Therefore, impacts related to hazardous emissions or the handling of hazardous materials within one-quarter mile of a school would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No Impact)

The Project area is not included on any lists compiled pursuant to California Government Code Section 65962.5. A review of the Department of Toxic Substances Control EnviroStor Database and the State Water Resources Control Board GeoTracker Database did not identify any hazardous materials sites within or adjacent to the Project area (DTSC 2026; SWRCB 2026). Accordingly, no impacts associated with hazardous materials sites are anticipated. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (No Impact)

The Project is not located within an airport land use plan area or within two miles of a public airport or public use airport. The proposed roadway and intersection improvements would not result in a safety hazard for people residing or working in the Project area. Accordingly, no safety hazards associated with airport operations are anticipated, and no impacts would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less than Significant Impact)

Construction activities may result in temporary lane closures, detours, or traffic delays along portions of the Project Corridor. However, traffic control plans would be implemented to maintain access for emergency vehicles and minimize disruptions to local circulation. Because any disruptions would be temporary and managed through established traffic control procedures, impacts to emergency response or evacuation plans would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less than Significant Impact)

The Project Corridor is located within unincorporated San Joaquin County and is surrounded primarily by agricultural land uses. The CAL FIRE Fire Hazard Severity Zone Mapper does not identify a fire hazard severity designation for the Project area (CAL FIRE 2026). The Project would

improve existing transportation infrastructure and would not result in land use development that would expose people or structures to substantial wildland fire hazards. Construction activities would be temporary and subject to applicable fire prevention requirements. Accordingly, impacts associated with wildland fires are anticipated to be less than significant.

3.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?			✓	
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
iv. Impede or redirect flood flows?			✓	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

Background and Regulatory Setting

Portions of the Project Corridor are within the 100-year or 500-year floodplain. Specifically, Project long-term improvements at Site 2, Intersection of Mariposa Road and Gawne Road / Murphy Road, and Site 7, Escalon-Bellota Road Segment are partially within the 100-year and 500-year floodplain.

The Project is located within the Eastern San Joaquin Groundwater Subbasin, which is identified as a 'high priority' basin subject to the California Sustainable Groundwater Management Act (SGMA). As required by the SGMA, the Eastern San Joaquin Groundwater Authority adopted the Eastern San Joaquin Groundwater Subbasin: Groundwater Sustainability Plan.

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Less than Significant with Mitigation)

As detailed in Section 3.4, Biological Resources, seven water features were identified within the Project Corridor. See Table 3.1-1, Aquatic Resources in the BSA, for the locations and types water features. As detailed in Section 3.4, the Project would require a CDFW or RWQCB Waste Discharge Requirements prior to Project initiation. Additionally, a USACE Section 404 permit and RWQCB Section 401 Water Quality Certification would be required. Construction activities such as site clearing, grading, excavation, material stockpiling, placement of aggregate base, utility replacement, and related construction activities could leave soils exposed to rain or surface water runoff that may carry sediment, nutrients, petroleum products, concrete materials, or other pollutants into regulated surface waters, degrade water quality, and potentially violate water quality standards or waste discharge requirements. There is also the potential for surface water impacts from other pollutants in runoff sourced from construction equipment, such as petroleum fuels and lubricants, and construction materials that could contaminate runoff or groundwater. If not properly managed, construction activities could result in erosion, as well as the discharge of chemicals and materials into surface and groundwater resources. In such an instance, applicable water quality standards and waste discharge requirements could be violated, and polluted runoff could substantially degrade water quality in surface waters.

However, as described in Section 1.7, Compliance with Existing Regulations and Standard BMPs, the Project would be subject to various stormwater pollution prevention requirements, including erosion and sediment control measures under applicable stormwater permit requirements. Specifically, the Project would obtain coverage under the current statewide Construction Stormwater General Permit is Order WQ 2022-0057-DWQ, the applicable National Pollutant Discharge Elimination System (NPDES) permit requirements for discharges of stormwater runoff associated with construction and land disturbance activities. In compliance with NPDES requirements, applicable permit registration documents would be prepared and submitted to the State Water Resources Control Board prior to undertaking Project construction, providing notification and intent to comply with the State of California Construction General Permit (SWRCB 2022).

Construction and erosion control plans would be written by a qualified professional and would identify and specify the use of erosion and sediment control BMPs, off-site tracking controls, wind erosion controls, non-stormwater management controls, and waste management and materials pollution controls.

Implementation of the requirements in Section 1.7, Compliance with Existing Regulations and Standard BMPs, combined with Mitigation Measure BIO-8 (Stormwater Best Management Practices) and regulatory permit conditions, would reduce potential water quality impacts during Project construction to a less-than-significant level by requiring measures to minimize erosion, sediment, and pollutant contribution to surface waters. Upon completion of the Project construction activities, each site would be returned to pre-construction conditions. The Project's construction-period impact would be less than significant with mitigation.

Following construction, operation and maintenance of the Project would not result in a new substantial point discharge or a substantial increase in impervious surfaces relative to the existing conditions. The increase in impervious surface area would be limited to the long-term improvements, including widening of Mariposa Road and Escalon-Bellota Road, and would be treated or managed in accordance with applicable Regional Water Board requirements. Therefore, impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (No Impact)

The Project would not result in a substantial increase in impervious surfaces relative to the existing conditions such that that groundwater recharge would be impacted. Furthermore, the Project would not involve the operational extraction or use of groundwater, and no interference with groundwater recharge would occur. No impact would result.

c.i) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? (Less than Significant Impact)

The Project would add impervious surfaces to the Project area through the roadway widening, and intersection improvements. Existing roadway drainage patterns would be maintained to the maximum extent practicable. Excavation depths to install drainage facilities may vary. Erosion and sediment prevention would be implemented during construction to avoid impacts to water quality, including those related to siltation (see Impact 3.10 (a), above). The Project would be required to adhere to BMPs and conditions to be included in a SWPPP to prevent erosion-related impacts during construction. Substantial on- or off-site erosion and siltation would not result, and the potential construction-related impact with regard to erosion and siltation would be less than significant. Therefore, the impact would also be less than significant.

c.ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Less than Significant Impact)

The Project would add a marginal amount of impervious surface to the Project area through Area through the roadway widening, and intersection improvements. However, the Project would improving existing roadways in the same general location and would not substantially alter the drainage pattern of the surrounding area.

The Project would not alter topography or drainage patterns in a manner that would increase on- or off-site flooding. Aside from the increase in impervious surface area, the Project does not include elements that would increase stormwater drainage or necessitate significant design features to accommodate stormwater management. The Project would not cause on- or off-site flooding. The impact would be less than significant.

c.iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Less than Significant Impact)

Figure 1.2 shows culverts and drainage systems along the Project Corridor. Existing watershed drainage patterns would be maintained to the maximum extent practicable. The Project also does not include elements that would increase stormwater drainage or necessitate significant design features to accommodate stormwater management. Additionally, requirements in Section 1.7, Compliance with Existing Regulations and Standard BMPs, combined with Mitigation Measure BIO-8 (Stormwater Best Management Practices) and regulatory permit conditions would minimize the Project's potential impacts. The Project would not cause on- or off-site flooding. The impact would be less than significant.

c, iv) Impede or redirect flood flows? (Less than Significant Impact)

Portions of the Project Corridor are located within the FEMA 100-year flood zone (Appendix C, Figure 5). However, the Project design does not include any features that would impede or redirect flood flows. Existing topography would not be significantly altered in such a manner as to redirect flood flows and the Project would include new drainage facilities. Any potential impact on the impediment or redirection of flood flows would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Less than Significant Impact)

Portions of the Project Corridor are located within the FEMA 100-year flood zone (Appendix C, Figure 5). However, Project construction would not occur during flood conditions. Thus, there would be no potential for a flood-related release of pollutants during construction. The Project does not include unsecured elements that could be washed away during a flood. Potential construction related impact would be less than significant.

The Project Corridor is not located near a larger isolated body of water that may be affected by a seiche. The Project Corridor is not located within a tsunami hazard zone because it is more than 70 miles from the Pacific Ocean. No impact from a seiche or tsunami would result.

Operational maintenance of the Project improvements may involve occasional repair, trash/debris removal, and vegetation maintenance (e.g., mowing), which could involve hazardous materials (e.g., small equipment fuel). However, these materials would not be stored within the Project Corridor and thus would not be released into the environment in the event of a flood event. Additionally, operational maintenance of the Project improvements would be the same as under existing conditions. Operational impacts would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less than Significant Impact)

The Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (Basin Plan) addresses both surface and groundwater quality within the basins (CVRWQCB 2019). The Project would not conflict with or obstruct the implementation of the Water Quality Control Plan or a sustainable groundwater management plan.

Compliance with construction provisions and precautions outlined in the required National Pollutant Discharge Elimination System permits would be maintained, and best management practices would be implemented to prevent violations of water quality standards, waste discharge requirements, or water quality degradation (see Impact 3.10 (a), above). The operation of the Project would not impede sustainable groundwater management, as it would not use groundwater, interfere with groundwater recharge, generate growth, or increase water demands. The impact would be less than significant.

Mitigation Measures

Mitigation Measure BIO-8 combined with implementation of Section 1.7, Compliance with Existing Regulations and Standard BMPs, and regulatory permit conditions, would reduce potential water quality impacts during Project construction to a less-than-significant level by requiring measures to minimize erosion, sediment, and pollutant contribution to surface waters.

3.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

Background and Regulatory Setting

The San Joaquin County General Plan establishes land use designations for unincorporated areas of the County, while the County Zoning Ordinance implements General Plan policies through zoning regulations. The Project area is designated Agricultural/General and zoned General Agriculture (AG-160). The AG zone is intended to preserve agricultural lands for continued commercial agricultural use and allows uses such as crop production, agricultural support activities, and livestock operations. Residential development is generally limited to one primary residence per 40 acres (San Joaquin County 2016).

a) Physically divide an established community? (No Impact)

The Project consists of roadway and intersection improvements along the existing Mariposa Road and Escalon-Bellota Road corridor. The implementation of the improvements would not create a physical or visual barrier to travel and would not restrict access between residences, businesses, agricultural operations, or public facilities. The Project is limited to improvements within and adjacent to an existing roadway corridor and would not divide an established community. Therefore, no impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

The Specific Plan would remain subject to applicable federal, state, and local regulations and permit requirements intended to avoid or mitigate environmental effects. Implementation of the improvements would not conflict with the San Joaquin County General Plan. Specific General Plan policies adopted for the purpose of avoiding environmental effects are evaluated throughout this Initial Study under the corresponding issue areas; for example, policies related to biological resources are evaluated in Section 3.4, Biological Resources. There would be no impact.

3.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a, b) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

Under the Surface Mining and Reclamation Act, the State Geologist classifies areas into Mineral Resource Zones (MRZs). The Project is not located in an area classified as MRZ-2 and therefore is not located in an area of known economic mineral deposits of value to the region or state (California Geological Survey 2013).

The minor roadway improvements proposed by the Specific Plan would not affect the availability of important mineral resources as the improvements would only use minimal aggregate and other roadway materials to construct the improvements. Therefore, no impact would occur.

3.13 Noise

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b) Result in generation of excessive groundborne vibration or noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

Background and Regulatory Setting

Section 9-1025.9 (Noise) of the San Joaquin County Development Title sets forth noise exposure standards for transportation and stationary noise sources. Table 9-1025.9 sets a transportation source noise threshold of 65 decibels (dB) as acceptable for outdoor activity areas around various land uses, and 45 dB for interior spaces; stationary noise sources have lower thresholds, 50-70 dB for outdoor activity areas during the day and 45-65 dB at night. Development must be planned and designed to minimize noise interference from outside noise sources (§ 9-1025.9(a-b)). Exemptions include noise sources associated with construction, provided that such activities do not take place before 6:00 a.m. or after 9 p.m. on any day (§ 9-1025.9(c)(3)). The same applies to noise sources associated with work performed by private or public utilities for facility maintenance or modification ((§ 9-1025.9(c)(7))). There are no County standards for ground-borne vibration.

a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less than Significant Impact)

Construction of Project improvements would not generate substantial temporary or permanent noise in excess of San Joaquin County standards, generally because those standards do not apply to construction projects conducted during the day, and because operational noise would not be anticipated to change from present conditions, since the Project improvements would not increase road capacity nor induce substantial additional traffic. The impact would be less than significant.

b) Result in generation of excessive groundborne vibration or noise levels? (Less than Significant Impact)

Project construction activities would involve the use and operation of equipment such as a backhoe, excavator, grader, roller, concrete truck, bulldozer, dump trucks, water trucks, and pickup trucks. Typical vibration levels generated by conventional construction equipment range from approximately 0.003 to 0.089 inches per second peak particle velocity (PPV) at a distance of 25 feet (FTA 2006). Because these levels are representative of standard construction practices and are relatively low, construction activities would not generate excessive groundborne vibration or vibration-related impacts.

Construction activities that would generate groundborne vibration or noise would be short-term and would stop after construction. Additionally, construction would shift along the corridor for this linear Project, with construction duration being shorter at any one location. Therefore, the Project is not anticipated to generate excessive groundborne vibration or noise levels. The impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)

The Project site is not near a private airstrip, and is not within two miles of a public or public-use airport. The nearest airport to the Project site is the Stockton Metropolitan Airport, more than 10 miles to the west. Therefore, the Project would result in no impact.

3.14 Population and Housing

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

Background and Regulatory Setting

Residences near the Project area are associated with agricultural uses, predominately orchards. The area in the immediate vicinity of the Project Corridor is planned and zoned for agricultural uses.

However, population and development growth is currently anticipated in the region around the Project Corridor. The Mariposa Industrial Park Project would result in construction of industrial and warehousing development in south Stockton. In addition, the California Department of Finance has prepared projections showing population increases in the County through the Project design horizon (year 2045). This predicted growth is anticipated to occur independently of the Project.

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)

The Project would not induce substantial unplanned population growth because it does not propose new homes, businesses, roads, or extension of utilities that would result in direct or indirect population growth. As provided in the background and regulatory setting, growth is currently planned and anticipated near the Project Corridor. This growth is due to existing plans for industrial and warehousing development in south Stockton, and buildout of the General Plan. Without implementation of the Project, roadway operation and safety along the Project Corridor is projected to degrade. Therefore, the Project is proposed to improve corridor safety and operations in the near-term and long-term.

Maintenance of the proposed road would be performed by base staff or a hired contractor. No additional local government staff would be required. Implementation of the Project would not induce growth.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)

No homes or people would be displaced as a result of implementation of the Specific Plan. Therefore, no replacement housing is needed. No impact would occur.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services? (No Impact)

As discussed in Section 3.13, Population and Housing, implementation of the Project would not induce population growth and, therefore, would not require expanded fire or police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. The Project would also not result in an increase in student population, and therefore, no new or expanded schools would be required.

The Project would not result in the increased use of existing parks and other public facilities because it would not induce population growth. The Project would also not require the expansion of recreational facilities to maintain acceptable service ratios in parks and would not require the expansion of other public facilities. No impact on public services would occur.

3.16 Recreation

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (No Impact)

The proposed Project would not contribute to increased use or deterioration of neighborhood or regional parks or other recreational facilities because the Project would not create population-generating development or otherwise increase demand for recreational facilities. Accordingly, no impacts associated with the increased use of recreational facilities are anticipated.

b) Include or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (No Impact)

The proposed Project would not include or require the construction or expansion of recreational facilities. Accordingly, no impacts associated with the construction or expansion of recreational facilities are anticipated.

3.17 Transportation

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				✓
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			✓	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
d) Result in inadequate emergency access?			✓	

Background and Regulatory Setting

Roadways

Mariposa Road

Mariposa Road is a two-lane, east-west, major collector that begins as East Mariposa Road at the intersection of Martin Luther King Jr. Boulevard within the City of Stockton and ends at the intersection of Mariposa Road & Escalon-Bellota Road. Within the Project area, the posted speed limit is 55 mph, and there are no existing bikeways along the corridor. Per the San Joaquin County Regional Congestion Management Program (RCMP) 2025 Monitoring Report, the roadway is within the San Joaquin Council of Governments (SJCOG) RCMP network, but is not identified as a deficient corridor. However, the 2025 Monitoring Report identifies Mariposa Road as having high rates for fatal and severe injury collisions.

Escalon-Bellota Road

Escalon-Bellota Road is a 55 mph, two-lane, north-south, major collector within the Project area. Escalon-Bellota Road begins at SR 26 in unincorporated San Joaquin County north-east of the Town of Linden. Escalon-Bellota Road continues south and intersects Mariposa Road approximately two miles north of the Escalon City limits. Within the City of Escalon, the roadway becomes Escalon Avenue, the classification transitions to a minor arterial, and the roadway widens to four lanes with a two-way-left-turn (TWLT) median lane. The name of the roadway changes to McHenry Avenue at SR 120 and continues south into Stanislaus County and the City of Modesto. Escalon-Bellota Road is not part of the SJCOG RCMP network.

Bicycle and Pedestrian Facilities

With the rural nature of the area, multimodal infrastructure (bikeways or sidewalks) is not present along the Project area. There is a marked pedestrian crossing on the north leg of Jack Tone Road at

Mariposa Road, and pedestrian push buttons at the traffic signal at Escalon-Bellota Road and Lone Tree Road, but not marked crosswalks.

Public Transit

There are no transit routes or bus stops along the Project Corridor.

Airports

There are no airports within the Project vicinity. The nearest airport is the Stockton Metropolitan Airport.

San Joaquin County General Plan

Part 3.2 of the San Joaquin County General Plan addresses the County's roadway system within the Transportation and Mobility Element. The following policies are referenced for applicability to this Project.

TM-1.1 Transportation System Safety The County shall manage the transportation system to ensure safe operating conditions.

TM-1.2 Emergency Services The County shall coordinate the development and maintenance of all transportation facilities with emergency service providers to ensure continued emergency service operation and service levels.

TM-1.8 Multimodal Congestion Management The County shall support, as appropriate, SJCOG efforts to monitor multimodal corridors within the County as part of the Regional Congestion Management Program. The County shall also encourage the consideration of additional multimodal corridors, where appropriate, as part of future updates to the Regional Congestion Management Program.

TM-1.12 Transportation and Land Use The County shall ensure that transportation system investments and improvements support existing and future sustainable land use patterns.

TM-1.16 Transportation Capacity and Development The County shall schedule transportation improvements to coordinate with land use development and transportation demand. Transportation investments and service capacity shall be planned to correspond to the development and travel demand identified by plans of local communities.

TM-2.4 Rural Complete Streets The County shall strive to serve all users on rural roadways in the County and shall design and construct rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
- coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions.

TM-3.4 Roadway Plan Coordination The County shall coordinate roadway improvements with regional plans, such as the countywide Regional Transportation Plan and Regional Transportation Improvement Plan Program, the Congestion Management Program, and the Measure K Strategic Plan Funding Program.

TM-3.5 Variations in Roadway Alignment The County shall consider variations in the alignment of designated roadways to be in conformity with the General Plan if the alignment does not result in traffic safety problems or reductions in needed capacity; does not constrain the proper development of contiguous properties, and does not conflict with or preempt other General Plan-specified uses or facilities; or if the alignment is in conformance with an adopted special purpose plan or specific plan.

TM-3.6 Right-of-Way Preservation The County shall strive to preserve road rights-of-way necessary to implement the circulation system included in the General Plan using 3.2-10 Special Purpose Plans or other means, where appropriate.

TM-3.9 Functional Classification The County shall plan for a road system of adequate capacity and design to provide reasonable and safe access by vehicles with minimum delay. The road system shall be based on a functional classification and shall contain the types of roads outlined in Table TM-1 and Table TM-2. General alignments for Minor Arterials and higher classifications are shown on the General Plan Circulation Diagram. Table TM-2 presents standards and a description of each road. Roads carrying recreational traffic may require higher standards.

San Joaquin County Bicycle Master Plan Update (November 2020)

The Specific Plan presents policies, bicycle infrastructure projects, programs, and action plans to support the improvement and expansion of the County's bicycling network. The Bicycle Master Plan Update proposes a Class III Bicycle Route along Escalon-Bellota Road. No bicycle facilities are proposed along Mariposa Road.

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (No Impact)

Consistency with County plans and policies, specifically the General Plan Transportation and Mobility Element, is analyzed in order to assess the proposed Project's environmental impacts.

The proposed near-term and road widening projects along Mariposa Road and Escalon-Bellota Road would not conflict with circulation system programs, plans, ordinances, or policies because they are consistent with TM policies listed above. The proposed roadway widenings would modify the Right-of-Way to be consistent with the Minor Arterial functional classification (84 feet to 110 feet) shown in Table TM-2 of the Transportation and Mobility Element. Widening these road segments improves safety, congestion management, increases capacity, and does not conflict with the Bicycle Master Plan. Therefore, there would be no impact.

The intersection improvements would not conflict with circulation system programs, plans, ordinances, or policies because they are consistent with TM policies listed above. The intersections which propose approach realignments to get to a 90-degree intersection angle would improve safety and would be consistent with policy TM-3.5 Variations in Roadway Alignment. Therefore, there would be no impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (Less than Significant Impact)

Level of Service (LOS) is no longer the basis for determining transportation impacts under CEQA. Senate Bill (SB) 743 directed the Governor's Office of Planning and Research to revise the CEQA Guidelines to shift transportation impact analysis away from automobile delay and congestion

metrics, such as LOS, and toward Vehicle Miles Traveled (VMT). Effective July 1, 2020, transportation impacts under CEQA are generally evaluated based on a project's effect on VMT rather than its effect on roadway or intersection operations. CEQA Guidelines Section 15064.3 states that, except for certain roadway capacity projects, a project's effect on automobile delay does not constitute a significant environmental impact. Therefore, roadway and intersection LOS standards remain relevant for transportation planning, operational analysis, and consistency with local General Plan or roadway design policies, but they are not used to determine the significance of transportation impacts under CEQA.

The widening of Mariposa Road from two lanes to four lanes west of Jack Tone Road to approximately 1,000 feet west of Santa Ana Way (Alternative 2) is intended to accommodate forecast travel demand and improve roadway safety and operations within the Project Corridor. Consistent with CEQA Guidelines Section 15064.3 and the Governor's Office of Land Use and Climate Innovation (formerly OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, roadway capacity improvements should be evaluated to determine whether they would induce substantial additional vehicle travel. The SJCOG regional travel demand model indicates that implementation of the roadway widening would increase corridor traffic volumes from approximately 27,800 average daily vehicles (ADT) for the base model year without the Project to 30,000 ADT for base model conditions with the Project, an increase of approximately 2,200 ADT, or about 7.9 percent. This is a relatively small increase in corridor traffic, and it suggests that the Project primarily accommodates travel already forecast to occur within the regional transportation network rather than inducing substantial new vehicle travel. Additionally, this widening is not the recommended alternative in the Plan; Alternative 1 is recommended and does not add additional through lanes. Accordingly, the Project would not be expected to result in a substantial increase in vehicle miles traveled or a significant induced travel impact under CEQA.

The proposed widening of Mariposa Road for a center turn lane (Alternative 1, recommended) and the intersection improvements along the corridor would not add additional through lanes, therefore there would be no impact on VMT for this alternative and the intersection Project sites.

The proposed widening of Escalon-Bellota Road from two lanes to four lanes with a center turn lane is intended to accommodate forecast travel demand and improve roadway operations within the Specific Plan area. The SJCOG regional travel demand model indicates that implementation of the roadway widening would increase corridor traffic volumes from approximately 28,260 ADT for the base model year without the Project to 28,930 ADT for base model conditions with the Project, an increase of approximately 670 ADT, or about 2.4 percent. The relatively small increase in corridor traffic suggests that the Project primarily accommodates travel already forecast to occur within the regional transportation network rather than inducing substantial new vehicle travel. Accordingly, the Project would not be expected to result in a substantial increase in vehicle miles traveled or a significant induced travel impact under CEQA.

Therefore, the Project would not be expected to result in a substantial increase in vehicle miles traveled and would not cause a significant transportation impact related to induced demand.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Less than Significant Impact)

The proposed roadway widening Project improvements would not result in a geometric design feature that would substantially increase hazards, because the widenings would not substantially change the existing roadway alignments.

The proposed intersection realignment Project improvements would not result in a geometric design feature that would substantially increase hazards, because the new intersection alignments improve geometric hazards that exist and roadway curves would be constructed to current engineering standards with appropriate advance warning signage for safety, minimizing hazards.

The proposed near-term Project improvement for channelization of turn lanes and the proposed long-term improvement of a roundabout at the intersection of Mariposa Road and Escalon-Bellota Road would not result in a geometric design feature that would substantially increase hazards, because the new intersection treatments improve safety, reduce vehicular speeds, and reduce geometric hazards that exist. Improvements would be constructed to current engineering standards with appropriate advance warning signage for safety, minimizing hazards.

The proposed Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) during construction or Project operation; therefore, the impact is less than significant.

d) Result in inadequate emergency access? (Less than Significant Impact)

The proposed Project improvements are not anticipated to result in permanently inadequate emergency access, because the intersection realignments and roadway widenings would maintain the same capacity or increase capacity for emergency vehicles as exists now. The Project would not interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant. The Project would not impede emergency access to or through the Project site. During construction, access to intersections and one lane along the roadways being widened would remain open for traffic. Any temporary lane closures would be for a short period of time and would be implemented in accordance with recommendations provided in the California Temporary Traffic Control Handbook to ensure that emergency access would be maintained all times. Temporary impacts to existing facilities are not anticipated to occur during construction, as the roadway would remain open to accommodate traffic, including emergency access through the construction area. However, should they be necessary, alternative routes would be identified in a Traffic Control Plan and would include coordination with local emergency service providers to ensure adequate access is maintained and alternate routes are available if needed. The Traffic Control Plan would be prepared and would be submitted by the construction contractor for review and approval by the County as part of the right-of-way permit and prior to Project construction. When construction is complete, full lane access would resume.

As the Project is intended to accommodate and relieve future congestion, future traffic conditions for emergency response or emergency evacuation would be improved. Therefore, impacts would be less than significant.

3.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)?		✓		
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

Background and Regulatory Setting

As defined at PRC Section 21074(a), a Tribal Cultural Resource (TCR) is a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a California Native American tribe and is either listed in or eligible for listing in the CRHR or included in a local register of historical resources. TCRs and any other resource determined significant by a Native American community should be identified as part of the SJCDPW's tribal outreach responsibilities under Assembly Bill (AB) 52, if any are present.

a, b) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k), or that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe? (Less than Significant with Mitigation)

The proposed Project is not anticipated to cause substantial adverse changes to tribal cultural resources. As discussed in Section 3.5, Cultural Resources, above, the Cultural Resources Report

prepared for the Project concluded that the Project area has low potential for archeological resources and found no evidence showing that the Project site was associated with a sacred place or Native American cultural activities. However, as noted in Section 3.5, Impact 3.5 (b), the Project would excavate within the area, which could result in a previously undiscovered find. If any subsurface resources are discovered, Mitigation Measures CR-2 through CR-4 above requires that all work stop until a qualified archaeologist has evaluated the find, reported on its significance, and recommended additional mitigation measures, which shall include contacting the Northern Valley Yokut Tribe for appropriate treatment of the find, and commitment by the County to facilitate that treatment.

Mitigation Measures

Mitigation Measures CR-2 and CR-3 would reduce the impact to unknown tribal resources to a less-than-significant level because a management plan to address the discovery of unanticipated resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

3.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				✓
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				✓
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (No Impact)

Implementation of the Specific Plan and associated improvements would not require or result in the relocation or construction of new or expanded water, wastewater, stormwater, power, or telecommunication facilities. Therefore, there would be no impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (No Impact)

The Project does not include land use development and would not create an increased demand for domestic water service. The Project may require relatively small quantities of water during the construction phase (e.g., for dust control and concrete/asphalt applications). Operation of the improvements is not expected to create any water demand. If landscaping is used within the proposed roundabout, some irrigation may be installed to establish the plantings. Sufficient water supplies exist to accommodate this minor use Therefore, the Project would not result in the need for the construction of new water facilities, or the expansion of existing facilities. No impact would result.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (No Impact)

Implementation of the Specific Plan, and the associated near-term and long-term roadway improvements, would not generate wastewater. Therefore, there would be no impact to wastewater capacity.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Less than Significant Impact)

Implementation of the Specific Plan is not anticipated to generate solid waste in excess of available capacity. Construction waste with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local landfill. Active permitted regional landfills include the Forward Landfill (24.7 million cubic yards remaining capacity) and Foothill Sanitary Landfill (125 million cubic yards remaining capacity), (CalRecycle 2026). The construction material to be off-hauled would be a marginal amount of the daily permitted tonnage of these facilities. Therefore, the Project's construction solid waste need would be sufficiently accommodated by existing landfills, and due to the temporary nature of the construction phase would not impair the attainment of solid waste goals.

During operation of the improvements, solid waste would not be generated on an on-going basis. Some small amounts of debris may be created during repairs or maintenance of the roadway infrastructure. This minor, intermittent waste could be accommodated by local landfills, as noted above.

The impact from solid waste generation during construction and operation of the Specific Plan improvements would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (Less than Significant Impact)

The San Joaquin County Solid Waste Division is the lead for the administration of solid wastes and the operation of related facilities. The San Joaquin County Environmental Health Department is involved in administering local and state regulations regarding waste management and has been appointed as the Local Enforcement Agency (LEA) in the unincorporated areas. San Joaquin County

2035 General Plan Policy PHS-6.5 requires the County to achieve a 75 percent diversion of landfilled waste by 2020, and a 90 percent diversion rate by 2035 (SJC General Plan).

No applicable federal solid waste regulations would apply to the implementation of the Specific Plan. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. Construction waste that could be reused, salvaged, or recycled would be separated, in compliance with local diversion requirements, from waste sent to the landfill.

The Project would not conflict with or impede implementation of such programs. Therefore, no impact would occur.

3.20 Wildfire

Would the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes?				✓

Background and Regulatory Setting

Revisions to the CEQA Guidelines in January 2018 created a focused section addressing wildfire hazards. Generally, CEQA requires lead agencies to analyze a project's impacts on the environment rather than the environment's impacts on a project. However, CEQA does require consideration of whether a project would place people or structures at substantial risk from environmental hazards, including wildfires (California Building Industry Association v. Bay Area Air Quality Management District 2015).

San Joaquin County General Plan, Public Health and Safety Element.

The Public Health and Safety Element of the San Joaquin County General Plan establishes goals and policies to minimize risks associated with fire hazards throughout the County (San Joaquin County 2016). The Element identifies the communities of Bellota, Clements, Linden, and Lockeford as areas with elevated wildfire risk and includes Policies 4.1 through 4.6, which address fire resilience and development within Fire Hazard Severity Zones.

San Joaquin County Local Hazard Mitigation Plan

The San Joaquin County Office of Emergency Services periodically prepares a Local Hazard Mitigation Plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 and Federal Emergency Management Agency (FEMA) requirements. The most recent LHMP was revised in 2023 and provides a framework for identifying natural and technological hazards, assessing associated

risks, and implementing mitigation measures to reduce potential damage from future disasters. The 2023 LHMP identifies wildfire as a hazard of concern within the County and includes mapping of State Responsibility Area and Local Responsibility Area Fire Hazard Severity Zones (OES 2023). The Project site is located within an area designated as having low wildfire hazard severity and is not located within a high or very high Fire Hazard Severity Zone.

a) Substantially impair an adopted emergency response plan or emergency evacuation plan? (No Impact)

As shown on the Fire Hazard Severity Zone maps included in the 2023 LHMP as well as the mapper from CAL FIRE, the Project site is located within a Local Responsibility Area and is not designated as a High or Very High Fire Hazard Severity Zone (San Joaquin County OES 2023 & CAL FIRE 2026). The Project would not alter emergency response facilities, emergency access routes, or designated evacuation routes. Therefore, the Project would not impair implementation of an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Less than Significant Impact)

The Project area includes relatively flat terrain where windy conditions may occur. Fire ignition risk associated with construction activities would be low and limited to accidental ignition associated with construction equipment or vehicle use. The Project would not otherwise increase exposure to wildfire hazards above existing conditions. Impacts would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)

The Project would not result in a need to expand infrastructure to the Project area or in the immediate vicinity of the Project. New roads for fire defense, expanded water sources, or new power lines would not be required. No impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes? (No Impact)

Project construction would not expose people or structures to significant risk. The immediate Project Area is not forested, although some vegetation is present. Fire ignition risk associated with construction activities is low. Because the Project is located in flat lands and due to low fire ignition risk, the risk of flooding or landslides associated with post-fire slope instability or changes in drainage is low. No impact would occur.

3.21 Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less than Significant with Mitigation)

As explained in Section 3.4, Biological Resources, the proposed Specific Plan Project would not substantially degrade the quality of the environment, fish or wildlife habitat or populations, nor would it substantially impair plant or animal communities or affect rare or endangered plants. Mitigation Measures BIO-1 through BIO-22 minimize impacts to biological resources, including conducting biological monitoring during initial ground disturbance and vegetation clearing, and all work within 50 feet of perennial water features, lighting restrictions, minimizing encroachment to riparian areas, timing restrictions on in-channel work, enrollment in the San Joaquin Multi Species Conservation Plan (SJMSCP), implementing focused preconstruction Swainson's hawk nesting surveys and

protection measures, preconstruction pond turtle surveys and protection measures, preconstruction nesting bird surveys, protection of valley oak dripline, and replacement of Fremont cottonwood trees at a ration of 2:1. To avoid construction-related impacts, SJCDPW will require a qualified biologist to conduct a pre-construction survey for turtles, Swainson's Hawk, and nesting birds if construction is scheduled within the breeding/nesting/active season.

As evaluated in this IS/MND, the Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory.

Mitigation measures are listed herein to reduce impacts related to biological resources, cultural resources, geology and soils, hazards and hazardous materials, and hydrology and water quality. With implementation of the required mitigation measures, impacts would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (Less than Significant Impact)

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The County has not identified other road improvement projects in the Project vicinity.

The Project is consistent with the San Joaquin County General Plan. The Project would address the growth projected for the region (see Section 3.14, Population and Housing) and improve safety and operations of the Mariposa Escalon-Bellota roadway corridor.

As summarized in this Initial Study, the Project would not result in impacts land use and planning, mineral resources, population and housing, public services, or recreation. Therefore, implementation of the Project would not contribute to any related cumulative impact on those resources.

Impacts resulting from the recently implemented projects were fully mitigated. The Project impacts summarized in this Initial Study would not add appreciably to any existing or foreseeable future significant cumulative impact. The impacts of the proposed Project would be mitigated to a less-than-significant level, including those related to biological resources, cultural resources, geology and soils, hydrology and water quality, and tribal cultural resources. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? (Less than Significant Impact)

The Project has been planned and designed to avoid significant environmental impacts. As discussed in the analysis throughout Section 3 of this IS/MND, the Project would not have environmental effects that would cause substantial adverse direct or indirect effects on human beings. The impact would be less than significant.

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