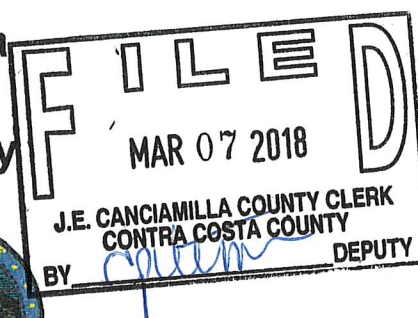


**Department of
Conservation and
Development**

30 Muir Road
Martinez, CA 94553

Phone: 1-855-323-2626

**Contra
Costa
County**



John Kopchik
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Assistant Deputy Director

Kelli Zenn
Business Operations Manager

March 7, 2018

**NOTICE OF PUBLIC REVIEW AND INTENT
TO ADOPT A PROPOSED MITIGATED NEGATIVE DECLARATION**

County File No. CP 17-49

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970" as amended to date, this is to advise you that the Department of Conservation and Development of Contra Costa County has prepared an Initial Study/Mitigated Negative Declaration for the following project:

PROJECT NAME: Camino Tassajara Bike Lane Gap

LEAD AGENCY: Contra Costa County Department of Conservation and Development

APPLICANT: Contra Costa County Public Works Department

LOCATION: The project is located in San Ramon Valley in unincorporated Contra Costa County on four segments of Camino Tassajara from near Penny Lane to Windemere Parkway as shown on Figures 1 and 2.

ZONING: A-80 (Exclusive Agriculture), A-2 (General Agriculture)

DESCRIPTION: The Project will widen the existing roadway along four segments of Camino Tassajara from near Penny Lane to Windemere Parkway to provide two 12-foot travel lanes with up to 8-foot shoulders as described below and shown. The total length of roadway where the road will be widened and shoulders will be added is approximately 5,400 feet. The approximate roadway widening limits for each segment of Camino Tassajara are provided as follows; Segment 1 extends from 240 feet north of Penny Lane to 150 feet south of Johnston Road (approximately 1,500 feet long). Segment 2 extends from 1,300 feet north of Highland Road to (approximately 1,300 feet long). Segment 3 extends from 700 feet south of the bridge over Tassajara Creek to 2,050 feet south of the bridge over Tassajara Creek (approximately 1,350 feet long). Segment 4 extends from 1,600 feet north of Windemere Parkway to 350 feet north of Windemere Parkway (approximately 1,250 feet long).

The Project will also apply a slurry seal along the entire roadway section from Lusitano Street to Windemere Parkway, which includes the four segments to be widened. The Project will provide consistent shoulders and will connect to the existing bike lanes resulting in a contiguous Class II bike lane along the entire County maintained portion of Camino Tassajara between Ballfields and Windemere Parkway. The Project will bring the roadway along these segments up to current County standards, and provide drivers

with a consistent roadway section and a wider area for recovery should they veer out of the travel lane. The Project will also contribute to the completion of the bikeway network proposed in the 2009 Contra Costa Countywide Bicycle and Pedestrian Plan.

To accommodate the widened roadway, excavation, grading, and/or embankment fill will be necessary on one or both sides of the roadway. The existing vertical alignment of the roadway will be retained. Slight localized variations in the horizontal alignment will result from and correspond to the road and shoulder widening. Existing striping will be removed and the roadway will be restriped. Roadway signage will be relocated and/or added as needed. Roadside obstacles, including utility poles, fences, drainage features, roadway signs, and/or mailboxes, will be relocated as necessary to accommodate the new roadway width. Additionally, roadside trees may need to be removed and modifications to roadside drainages will be necessary to accommodate the widening. This may include the replacement, extension, or relocation of culverts, the relocation or regrading of drainage ditches, and/or the modification of storm drain inlets. Real Property transactions may be necessary to accommodate the Project including temporary construction easements and right-of-way (ROW) acquisition from properties fronting Camino Tassajara. Standard lane closures and traffic control will be utilized during construction. No traffic detours are required. Project construction is anticipated to begin in April 2019 and conclude in October 2019. Construction would occur over approximately 45 working days for each segment while application of slurry seal and striping along the entire roadway would occur over approximately 10 days.

The Initial Study/Mitigated Negative Declaration (IS/MND) describes the proposed project; identifies, analyzes, and evaluates the potential significant environmental impacts, which may result from the Project; and identifies measures to mitigate adverse environmental impacts. Mitigation measures were identified in the areas of air quality, biological resources, cultural resources, geology and soils, and noise. Mitigation measures identified in this document will reduce impacts to a less-than-significant level.

A copy of the IS/MND may be reviewed at the Contra Costa County Public Works Department, 255 Glacier Drive, Martinez, during normal business hours. You may also view the IS/MND on the County's webpage: <http://www.co.contra-costa.ca.us/4841/Public-Input>. All documents referenced in the IS/MND are available on request.

PUBLIC COMMENT PERIOD: The 30-day public comment period for accepting comments on the adequacy of the environmental document is from **March 8, 2018 to April 6, 2018**. Any comments should be in writing and submitted to the following address and/or email address:

Matt Kawashima, Environmental Analyst II
Contra Costa County Public Works Department
255 Glacier Drive
Martinez, CA 94553
Matt.Kawashima@pw.cccounty.us

Any questions regarding the project itself should be directed to:

John Honey, PE, Staff Engineer
Contra Costa County Public Works Department
255 Glacier Drive
Martinez, CA 94553
925-313-2371
John.Honey@pw.cccounty.us

It is anticipated that the proposed IS/MND will be considered for adoption at the County Board of Supervisors meeting on **May 1, 2018**. To confirm the Board date, please contact Matt Kawashima at (925) 313-2161.

FIGURE 1: Regional Location Map

CONTRA COSTA COUNTY CALIFORNIA

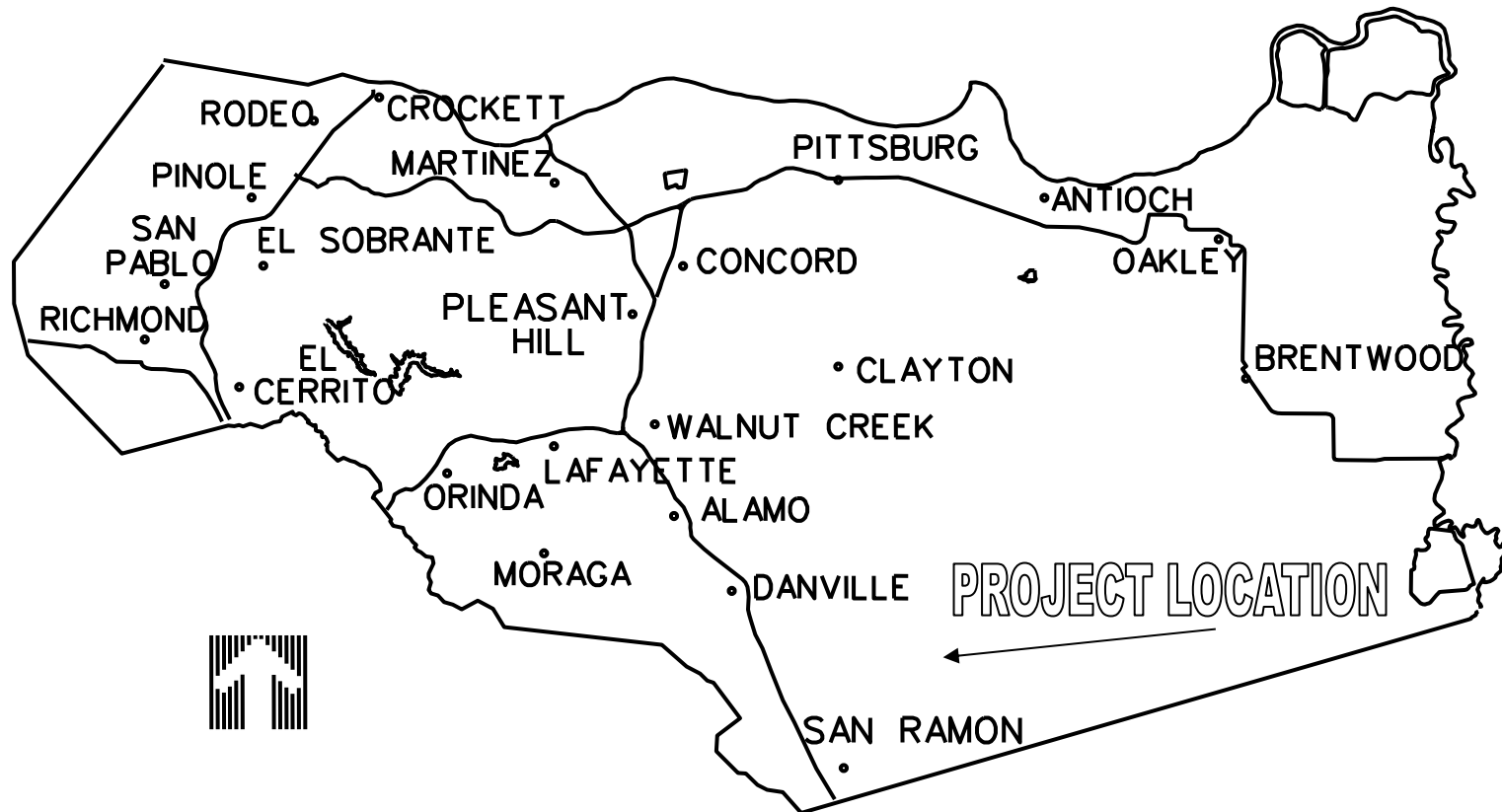


FIGURE 2: Project Vicinity Map



PUBLIC WORKS DEPARTMENT
INITIAL STUDY OF
ENVIRONMENTAL SIGNIFICANCE

PROJECT NUMBER: 0662-6R4010
CP# 17-49

PROJECT NAME: Camino Tassajara Bike Lane Gap Closure Project

PREPARED BY: Matt Kawashima *MK*

DATE: February 7, 2018

APPROVED BY: *T. C.*

DATE: 2-8-18

RECOMMENDATIONS:

☐ Categorical Exemption: 1530 ___ [Class ___]

☒ Mitigated Negative Declaration

☐ Environmental Impact Report Required

☐ Conditional Negative Declaration

The project will not have a significant effect on the environment. The recommendation is based on the following: There is no substantial evidence that the Project or any of its aspects may cause a significant effect on the environment, pursuant to section 15063(b)(2) of the CEQA guidelines.

What changes to the project would mitigate the identified impacts: N/A

USGS Quad Sheet: <u>Tassajara</u>	Base Map Sheet #: <u>U19 & X20-23</u>	Parcel #: <u>206-030-022; 204-160-009; 203-030-065; 204-100-005</u> <u>223-020-018; 205-090-010</u> <u>205-050-008; 223-020-010; 223-030-006; 205-050-009; 223-030-013</u> <u>223-041-021; 223-042-009; 223-042-008; 223-042-004; 223-042-007; 223-042-011;</u> <u>223-041-022; 223-041-023; 223-041-014; 223-041-015; 223-041-013; 223-041-020</u>
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GENERAL CONSIDERATIONS:

- Location:** The Project is located within the San Ramon Valley, an unincorporated portion of Contra Costa County approximately 6 miles east of the City of San Ramon along Camino Tassajara from Lusitano Street to Windemere Parkway.
- Project Description:** The Project will widen the existing roadway along four segments of Camino Tassajara from near Penny Lane to Windemere Parkway to provide two 12-foot travel lanes with up to 8-foot shoulders as described below and shown. The total length of roadway where the road will be widened and shoulders will be added is approximately 5,400 feet. The approximate roadway widening limits for each segment of Camino Tassajara are provided below.
 - Segment 1 extends from 240 feet north of Penny Lane to 150 feet south of Johnston Road (approximately 1,500 feet long).
 - Segment 2 extends from 1,300 feet north of Highland Road to (approximately 1,300 feet long).
 - Segment 3 extends from 700 feet south of the bridge over Tassajara Creek to 2,050 feet south of the bridge over Tassajara Creek (approximately 1,350 feet long).
 - Segment 4 extends from 1,600 feet north of Windemere Parkway to 350 feet north of Windemere Parkway (approximately 1,250 feet long).

The Project will also apply a slurry seal along the entire roadway section from Lusitano Street to Windemere Parkway, which includes the four segments to be widened. The Project will provide consistent shoulders and will connect to the existing bike lanes resulting in a contiguous Class II bike lane along the entire County maintained portion of Camino Tassajara between Ballfields and Windemere Parkway. The Project will bring the roadway along these segments up to current County standards, and provide drivers with a consistent roadway section and a wider area for recovery should they veer out of the travel lane. The Project will also contribute to the completion of the bikeway network proposed in the 2009 Contra Costa Countywide Bicycle and Pedestrian Plan.

To accommodate the widened roadway, excavation, grading, and/or embankment fill will be necessary on one or both sides of the roadway. The existing vertical alignment of the roadway will be retained. Slight localized

Contra Costa County

variations in the horizontal alignment will result from and correspond to the road and shoulder widening. Existing striping will be removed and the roadway will be restriped. Roadway signage will be relocated and/or added as needed. Roadside obstacles, including utility poles, fences, drainage features, roadway signs, and/or mailboxes, will be relocated as necessary to accommodate the new roadway width. Additionally, roadside trees may need to be removed and modifications to roadside drainages will be necessary to accommodate the widening. This may include the replacement, extension, or relocation of culverts, the relocation or regrading of drainage ditches, and/or the modification of storm drain inlets.

Real Property transactions may be necessary to accommodate the Project including temporary construction easements and right-of-way (ROW) acquisition from properties fronting Camino Tassajara. Standard lane closures and traffic control will be utilized during construction. No traffic detours are required. Project construction is anticipated to begin in April 2019 and conclude in October 2019. Construction would occur over approximately 45 working days for each segment while application of slurry seal and striping along the entire roadway would occur over approximately 10 days.

3. Does it appear that any feature of the project will generate significant public concern?

☐ Yes ☒ No ☐ maybe (Nature of concern):

4. Will the project require approval or permits by other than a County agency?

☐ Yes ☒ No

5. Is the project within the Sphere of Influence of any city? Yes, San Ramon

Environmental Checklist Form

1. **Project Title:**
Camino Tassajara Bike Lane Gap Closure Project
2. **Lead Agency Name and Address:**
Contra Costa County Department of Conservation and Development
30 Muir Road, Martinez, CA 94553
3. **Contact Person and Phone Number:**
Matt Kawashima, Environmental Analyst II, (925) 313-2161
Contra Costa County Public Works Department
4. **Project Location:**
The Project is located within the San Ramon Valley, an unincorporated portion of Contra Costa County approximately 6 miles east of the City of San Ramon along Camino Tassajara from Lusitano Street to Windemere Parkway as shown in Figures 1, 2, and 3.
5. **Project Sponsor's Name and Address:**
Contra Costa County Public Works Department
255 Glacier Drive, Martinez CA 94553
6. **General Plan Designation:**
AL (Agricultural Lands)
7. **Zoning:**
A-2 (General Agriculture) and A-80 (Exclusive Agriculture)
8. **Project Description:**
The Project will widen the existing roadway along four segments of Camino Tassajara from near Penny Lane to Windemere Parkway to provide two 12-foot travel lanes with up to 8-foot shoulders as described below and shown on Figures 4 through 7. The total length of roadway where the road will be widened and shoulders will be added is approximately 5,400 feet. The approximate roadway widening limits for each segment of Camino Tassajara are provided below.
 1. **Segment 1** extends from 240 feet north of Penny Lane to 150 feet south of Johnston Road (approximately 1,500 feet long).
 2. **Segment 2** extends from 1,300 feet north of Highland Road to (approximately 1,300 feet long).
 3. **Segment 3** extends from 700 feet south of the bridge over Tassajara Creek to 2,050 feet south of the bridge over Tassajara Creek (approximately 1,350 feet long).
 4. **Segment 4** extends from 1,600 feet north of Windemere Parkway to 350 feet north of Windemere Parkway (approximately 1,250 feet long).The Project will also apply a slurry seal along the entire roadway section from Lusitano Street to Windemere Parkway, which includes the four segments to be widened (Project).

The Project will provide consistent shoulders and will connect to the existing bike lanes resulting in a contiguous Class II bike lane along the entire County maintained portion of Camino Tassajara between Ballfields and Windemere Parkway. The Project will bring the roadway along these segments up to current County standards, and provide drivers with a consistent roadway section and a wider area for recovery should they veer out of the travel lane,. The Project will also contribute to the completion of the bikeway network proposed in the 2009 Contra Costa Countywide Bicycle and Pedestrian Plan (Contra Costa Transportation Authority 2009).

To accommodate the widened roadway, excavation, grading, and/or embankment fill will be necessary on one or both sides of the roadway. The existing vertical alignment of the roadway will be retained. Slight localized variations in the horizontal alignment will result from and correspond to the road and shoulder widening. Existing striping will be removed and the roadway will be restriped. Roadway signage will be relocated and/or added as needed. Roadside obstacles, including utility poles, fences, drainage features, roadway signs, and/or mailboxes, will be relocated as necessary to accommodate the new roadway width. Additionally, roadside trees may need to be removed and modifications to roadside drainages will be necessary to accommodate the widening. This may include the replacement, extension, or relocation of culverts, the relocation or regrading of drainage ditches, and/or the modification of storm drain inlets.

Real Property transactions may be necessary to accommodate the Project including temporary construction easements and right-of-way (ROW) acquisition from properties fronting Camino Tassajara. Standard lane closures and traffic control will be utilized during construction. No traffic detours are required. Project construction is anticipated to begin in April 2019 and conclude in October 2019. Construction would occur over approximately 45 working days for each segment while application of slurry seal and striping along the entire roadway would occur over approximately 10 days.

The roadway widening limits and any associated work will occur within the Area of Potential Impact shown on Figures 4 through 7. The Area of Potential Impact represents the maximum limit of work. As design of the Project is finalized, the actual area of impact will be reduced. The analysis in this document is based on the Area of Potential Impact and therefore represents a conservative analysis of potential impacts. Where applicable, the term “Project Site” will be used below to define the actual area of impact, any associated disturbance and staging areas as identified in the final plans. The Project Site will be located within the Area of Potential Impact shown on Figures 4 through 7.

9. **Surrounding Land Uses and Setting:**

Camino Tassajara is a two-lane arterial road with a 45 mile per hour speed limit along most of its length. The general Project area is rural in setting; with cattle grazing and equestrian facilities as common land uses. Camino Tassajara is located on the floor of the Camino Tassajara Valley. Topography within the vicinity of the Project Site is characterized by steeply to gently rolling hills to the east and west. Tassajara Creek meanders approximately parallel to the roadway crossing from the east side to the west south of Highland Road.

10. **Other public agencies whose approval is required** (e.g. permits, financing, approval, or participation agreement):

N/A

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.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology/Soils
<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology/Water Quality
<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise
<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	<input type="checkbox"/> Recreation
<input type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Tribal Cultural Resources	<input type="checkbox"/> Utilities/Service Systems
<input type="checkbox"/> 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 will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will 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 will be prepared.
- ☐ I find that the proposed project 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 although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigations measures that are imposed upon the proposed project, nothing further is required.


 Signature
 Contra Costa County Department of Conservation and Development

2/28/17
 Date

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EVALUATION OF ENVIRONMENTAL IMPACTS:

I. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

According to the Contra Costa County General Plan 2005-2020 (General Plan), the County has two main scenic resources in addition to many localized scenic features: (1) scenic ridges, hillsides, and rock outcroppings; and (2) the San Francisco Bay/Delta estuary system. Throughout much of the County, there are significant topographic variations in the landscape. The largest and most prominent of these are the hills that form the backdrop for much of the developed portions of the area. Views of these major ridgelines help to reinforce the rural feeling of the County's rapidly growing communities. These major ridges provide an important balance to current and planned development (Contra Costa County 2005g).

Environmental Setting

Camino Tassajara is a two-lane arterial that runs from Danville through the Tassajara Valley to Dublin through single-family developments and rural residential areas. The general Project area is characterized by horse ranches, orchards, and pastureland flanked by grassy hills dotted with oak.

a) Would the project have a substantial adverse effect on a scenic vista?

The Project will not have a substantial adverse effect on a scenic vista. A scenic ridgeline identified on Figure 9-1 of the General Plan is located to the west of all Project segments and is visible in some part from all Project segments. However the Project is a simple shoulder-widening project that will not block or change views in any direction. Therefore, the Project will have **no impact**.

b) Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project is not located within a state scenic highway (Caltrans 2011). The Project Site is identified as a scenic route on Figure 5-4 of the General Plan. No historic buildings, rock outcroppings or other potentially scenic resources would be impacted by the Project. Some tree removal may be necessary but would be limited to small trees in or adjacent to the road right-of-way and does not include large trees or groups of trees that would make a noticeable difference to the scenic quality of the route. Further, the Project will facilitate access to the route for bicyclists. Therefore, the Project impacts will be **less than significant**.

- c) *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

The Project will cause very little visual change to the existing roadway and surrounding area because of the limited scope and nature of the Project. The Project is limited to lane and shoulder widening and associated work including relocation of existing utility support poles, restriping, and re-grading of existing ditches. Once the Project is complete the roadway will not look substantially different from the existing condition. The Project will not remove elements that define the area, or introduce buildings, structures or other features that would not be compatible with the character of the area. Some tree and vegetation removal may be necessary; however, it will be minimal and would not affect the overall appearance or character of the area. Therefore, Project impacts will be **less than significant**.

- d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

The Project will not create a new permanent source of light or glare that would adversely affect day or nighttime views. No reflective surfaces or lights would be installed by the Project. Construction is expected to take place during the daylight hours. If unforeseen circumstances necessitate night work, it would be temporary and require approval by the Resident Engineer who will be available to address any concerns. Therefore Project impacts will be **less than significant**.

II. AGRICULTURE AND FOREST RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Farmland Mapping and Monitoring Program (FMMP)

Maintained by the California Department of Conservation (DOC), the FMMP rates agricultural land in the state according to soil quality and irrigation status. The best quality land is called Prime Farmland, which has the best combination of physical and chemical features able to sustain long term agricultural production. Farmland of Statewide Importance is similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique Farmland is farmland of lesser quality soils used for the production of the state's leading agricultural crops. Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Maps and statistical data used for analyzing impacts on California's agricultural resources are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

Williamson Act

The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

Land Evaluation and Site Assessment

California DOC's Land Evaluation and Site Assessment (LESA) is an approach for rating the relative quality

of land resources based upon specific measurable features. When used for California Environmental Quality Act impact analysis, the LESA model provides “an optional methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process” (Public Resources Code Section 21095).

Environmental Setting

The four segments are zoned General Agriculture (A-2) and/or Exclusive Agriculture (A-80) (Figure 8). According to the FMMP, portions of the four segments overlap with Farmland of Local Importance, Prime Farmland, and Unique Farmland (Figure 9). All four segments are located within an area identified as an “Important Agricultural Area” in the Conservation Element of the County General Plan (AWE 2017).

The following analysis is based on the Farmland Conversion Impact Analysis (Farmland Report) prepared for the Project by Area West Environmental, Inc. (AWE 2017)

- a) *Would the project 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?*

The Project may require minimal takes of farmland adjacent to the road shoulder to accommodate the shoulder widening. The Farmland Report prepared for the Project was conducted prior to final design and was based on the estimated Area of Potential Impact. Therefore the analysis is conservative in nature and actual Project impacts are expected to be less than those analyzed in the Farmland Report. The Farmland Report used the LESA model, which takes into consideration several conditions to determine impacts. All segments score below the significance threshold for agricultural land conversion when evaluated using the LESA model using the maximum impact area. Further, given the very small impact areas and proximity of the impact (sliver takes along the road right of way), the viability of the farmland will not be affected nor will the conversion affect the viability of the agricultural use in the area. Therefore, impacts will be **less than significant**.

- b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?*

The General Plan Conservation Element contains many goals and policies intended to protect agricultural land. These goals and policies primarily address conversion of agricultural land through urban development. Additional policies stress the economic importance of agriculture, strengthen the availability of agriculture support services and infrastructure, and facilitate cooperation between farmers and their urban neighbors. A review of General Plan policies pertaining to agriculture and the Contra Costa County zoning code for Land Use Districts A-2 and A-80 did not reveal inconsistencies with the provisions of these land use designations and districts that would result from implementation of the Project (Municode 2017, Contra Costa County 2005f).

A parcel along the eastern roadside along Segment 2 is under a Williamson Act contract (APN 205-090-010). Additionally, parcels along both the western and eastern roadside at Segment 3 are under a Williamson Act contract (APN 223-030-006, 205-050-009). As such, the Project may require right of way acquisition of a small area adjacent to the roadway that is currently under Williamson Act. When considering road alignment alternatives (to widen on one side of the existing road or another) every attempt will be made to avoid Williamson Act parcels where it doesn't result in a sub-standard road alignment. If necessary, the Contra Costa County Public Works Department (CCCPWD) would purchase necessary right of way in fee-title, which is not expected to affect the Williamson Act contract on the remainder of the parcel. Purchase of the right of way would not be influenced by the price of the land but

by necessity. There are no alternative sites that could be developed to provide the same public improvement without resulting in greater impacts to farmland and the environment. As such, the Project may require minimal takes of one or more parcels under a Williamson Act Contract. However, as required by Government Code Section 51291(b), if acquisition of land under a Williamson Act contract is necessary, the Director of the California Department of Conservation and the Contra Costa County Department of Conservation and Development will be notified of the proposed acquisition, and will be provided with a subsequent notification within 10 working days upon completion of the acquisition. Therefore, implementation of Mitigation Measure AGR-1 will reduce potentially significant impacts to **less than significant with mitigation incorporated**.

IMPACT AGR-1

Development of the Project may require right-of-way acquisition of a small roadside area that is currently under Williamson Act.

MITIGATION MEASURE AGR-1:

If right of way takes of land under a Williamson Act Contract is necessary, prior to construction the CCCPWD or its designated representative will notify the Director of the California Department of Conservation and the Contra Costa County Department of Conservation and Development of the property acquisition and will provide a subsequent notification within 10 working days upon completion of the acquisition.

- c) *Would the project 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))?*

The zoning in the Area of Potential Impact is specific to agriculture A-2 (General Agriculture) and A-80 (Exclusive Agriculture), there is no forestland, or land zoned for timberland production in the Project vicinity. These conditions preclude impacts to forestland or timberland. Therefore, the Project will have **no impact**.

- d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The Project will not result in the loss of forest land or conversion of forest land to non-forest use because forest land is not present within or adjacent to the Project Site. Therefore, the Project will have **no impact**.

- e) *Would the project 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?*

The Project is located along an existing roadway, will not increase the capacity of the roadway, facilitate growth, or encourage development of other land uses that could indirectly result in the conversion of Farmland. Therefore, the Project will have **no impact**.

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

The Clean Air Act requires the United States Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards for six common air pollutants known as criteria air pollutants. They are: particle pollution (often referred to as particulate matter or PM₁₀ and PM_{2.5}), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats (USEPA 2017). The San Francisco Bay Area Air Basin (SFBAAB) is currently designated as a nonattainment area for state ozone and particulate matter standards for air quality. In addition, the SFBAAB is designated as nonattainment for the national 8-hour ozone and PM_{2.5} air quality standards (BAAQMD 2017b).

The Bay Area Air Quality Management District (BAAQMD) is the regional, government agency that regulates sources of air pollution within the nine San Francisco Bay Area Counties. In addition to criteria pollutants, the BAAQMD enforces the California Airborne Toxic Control Measure (ATCM) that regulates the Naturally-Occurring Asbestos (NOA) emissions from grading, quarrying, and surface mining operations at sites which contain ultramafic rock. According to the 2000 map “A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos”, the Project is not in an area likely to contain ultramafic rocks (CDC 2000).

The BAAQMD periodically prepares and updates plans to establish rules and regulations for various emissions sources. In June 2010, the BAAQMD adopted new thresholds of significance and in 2011 updated its CEQA Guidelines. On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the 2010 thresholds. Subsequent proceedings may ultimately reinstate the 2010 thresholds. As such, the 2010 thresholds are not formally in place and have been pulled from the BAAQMD CEQA Guidelines which were updated to omit the thresholds to reflect the 2012 ruling. BAAQMD’s Justification Report, found in Appendix D of BAAQMD’s May 2017 CEQA Guidelines, explains the agency’s reasoning and provides substantial

evidence for developing and adopting their 2017 thresholds (BAAQMD 2017a). As such, BAAQMD's thresholds are supported by substantial evidence and are used to evaluate the significance of air quality impacts associated with the Project.

The following analysis is based on the Camino Tassajara Bike Lane Gap Closure Construction Emissions Assessment and Air Quality Memo prepared for the Project by Nichols Consulting Engineers (NCE 2017).

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The air quality plan applicable to the proposed project is the BAAQMD's 2017 Clean Air Plan (Clean Air Plan), which was adopted April 19, 2017.

Consistency with the Clean Air Plan can be determined if the project: 1) supports the goals of the Clean Air Plan; 2) includes applicable control measures from the Clean Air Plan; and 3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan. If it can be concluded with substantial evidence that a project would be consistent with the above criteria, then the BAAQMD considers it to be consistent with air quality plans prepared for the region. An evaluation of the consistency of the Project with the Clean Air Plan is provided below.

Clean Air Plan Goals. The primary goals of the Clean Air Plan are to: attain air quality standards; reduce population exposure to air pollutants and protect public health in the Bay Area; and reduce greenhouse gas emissions and protect the climate. As indicated in the analysis that follows below, the Project will not cause significant air quality or greenhouse gas emissions impacts and will not increase exposure of the population to air pollutants. The Project will not hinder the region from attainment of the goals outlined in the Clean Air Plan. Therefore, the project supports the goals of the Clean Air Plan.

Clean Air Plan Control Measures. The control strategies of the Clean Air Plan include measures in the following categories: stationary sources measures, mobile source measures, transportation control measures, land use and local impact measures, and climate measures. The control strategies applicable to the project are the Transportation and Mobile Source Control Measures.

Transportation and Mobile Source Control Measures. The BAAQMD identifies transportation and mobile source control measures as part of the Clean Air Plan to reduce ozone precursor emissions from stationary, area, mobile, and transportation sources. The transportation control measures are applicable to the Project and are designed to reduce emissions from motor vehicles by reducing vehicle trips and vehicle miles traveled (VMT) in addition to vehicle idling and traffic congestion. The Project is a road widening project that would widen the existing shoulder to current County standards. The Project will not add lanes that would increase the capacity of the roadway for motorized vehicles and therefore will not result in a long-term increase in emissions. In addition, the Project will provide sufficient space for a signed and striped Class II bicycle lane, which would support the ability of individuals to use alternative modes of transportation. Therefore, the Project will not conflict with the identified transportation and mobile source control measures of the Clean Air Plan.

Clean Air Plan Implementation. As discussed above, implementation of the Project will not disrupt or hinder implementation of applicable measures outlined in the Clean Air Plan, including stationary sources measures, mobile source measures, transportation control measures, land use and local impact measures, and climate measures. Therefore, the Project will not hinder or disrupt implementation of any control measures from the Clean Air Plan.

As discussed above, the Project will not conflict with or obstruct implementation of the Clean Air Plan and this impact will be **less than significant**.

- b) *Would the project violate any air quality standard or contribute to an existing or projected air quality violation?*

The Bay Area is under nonattainment status for State 1-hour and 8-hour ozone standards. In addition, the Bay Area was designated as a nonattainment area for the federal 8-hour ozone standard. The Bay Area is also considered a nonattainment area for PM_{2.5} at the state level and an attainment area at the federal level.

As discussed above in (a), the Project will not result in long-term operational impacts. However, during construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities particularly during site preparation. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly-emitted particulate matter (PM_{2.5} and PM₁₀), and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Each segment would include utility relocation, clearing and grubbing, grading and excavation, saw cutting, compacting, paving, slurry seal application, and striping. In addition to dust-related PM₁₀ emissions, construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs and some soot particulate (PM_{2.5} and PM₁₀) in exhaust emissions.

Construction emissions for the project were calculated using the Road Construction Emissions Model v. 8.1.0, developed by the Sacramento Metropolitan Air Quality Management District and the California Emissions Estimator Model (CalEEMod) Version 2016.3.1. Construction is anticipated to begin in April 2019 and conclude in October 2019 with each segment occurring over approximately 45 days. A summary of average daily constructions emissions is shown in Table 1. The analysis evaluated potential impacts from the following construction scenarios:

- Scenario A: No Segment Construction Overlap
- Scenario B: Two Segment Construction Overlap
- Scenario C: Three Segment Construction Overlap
- Scenario D: All Segment Construction Overlap

Table 1: Summary of Average Daily Construction Emissions By Segment

Segment	Emissions (lb/day)			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Segment 1	1.6	15.1	1.0	0.8
Segment 2	1.6	15.4	1.0	0.9
Segment 3	2.4	23.1	1.4	1.2
Segment 4	2.1	20.4	1.2	1.1
Slurry Seal/Striping	35.6	3.6	0.2	0.2
BAAQMD Threshold of Significance	54	54	82	54

Source: Nichols Consulting Engineers, 2017

Exceed Thresholds of Significance?

- Scenario A: No Segment Construction Overlap: No
- Scenario B: Two Segment Construction Overlap: No
- Scenario C: Three Segment Construction Overlap: Yes, NO_x emissions (58.9 lbs/day)
- Scenario D: All Segment Construction Overlap: Yes, NO_x emissions (74.4 lbs/day)

Under all Scenarios the average daily construction emissions of PM_{2.5} would not exceed the applicable thresholds adopted by BAAQMD during the construction period. However, the BAAQMD has established standard measures for reducing fugitive dust emissions (PM₁₀) that are recommended for all projects. With the implementation of standard construction measures fugitive dust emissions from construction activities would not result in adverse air quality impacts. Mitigation Measure AIR-1 would be implemented under all construction scenarios to further reduce fugitive dust emissions.

Scenarios C and D would result in NO_x emissions that exceed the applicable threshold of 54 pounds per day. It is anticipated that construction will not occur under Scenarios C and D however, if one of these option is chosen, Mitigation Measure AIR-2 would be implemented under construction scenarios C or D to reduce NO_x emissions to a less-than-significant level.

IMPACT AIR-1

Construction activities could result in fugitive dust emissions during Project construction.

MITIGATION MEASURE AIR-1:

Consistent with the Construction Mitigation Measures required by the BAAQMD, the construction contractor shall comply with the following:

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- 6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8) A publicly visible sign shall be posted with the telephone number and contact information for the designated on-site construction manager available to receive and respond to dust complaints. This person shall report all complaints to Contra Costa County and take immediate corrective action as soon as practical but not more than 48 hours after the complaint is received. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

IMPACT AIR-2

Construction of three or four segments simultaneously (Scenario C and D) will result in NO_x emissions that exceed the BAAQMD Thresholds of Significance.

MITIGATION MEASURE AIR-2:

Prior to construction, the construction contractor shall provide a written calculation to the County, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of at least 28 percent of NO_x and 45 percent of diesel PM reduction as compared to California Air Resources Board (CARB) statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products (e.g., CARB approved High Performance Renewable Diesel), alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The Construction Emissions Mitigation Tool development by the Sacramento Metropolitan Air Quality Management District (SMAQMD) may be used to calculate compliance with this condition and shall be submitted to the approving agency as described above.

Localized CO Impacts. The BAAQMD has established a screening methodology that provides a conservative indication of whether implementation of a proposed project will result in significant CO emissions. According to the BAAQMD's CEQA Air Quality Guidelines, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans.
2. The proposed project would be expected to alleviate congestion on roadways and not increase traffic volumes. Therefore, the project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, nor would it increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).

The Project would not conflict with the Contra Costa County Transportation Authority's Congestion Management Program for designated roads or highways, a regional transportation plan, or other agency plans (CCTA 2015). Therefore, the Project will not result in localized CO concentrations that exceed state or federal standards. Further, the proposed Project will bring the current roadway up to current County standards and provide paved shoulders with sufficient width for a Class II bicycle lane. The Project will help alleviate congestion by providing opportunities for alternative forms of transportation and creating a safer roadway segment. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

- c) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

CEQA defines a cumulative impact as two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts. According to the BAAQMD, air pollution is largely a cumulative impact and no single project is sufficient in size itself to result in nonattainment of ambient air quality standards. In developing the thresholds of significance for

air pollutants used in the analysis above, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The BAAQMD CEQA Air Quality Guidelines (2012) indicate that 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. Therefore, if a project's daily average or annual emissions of operational-related criteria air pollutants exceed any applicable threshold established by the BAAQMD, the proposed Project will result in a cumulatively significant impact. As stated previously the Project will not result in operational impacts. Further, the Project will likely reduce operational emissions with new bicycle lanes and improved traffic flow. As such, the Project will not exceed established thresholds for regional emissions or make a cumulatively considerable contribution to regional air quality impacts. Mitigation Measures AIR-1 and potentially AIR-2 would be implemented to reduce construction impacts to less than significant levels. Therefore, project impacts will be **less than significant with mitigation incorporated**.

d) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers, and other high-risk receptors. Individuals particularly vulnerable to diesel particulate matter (DPM) are children, with lung tissue that is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to DPM. Health risks from toxic air contaminants (TACs) such as construction diesel emissions are a function of both concentration and duration of exposure. Construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks throughout the construction period. Additionally, construction-related sources are mobile and transient in nature and the emissions occur with the project site with concentration dispersing rapidly with distance. Implementation of Mitigation Measure AIR-1 and potentially AIR-2 would help to reduce construction pollutant concentrations.

The closest sensitive receptors in the Project vicinity are residences located adjacent to the roadway segments. Residents could be temporarily exposed to diesel engine exhaust during the construction period due to the operation of construction equipment. The BAAQMD CEQA significance threshold for potential effects of DPM applies to the hypothetical exposure of a person continuously for 70 years. The duration of the construction period is expected to be a total of 6 months which is relatively short when compared to the 70-year risk exposure period. Additionally, the 6 month period would cover each of the four roadway segments included as part of the Project. Therefore, emission concentrations at any one receptor location would have a much shorter duration. Due to the short duration of the construction period and the dispersion of project construction emissions, health risk impacts associated with Project construction would be less than significant. Additionally, with implementation of Mitigation Measure AIR-1 and potentially AIR-2, which is consistent with BAAQMD guidelines, health risks from construction emissions of DPM would be further reduced. Therefore, project impacts will be **less than significant with mitigation incorporated**.

e) *Would the project create objectionable odors affecting a substantial number of people?*

The operational aspects of the Project will not generate any objectionable odors. Construction equipment exhaust and asphalt paving operations may create objectionable odors in the vicinity of homes. However, these will be limited and temporary in nature and avoided with implementation of Mitigation Measures AIR-1 and potentially AIR-2. Therefore, the Project will have a **less than significant with mitigation incorporated**.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

In 1973, the federal Endangered Species Act (ESA) was passed by Congress to protect ecosystems supporting special-status species to be administered by the U. S. Fish and Wildlife Service (USFWS). The California Endangered Species Act was passed as a parallel act to be administered by the California Department of Fish and Wildlife (CDFW). Special-status plant and wildlife species are defined as those species listed as Endangered, Threatened, or Proposed for listing or are designated as Fully Protected species under one or more of the following regulatory status:

- Federal Endangered Species Act, as amended (Code of Federal Regulations, Title 50, Section 17);

- California Endangered Species Act (California Code of Regulations Title 14, Section 670.5);
- California Fish and Game Code (Section 1901, 2062, 2067, 3511, 4700, 5050, and 5515);
- 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 (CNPS) (Native Plant Protection Act of 1977); 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 (SSC) designated by the CDFW as well as locally rare species defined by CEQA Guidelines 15125(c) and 15380, which may include species that are designated as sensitive, declining, rare, locally endemic or as having limited or restricted distribution by various federal, state, and local agencies, organizations, and watchlists such as those identified in the CDFW California Natural Diversity Database; as well as birds and raptors protected under the Federal Migratory Bird Treaty Act (16 U.S.C. 703-711) (Executive Order 13186) and bald and golden eagles protected under the Bald and Golden Eagle Protection Act of 1940.

Environmental Setting

The following analysis was based on the Biological Resources Assessment prepared for the Project in 2017 by Contra Costa County Public Works Department with the assistance of Area West Environmental Inc. (CCCPWD 2017). Area West conducted a biological resources assessment of the Project, which included a review of literature and databases, reconnaissance-level field surveys, a delineation of potentially jurisdictional areas. Because the exact alignments were not available at the time of the biological assessment, a conservative maximum area of effect identified as the Area of Potential Impact was used to analysis potential impacts. The Biological Study Area (BSA) represents the Area of Potential Impact and a 250-foot buffer. Vegetation communities or land cover types at the Project consist of the following: annual grassland, cropland, developed, orchard, ornamental, riparian, riverine, ruderal, and roadside ditch. These communities are described below and summarized in Table 2.

- **Annual Grassland.** The areas classified as annual grassland consist primarily of non-native annual grasses with a small forb component. Annual grassland occurs throughout the BSA for all four segments, with the majority used for livestock grazing. Where annual grassland abuts private property, it had been mowed prior to the site visit. Vegetation in this habitat is mostly herbaceous with a few valley oak (*Quercus lobata*) trees scattered throughout the annual grassland. This habitat is dominated by upland plant species, including soft chess brome (*Bromus hordeaceus*), yellow star thistle (*Centaurea solstitialis*), wild oat (*Avena fatua*), red-stem filaree (*Erodium cicutarium*), and Crane's bill geranium (*Geranium molle*).
- **Cropland.** Cropland is present along the sides of Camino Tassajara Road in Segment 1 on the eastern side of the BSA. These areas were recently tilled and consisted mostly of bare ground, with upland annual grasses and forbs along margins. The cropland is likely used for hay or other forage production.
- **Developed.** The developed vegetation community includes private residential homes, paved roadways, and shoulders. Roads consist of unvegetated sections of Camino Tassajara Road and associated shoulders. The private residential homes are scattered along the side of the road throughout the BSA. Vegetation, when present, is sparse and consists primarily of scattered upland annual grasses and forbs. Vegetation within the developed habitat is regularly mowed and/or sprayed with herbicide.
- **Orchard.** Orchard is present along the sides of Camino Tassajara Road in Segment 2 and Segment 3

on the eastern side of the BSA. Orchard habitat consists of flood-irrigated nut and olive orchards. The understory of orchard habitat was mostly barren or comprised of sparse weedy annuals. Two types of orchards were observed, one consisting of English walnut (*Juglans regia*) and the other consisting of olive (*Olea europea*).

- **Ornamental.** Ornamental vegetation includes landscaped areas adjacent to private residential homes, and other developed properties. A majority of the ornamental vegetation is irrigated. Some native species associated with other habitats, such as riparian or oak woodland, are present within this vegetation community. Ornamental vegetation consists primarily of fir (*Abies* spp.), coast redwood (*Sequoia semipervirens*), oleander (*Nerium oleander*), and blue grass (*Poa* spp.).
- **Riparian.** The riparian vegetation community is present within the BSAs for segments 2, 3 and 4, outside of the Project Site. These habitats are associated with Tassajara Creek (described below). Within the BSA, the riparian over story is dominated by California black walnut (*Juglans hindsii*), coast live oak (*Quercus agrifolia*), valley oak, and willow (*Salix* sp.), with an understory consistent with adjacent annual grassland, as well as coyote brush (*Baccharis pilularis*).
- **Riverine.** Tassajara Creek is a perennial stream within the BSAs for segments 2, 3 and 4, outside of the Project Site, that runs roughly parallel to the Project segments.
- **Ruderal.** Ruderal vegetation is present along roadsides and adjacent to developed areas throughout the BSA. Ruderal areas are frequently disturbed by routine maintenance that regularly remove and/or disturb vegetation, resulting in bare ground or weedy annual grasses and forbs. Within the BSA, these areas include horse paddocks and a baseball diamond. Vegetation in the ruderal areas is mostly herbaceous with a few valley oak, coast live oak, and coyote brush scattered throughout the BSA. The herbaceous layer of plants is dominant and consists of soft chess brome, yellow star thistle, wild oats, red-stem filaree, and Crane's bill geranium.
- **Roadside Ditch.** There are eight roadside ditches in the BSA. These roadside ditches were formed as the result of excavation conducted in uplands, and the hydrology of the features was designed to collect and convey stormwater from Camino Tassajara Road through a system of above ground and subsurface drainages to Tassajara Creek. All eight roadside ditches are stormwater control features that were excavated in uplands and that drain uplands.

Table 2: Vegetation Communities Within the Biological Study Area

Vegetation Community	Segment 1 (acres)	Segment 2 (acres)	Segment 3 (acres)	Segment 4 (acres)
Annual Grassland	10.927	11.409	7.337	10.388
Cropland	4.492	0	0	0
Developed	5.757	3.870	4.559	13.626
Orchard	0	7.876	10.819	0
Ornamental	1.522	0	0.310	2.819
Riparian	0	1.600	0.113	0.877
Riverine	0	0.246	0	0.104
Ruderal	5.727	0.256	4.469	5.800
Roadside Ditch	0.095	0.103	0.085	0.034
Total	28.520	25.360	27.761	34.643

Source: Contra Costa County, 2017

- a) *Would the project 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 Wildlife or U.S. Fish and Wildlife Service?*

There is potential for several special-status plant and animal species and their associated habitats to be present in the BSA. As shown in Table 3, using the maximum Area of Potential Impact, the Project will result in permanent impacts to approximately 17.903 acres and temporary impacts to approximately 0.893 acres. However, actual impacts will be much less as the exact alignments are defined. In any case, the Project will not have a substantial adverse effect on any species identified as a candidate, sensitive or special status species, because project-related impacts will be avoided, minimized, or appropriately mitigated. The following mitigation measures will reduce potential impacts to all special status species and their habitat. Impacts to specific species and associated habitat are discussed individually.

Although two segments are located on the edge of critical habitat for red-legged frog, the Project Site consists of mainly gravel road shoulder. Further, during similar County projects along Camino Tassajara, no evidence of California red-legged frog presence in road shoulder was found. As such, it is highly unlikely that California red-legged frog is using these areas. The term “Project Site” will be used below to define the area of work, any associated disturbance and staging areas as identified in the final plans. The Project Site will be located within the Area of Potential Impact shown on Figures 4 through 7.

Table 3: Summary of Maximum Potential Temporary and Permanent Effects by Habitat

Habitat Community	Permanent Impact (acres)	Temporary Impact (acres)	Total Impact (acres)
Annual Grassland	2.899	0.455	3.354
Cropland	0.261	0	0.261
Developed	9.767	0.246	10.013
Orchard	1.734	0	1.734
Ornamental	0.481	0	0.481
Riparian	0	0	0
Riverine	0	0	0
Roadside Ditch	0.280	0.022	0.302
Ruderal	2.481	0.170	2.651
Total	17.903	0.893	18.796

Source: Contra Costa County, 2017

IMPACT BIO IV(a)-1

Potential habitat for the special-status wildlife species is present within the Biological Study Area (BSA) and surrounding area. In addition, the BSA is located within California red-legged frog Critical Habitat Unit CCS-2B. Therefore, impacts to special status species and their habitats could occur as a result of Project implementation. The following mitigation measures will reduce potential impacts to all special status species and their habitat. Impacts to specific species and associated mitigation measures are discussed individually.

MITIGATION MEASURE BIO IV(a)-1a:

Before any Project work occurs, including installation of exclusion fencing, grading and equipment staging, all construction personnel will participate in an environmental awareness training given by a qualified biologist regarding special-status species and sensitive habitats present in the Biological Study Area (BSA). If new construction personnel are added to the Project, they must receive the

mandatory training before starting work. As part of the training, an environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources (i.e., special-status plant populations and special-status wildlife habitat) to be avoided during Project construction and lists applicable permit conditions required to protect these resources. New construction personnel will receive the training from a qualified biologist or from staff deemed adequate to give the training by the qualified biologist.

MITIGATION MEASURE BIO IV(a)-1b:

Before any Project equipment staging or ground-disturbing activity occurs, the County will ensure that appropriately sized temporary wildlife barrier fencing, buffer fencing, and/or silt fencing will be installed between the Project Site and adjacent habitats and any environmentally sensitive habitat areas (i.e., special-status plants, special-status wildlife habitat, active bird nests), as appropriate.

Wildlife barrier fencing will be a minimum of 4 feet tall and made of suitable wildlife exclusion material (such as ERTECH E-Fence). As appropriate, the lower portion of barrier fence will be buried such that 6 inches of the fence is below ground and at least 48 inches is above ground. Wildlife exclusion fencing will contain wildlife funnels that allow animals to leave the Project Site but not to enter it. Temporary silt fencing installed for erosion control will be 24 inches tall.

Fencing will be installed in a manner that is consistent with applicable water quality requirements contained within the Project's Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP). Construction personnel and construction activity will avoid areas outside the fencing. The exact location of the fencing will be determined by the resident engineer coordinating with a qualified biologist, with the goal of protecting sensitive biological habitat and water quality. Installation of fencing will occur under the supervision of a qualified biologist. The fencing will be checked regularly and maintained until all construction is complete. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until the County has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition will be shown on the final construction documents.

MITIGATION MEASURE BIO IV(a)-1c:

A representative from the County will make weekly monitoring visits to construction areas occurring in or adjacent to environmentally sensitive habitat areas, (i.e., waters of the U.S. and State, special-status plants, special-status wildlife habitat). The County will be responsible for ensuring that the contractor maintains the construction barrier fencing protecting sensitive biological resources. Additionally, the County will retain a qualified biologist on-call to assist the County and the construction crew in complying with all Project implementation restrictions and guidelines.

MITIGATION MEASURE BIO IV(a)-1d:

All temporarily disturbed areas will be returned to pre-Project conditions upon completion of Project construction. These areas will be properly protected from washout and erosion using appropriate erosion control devices.

MITIGATION MEASURE BIO IV(a)-1e:

The following Best Management Practices will be implemented during construction to protect water quality within the watershed:

- 1) Final construction plans will depict the designated construction footprint as well as habitat to

be avoided.

- 2) Before October 15 and/or immediately after construction is complete, stabilize exposed surfaces.
- 3) Temporarily affected areas will be restored to pre-Project conditions.
- 4) All exposed soils will be stabilized with an erosion control tackifier and will be seeded with a native seed mix with a sterilized nurse crop to reduce the effects of erosion.
- 5) Avoid construction within ponded or saturated areas to the maximum extent possible.
- 6) Staging areas will be contained within silt fencing or lined and bermed areas such that no leaks, runoff, or construction liquids could enter any drainage facilities.
- 7) No refueling, storage, servicing, or maintenance of equipment will take place within 50 feet of Tassajara Creek, its tributaries, or other adjacent wetland features.
- 8) All machinery used during construction of the Project will be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water.
- 9) Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) will be cleaned up in accordance with applicable local, state, and/or federal regulations.

MITIGATION MEASURE BIO IV(a)-1f:

The County will comply with the National Pollution Discharge Elimination System (NPDES) requirements associated with construction activity as required under Section 402 of the Clean Water Act. As part of this requirement, the County will require the contractor to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). If the project qualifies for an erosivity waiver, a Water Pollution Control Program (WPCP) will be prepared. In either case, the document will include erosion control measures and construction-waste containment measures to ensure that waters of the U.S. and State are protected during and after Project construction. The SWPPP or WPCP will include measure to minimize offsite stormwater runoff. Components of the SWPP or WPCP will include but not be limited to:

- 1) A comprehensive erosion and sediment control plan, depicting areas to remain undisturbed, and providing specifications for revegetation of disturbed areas.
- 2) A list of potential pollutants from building materials, chemicals, and maintenance practices used during construction, and the specific control measures to be implemented to minimize release and transport of these constituents in runoff.
- 3) Specifications and designs for the appropriate BMPs for controlling drainage and treating runoff in the construction phase.
- 4) A program for monitoring all control measures that includes schedules for inspection and maintenance, and identifies the party responsible for monitoring.
- 5) A site map that locates all water quality control measures and restricted areas to be left undisturbed.

MITIGATION MEASURE BIO IV(a)-1g:

To prevent the accidental introduction of new invasive species into the Project Site during construction, the County will require that the Project contractor implement the following control measures:

- 1) Only certified noxious weed-free erosion control materials will be used. All straw and seed

material will be certified as weed-free prior to being used at the Project Site.

- 2) Contractor will wash all construction equipment prior to bringing it onto the job site. Inspection will ensure that equipment arrives on site free of mud and seed-bearing material.
- 3) Any reseeded of disturbed soil areas and newly constructed slopes will use an appropriate native seed mix.

Special-Status Plant Species

A total of 55 special status plants were initially identified as potentially occurring in the BSA. All but one was ruled out because of lack of habitat, the Project occurs outside the plants range, or it was confirmed absent during focused surveys conducted in November, April, and July of 2017. No federally or state listed species have potential to occur. The one plant identified within the BSA is Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) a California Rare Plant Rank Class 1B.1 species that is protected by CEQA. During the July 6, 2017 botanical survey, scattered patches of Congdon's tarplant were identified along Segment 3 primarily outside the Work Area. In total, approximately 136 Congdon's tarplant individuals were observed within the BSA, of which three individuals are growing within the Project Site. San Joaquin spearscale (*Extriplex joaquiniana*) has been recorded along Camino Tassajara north of the Project segments but was not observed during botanical surveys.

Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1e, Mitigation Measure BIO IV(a)-1g, and Mitigation Measure BIO IV(a)-2a and BIO IV(a)-2b, identified below, will ensure that the Project minimizes disturbance to special-status plant populations. In addition, the County will compensate for unavoidable impacts to Congdon's tarplant as described under Mitigation Measure BIO IV(a)-3. This would not constitute a substantial adverse effect to the species and the impact would be less than significant with mitigation.

IMPACT BIO IV(a)-2

If present in the Project Site, the Project could impact Congdon's tarplant individuals.

MITIGATION MEASURE BIO IV(a)-2a:

The following measures will be implemented to avoid impacts to special-status plants:

- The County will minimize impacts to populations of Congdon's tarplant in Segment 3 by establishing a work zone that avoids special-status plants to the greatest extent possible. To accomplish this measure, final design will focus on minimizing the Project footprint within areas that contain these special-status plants, as feasible. Anticipated locations of special status plants will be represented on final plans.

MITIGATION MEASURE BIO IV(a)-2b:

Prior to any unavoidable excavation work in any areas identified during botanical surveys that support Congdon's tarplant, seeds will be collected from plants located in the Project footprint. After finished grades generally have been achieved, the collected seeds will be redistributed within areas disturbed by the Project that provide appropriate habitat for the species. Specific actions that will be employed to ensure successful establishment of Congdon's tarplant include the following:

- 1) Prior to construction, all accessible areas of permanent disturbance that are within 100 feet of Congdon's tarplants will be flagged for seed salvage.

- 2) Prior to other earthwork, at the appropriate time when seeds have developed but just before seeds drop, typically late summer and early fall, seeds will be collected and stored in a cool, dry location.
- 3) Once construction is complete in an area, seeds will be evenly spread over areas of exposed soil and raked in.
- 4) In areas where seed has been spread, equipment traffic will be limited, to the extent practicable, to minimize compaction.
- 5) Post construction, areas where seed was spread will be protected from wind and water erosion until after the next growing season (spring/summer) using typical stabilization methods. If hydroseeding is used, hydroseed will be comprised of a native seed mix with a sterilized nurse crop.

Special-Status Wildlife Species

Of the 34 special-status wildlife species with potential to occur in the general Project area, 18 wildlife species will not occur in the BSA or will not have the potential to be affected by the Project because the BSA lacks suitable habitat for the species or is outside the species' known range. Four of the wildlife species (tricolored blackbird [*Agelaius tricolor*], peregrine falcon [*Falco peregrinus anatum*], pallid bat [*Antrozous pallidus*], and Townsend's big-eared bat [*Corynorhinus townsendii*]) may forage in the BSA but would not breed or roost in the BSA due to the lack of suitable habitat.

The remaining 12 wildlife species (California red-legged frog [*Rana draytonii*], California tiger salamander [*Ambystoma californiense*], Alameda whipsnake [*Masticophis lateralis euryxanthus*], western pond turtle [*Actinemys marmorata*], burrowing owl [*Athene cunicularia*], golden eagle [*Aquila chrysaetos*], northern harrier [*Circus cyaneus*], white-tailed kite [*Elanus leucurus*], loggerhead shrike [*Lanius ludovicianus*], western red bat [*Lasiurus blossevillii*], American badger [*Taxidea taxus*], and San Joaquin kit fox [*Vulpes macrotis mutica*]) were determined to have suitable habitat present in the BSA; however none of these species were observed during the November 10, 2016 and February 10, 2017 wildlife surveys. A description of these species is included below and measures to further avoid and minimize impacts are identified.

California Red-legged Frog: Tassajara Creek is located outside of the Project Site, but within the BSA for segments 2, 3, and 4. Potential indirect effects to California red-legged frog breeding habitat in Tassajara Creek will be prevented through implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1e. Annual grassland, riparian, and roadside ditch habitats in the BSA for each of the four segments represent suitable upland aestivation and foraging habitat. Additionally, it is possible that California red-legged frog could disperse through any of the vegetation types within the general Project area.

Mortality or injury of California red-legged frogs in upland habitat could occur if burrows containing frogs are crushed by construction equipment or frogs are displaced from burrows, exposing them to predators and desiccation. However, this is considered unlikely because most activities will be completed in the existing disturbed roadside, where frogs may be less likely to burrow. Additionally, although the general Project area represents potential habitat for this species, the likelihood of their presence in the Project Site is considered extremely unlikely.

Trenches left open during the night could trap frogs moving through the construction area. Also, construction activities could temporarily impede the movement of juvenile and adult California red-legged frogs dispersing between breeding areas and upland refuge sites. However, these impacts will be mitigated with implementation of mitigations measures described previously. In addition, implementation of the following mitigation measures, prior to and during construction, will further avoid impacts to California red-legged frog.

IMPACT BIO IV(a)-3

Project construction could directly and indirectly impact California red-legged frog, California red-legged frog Critical Habitat, and California tiger salamander and its habitat.

MITIGATION MEASURE BIO IV(a)-3a:

All ground-disturbing activities associated with construction of the Project will be restricted to the dry season (estimated between April 15 and October 15) to avoid the period when listed amphibians (California red-legged frog and California tiger salamander) could be actively dispersing through upland habitats. If construction will need to continue past October 15, to avoid potential impacts to these species a qualified biologist will be present during any work conducted after October 15 and no work will occur during rain events. Also refer to Mitigation Measure BIO IV(a)-1d.

MITIGATION MEASURE BIO IV(a)-3b:

To avoid entrapment of wildlife, all excavated steep-walled holes or trenches more than 2 feet deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday. If escape ramps cannot be provided, then holes or trenches will be covered with plywood or similar materials. Providing escape ramps or covering open trenches will prevent injury or mortality of wildlife resulting from falling into trenches and becoming trapped. The trenches will be thoroughly inspected for the presence of wildlife species at the beginning of each workday. If wildlife is discovered in the trenches work will not occur within 50-feet and the qualified biologist will be called immediately to determine if it is a special status species. Special status species will be left to leave the area on its own. Non-special status species may be removed by a qualified biologist and may require consultation with CDFW prior to removal as determined by the qualified biologist. Also refer to Mitigation Measure BIO IV(a)-3d.

MITIGATION MEASURE BIO IV(a)-3c:

A preconstruction survey will be conducted immediately preceding initial ground disturbing activities. A qualified biologist will carefully search all suitable habitat areas within the Project Site for California red-legged frogs, California tiger salamanders, or Alameda whipsnakes.

A qualified biologist will monitor all initial ground disturbance and habitat removal e.g. grading, removal of vegetation, removal of culverts or rocks that could provide habitat for California red-legged frogs, California tiger salamanders, or Alameda whipsnakes.

If any California red-legged frogs, California tiger salamanders, or Alameda whipsnakes are found during these surveys, work will stop within that segment and they will be allowed to move outside the Project Site on their own. Work may resume on approval by the County Environmental Division Project Manager.

MITIGATION MEASURE BIO IV(a)-3d:

Following preconstruction surveys and Project initiation, it is possible that wildlife species could subsequently enter or return to the Project Site. The following measures shall be implemented to avoid disturbance or harm to these species:

- 1) If any special-status species or other wildlife species, alive or dead, are observed in the Project Site during construction, construction shall cease in that segment until the qualified biologist can determine if it is a special status species and/or that it is safe to continue.
- 2) Non-special status species may be relocated by a qualified biologist, CDFW coordination may be required as determined by the qualified biologist. Work may resume when the wildlife is a safe distance away as determined by the qualified biologist.
- 3) A living special status species will be allowed to leave the site on its own and work will not resume in that segment until approved by the County Environmental Division Project Manager.
- 4) Any special status species found in the work area, alive or dead will be documented and reported to the wildlife agencies as appropriate by the County Environmental Division Project Manager.

MITIGATION MEASURE BIO IV(a)-3e:

During construction, tightly woven fiber netting (no monofilament netting) or similar material will be used for erosion control or other purposes within the Project Site to ensure that wildlife are not trapped. Coconut coir matting and burlap contained fiber rolls are an example of acceptable erosion control materials.

MITIGATION MEASURE BIO IV(a)-3f:

During construction, all food-related garbage will be placed in tightly sealed containers at the end of each workday to avoid attracting predators. Containers will be emptied and garbage removed from the construction site at the end of each work week. If sealed containers are not available, garbage will be removed from the construction site upon completion of daily activities. All garbage removed from the construction site will be disposed of at an appropriate offsite refuse location.

California Tiger Salamander: The Project will not affect potential breeding habitat for California tiger salamander because no suitable breeding habitat is present within the BSA for any of the four segments. However, the BSA does provide suitable upland habitat within annual grassland, riparian, and roadside ditch habitats. Mortality or injury of California tiger salamanders in upland habitat could occur if burrows containing salamanders are crushed by construction equipment or salamanders are displaced from burrows, exposing them to predators and desiccation. However, this is considered unlikely for the following reasons. Most activities will be completed in the existing disturbed roadside, where California tiger salamanders are less likely to burrow. Additionally, although the general Project area represents potential habitat for this species, the likelihood of their presence in the Project Site is considered extremely unlikely.

Trenches left open during the night could trap California tiger salamanders moving through the construction area. Also, construction activities could temporarily impede the movement of juvenile and adult California tiger salamanders dispersing between breeding areas and upland refuge sites. However, these impacts will be avoided with implementation of Mitigation Measure BIO IV(a)-1a

through BIO IV(a)-1e and BIO IV(a)-3a through BIO IV(a)-3f, which require that trenches are covered or equipped with wildlife escape ramps at the end of each workday and that work is restricted to the dry season to avoid the period when this species could be actively dispersing through upland habitats.

Alameda Whipsnake: If Alameda whipsnake and/or active burrows are present in the Project Site, excavation, grading, and movement of equipment within grassland habitat could result in mortality or disturbance of adults or young and destruction of burrows containing eggs. However, this is considered unlikely for the following reasons. Most activities will be completed in the existing disturbed roadside. Additionally, although the general Project area theoretically represents potential habitat for this species, the likelihood of their presence in the Project Site is considered extremely unlikely. Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1d and BIO IV(a)-3b through BIO IV(a)-3e would ensure that impacts to Alameda whipsnake are avoided.

Western Pond Turtle: Marginal habitat for western pond turtle is present within the general Project area. Road widening activities associated with the Project could permanently remove and temporarily disturb potential upland annual grassland habitat. If western pond turtles are present within proposed work areas during construction, the movement of equipment could crush pond turtles or nests containing eggs or young. Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1e, BIO IV(a)-3b, BIO IV(a)-3c, and BIO IV(a)-15, described below, would ensure that impacts to western pond turtles are avoided.

IMPACT BIO IV(a)-4

The Project has the potential to affect Western Pond Turtle habitat. Project construction could directly and indirectly impact western pond turtle individuals and will temporarily disturb western pond turtle habitat.

MITIGATION MEASURE BIO IV(a)-4:

A qualified biologist will conduct a preconstruction clearance survey for western pond turtles immediately preceding initial ground disturbing activities within the Project Site. Any western pond turtles found within the Project Site will be allowed to voluntarily move out of this area or will be captured and held by a qualified biologist for the minimum amount of time necessary to release them in suitable habitat outside the Project Site.

Burrowing Owl: Although no burrowing owls were found in the BSA during field surveys, suitable habitat for the species is present within short annual grassland containing ground squirrel burrows. If burrowing owls are wintering or breeding within or adjacent to the Project Site, construction activities could disturb nesting burrowing owls or remove active burrowing owl burrows containing eggs, young, or adults. Disturbance or loss of wintering or nesting burrowing owls would violate the MBTA and CFGC. Implementation of mitigation measures BIO IV(a)-1a through BIO IV(a)-1d and BIO IV(a)-5, included below, will avoid potential impacts on burrowing owl and will avoid violation of the MBTA and CFGC.

IMPACT BIO IV(a)-5

The Project could impact the burrowing owl. Project construction could directly and indirectly impact burrowing owl individuals and will permanently and temporarily impact burrowing owl habitat.

MITIGATION MEASURE BIO IV(a)-5:

The County will retain a qualified biologist to conduct a one-day preconstruction survey to locate any active burrowing owl burrows within the Project Site or within a 500-foot-wide buffer around the Project Site, if feasible. The preconstruction survey will be conducted in accordance with recommendations provided in CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) and no more than 14 days before the start of construction activities (including grading and equipment staging). If no burrowing owls or burrows exhibiting burrowing owl use (i.e., whitewash, owl pellets, feathers, or egg fragments) are detected, then construction may proceed. Preconstruction surveys must be reinitiated if more than 30 days lapse between the survey dates and construction activities.

If active burrowing owls or occupied burrows are detected in the survey area, the following measures will be implemented.

- 1) Occupied burrows will not be disturbed during the nesting season (generally February 1–August 30). A no-disturbance buffer will be established around the burrow to avoid disturbance of nesting burrowing owls until a qualified biologist, coordinating with CDFW, determines that the young have fledged and are foraging on their own. The extent of these buffers will be determined by the biologist (coordinating with the CDFW) and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.
- 2) If the survey finds an active burrowing owl nest in an area of permanent or temporary impact including staging areas, that cannot be avoided due to spatial restrictions, burrowing owls may be passively relocated in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012). This recommends that passive relocation occur following approval from the agencies, outside of the nesting season, and after an agency-approved biologist determined that owls have not begun laying eggs or there is not young of the year present. Per CDFW 2012, passive relocation will include the installation of one-way doors within the burrow to let owls escape, but not allow them to re-enter the burrow. Once the owls have been excluded from the burrow, it will be collapsed by hand by an agency-approved biologist. If passive relocation is necessary, artificial or natural burrows should be in close proximity (100 meters) from the eviction site.

Golden Eagle: The BSA is in the foraging range of a known golden eagle nesting territory and a portion of Segment 3 is located within the line of sight of a golden eagle nest. If nesting golden eagles are present in the vicinity of the BSA, noise and human activity associated with the Project could cause disturbance, potentially resulting in the loss of active nests with eggs or young, which would violate the Bald and Golden Eagle Protection Act, MBTA, and CFGC. Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1c and BIO IV(a)-6, described below, will avoid impacts to golden eagles and violation of the MBTA and CFGC.

IMPACT BIO IV(a)-6

The Project could impact nesting birds and raptors. The BSA provides habitat for nesting raptors and other birds that are protected under the MBTA.

MITIGATION MEASURE BIO IV(a)-6:

The following will be completed to avoid potential impacts to nesting birds:

- 1) If construction (including utility pole relocation, equipment staging, and vegetation removal) will occur during the breeding season for migratory birds and raptors (generally January through August), the County will retain a qualified biologist to conduct pre-construction nesting bird and raptor surveys prior to construction activities.
- 2) The pre-construction nesting bird and raptor surveys will be conducted prior to the start of construction within suitable habitat in and near (within half a mile for golden eagle and 500 feet for all other raptors) the Project Site. For raptor surveys outside the Project Site where property access has not been granted, the surveying biologist will use binoculars to scan any suitable nesting substrate for potential raptor nests.
- 3) The surveys will be conducted no more than 14 days before the initiation of construction activities in the Project Area.
- 4) The known golden eagle nesting territory near Segments 3 and 4 will be observed adequately to determine if it is active. If nesting behavior is observed and the nest is determined to be active, no construction will occur within the line of site of the nest until a qualified biologist coordinating with CDFW determines that the young have fledged and are foraging on their own.
- 5) If an active bird nest is identified within the Project Area or an active raptor nest is identified in or within 500 feet from the Project Area, then a no-disturbance buffer will be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist coordinating with CDFW determines that the young have fledged and are foraging on their own. The extent of these buffers will be determined by the biologist (coordinating with the CDFW) and will depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers (generally 50 feet for passerine, 500 feet for raptors, or as agreed on during coordination with CDFW). In addition to the establishment of buffers, other avoidance measures (determined during CDFW coordination) may include monitoring of the nest during construction and restricting the type of work that can be conducted near the nest site. If no active nests are found during the preconstruction surveys, then no additional mitigation is required.

Loggerhead Shrike: Trees and shrubs within the Project area provide potential nesting habitat for loggerhead shrikes. Removal of trees or shrubs during the breeding season (generally February through August) could result in the destruction and/or loss of active nests with eggs or young and would violate the MBTA and CFGC. Implementation of mitigation measures BIO IV(a)-1a through BIO IV(a)-1c and BIO IV(a)-6 will avoid impacts to loggerhead shrikes and violation of the MBTA and CFGC.

White-Tailed Kite: Trees and shrubs within the Project area provide potential nesting habitat for white-tailed kite. Removal of trees or shrubs during the breeding season (generally March through August) could result in the destruction and/or loss of active nests with eggs or young and would violate the MBTA and CFGC. Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1c and BIO IV(a)-6 will avoid impacts to white-tailed kites and violation of the MBTA and

CFGC.

Northern Harrier: Annual grassland provides nesting habitat and cropland, ruderal, and riparian habitats in the Project Area provides potential foraging habitat for northern harriers. Grubbing activities in the Project Area and the movement of construction equipment within annual grassland habitat could result in the destruction and/or loss of active nests with eggs or young, which would violate the MBTA and CFGC. Implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1c and BIO IV(a)-6 will avoid impacts to northern harriers and violation of the MBTA and CFGC.

Western Red Bat: Annual grassland, cropland, and ruderal habitats in the Project Area provides potential foraging habitat for western red bat. Trees in the Project area provide potential roosting habitats. If present, roosting individuals could be injured or killed during tree removal. Implementation of Mitigation Measures BIO IV(a)-1a, BIO IV(a)-1b, and BIO IV(a)-7 will avoid and minimize impacts on roosting bats.

IMPACT BIO IV(a)-7

The Project could impact the western red bat and its habitat during project construction.

MITIGATION MEASURE BIO IV(a)-7:

A qualified biologist will conduct a preconstruction survey of all trees proposed for removal or trimming within the Project Site for the presence of bat roosts. Surveys will entail direct inspection of trees, including around the base within piles of leaf litter, or nocturnal surveys (if not conducted during the hibernation period for bats). The survey will occur no more than 2 weeks prior to the removal or trimming of trees within the Project Site. If bats are not found and there is no evidence of use by bats, construction may proceed. If roosting habitat is present and occupied, then a qualified biologist will determine the type of roost. If roosting bats are present, measures shall be implemented to avoid or minimize disturbance to the colony. Measures may include excluding bats from the tree before their hibernation period (mid-October to mid-March) and before construction begins. Alternatively a phased approach to removal may be used: small branches and non-habitat features will be carefully removed from the tree under the supervision of a qualified biologist. The next day larger features will be carefully removed under the supervision of a qualified biologist. On the third day a qualified biologist will inspect the tree for the presence of roosting bats, if no bats are present removal can commence.

American Badger: Ground disturbing activities within annual grassland, cropland, orchard habitats, and ruderal habitats in the Project Site have the potential to unearth an American badger den resulting in the mortality of adults and/or young. In general, excavation and fill associated with Project construction will only occur along the existing roadway, with some minor ground disturbance occurring from equipment access and staging. To minimize impacts to American badger, implementation of Mitigation Measures BIO IV(a)-8 will be implemented to identify potential badger burrows and either avoid them or exclude nonbreeding badgers. Because American badgers have very large home ranges and typically utilize a large number of burrows, exclusion of nonbreeding badgers from the Project Site will not adversely affect the local population of American badgers.

IMPACT BIO IV(a)-8

The Project could impact the American badger. Project construction could directly and indirectly impact American badger individuals and will temporarily impact American badger habitat. Noise and disturbance from construction activities could indirectly disrupt foraging and/or denning activities.

MITIGATION MEASURE BIO IV(a)-8:

A preconstruction survey for the American badger will be conducted within the BSA no more than 14 days prior to initial ground disturbing activities. The surveys will be conducted by a qualified wildlife biologist with experience identifying badger burrows. Any potential badger burrow identified should be clearly marked in the field and avoided if feasible. If avoidance is not feasible, the biologist will determine if the burrow is being used as a natal den (young rearing generally occurs between April and September). If young are determined to be present, the burrow will be avoided until the young vacate the burrow. If the biologist determines that the burrow is not being used for breeding, then a one way door will be installed on the burrow (upon approval by CDFW) to passively exclude the badger from the burrow. Once the badger has been excluded the burrow will be collapsed.

San Joaquin Kit Fox: There is a very low likelihood that the species will occur in the general Project area and be affected by Project construction. If present, ground disturbing activities within the Project Site could directly affect San Joaquin Kit Fox. Additionally, noise associated with construction activities involving heavy equipment operation could disturb individuals if present near these activities. However, these potentially adverse effects are considered unlikely because most activities will be completed in the existing disturbed roadside. Additionally, although the general Project area theoretically represents potential habitat for this species, the likelihood of their presence is considered extremely unlikely. Furthermore, to ensure that the Project does not adversely affect San Joaquin kit fox, implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1d, BIO IV(a)-3b, BIO IV(a)-3d, BIO IV(a)-3f, and BIO IV(a)-9 will be implemented prior to and during construction.

IMPACT BIO IV(a)-9

The Project has the potential to affect San Joaquin kit fox. Project construction could directly and indirectly impact San Joaquin kit fox individuals and will temporarily impact San Joaquin kit fox habitat. Noise and disturbance from construction activities could indirectly disrupt foraging and/or denning activities.

MITIGATION MEASURE BIO IV(a)-9:

A qualified biologist will conduct a preconstruction survey no more than 30 days before the beginning of ground disturbance or any activity likely to affect San Joaquin kit fox. Where accessible, or using binoculars in inaccessible areas, the biologist will survey the proposed Project Site and a 200-foot buffer area around the Project Work Area to identify suitable dens (e.g., burrow, pipe, or culvert approximately 5 to 8 inches in diameter). The biologist will conduct den searches by systematically walking transects spaced 30–100 feet apart through the survey area. Transect distance should be determined on the basis of the height of vegetation such that 100% visual coverage of the Project Area is achieved. If dens are found during the survey, the biologist will map the location of each den as well as record the size and shape of the den entrance; the presence of tracks, scat, and prey remains; and if the den was recently excavated. The biologist will also record information on prey availability (e.g., ground squirrel colonies). The status of the den will also be determined and recorded. Dens may be classified in one of the following four den

status categories.

Potential den: Any subterranean hole within the species' range that has entrances of appropriate dimensions for which available evidence is sufficient to conclude that it is being used or has been used by a kit fox.

Known den: Any existing natural den or artificial structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records; past or current radiotelemetry or spotlighting data; kit fox sign such as tracks, scat, and/or prey remains; or other reasonable proof that a given den is being or has been used by a kit fox.

Natal or pupping den: Any den determined to be used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two; therefore, for purposes of this definition either term applies.

Atypical den: Any artificial structure that has been or is determined to be used by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings.

After preconstruction den searches and before the commencement of construction activities, a qualified biologist will establish and maintain exclusion zones (varying between 50 and 200 feet) measured in a radius outward from the entrance or cluster of entrances of each mapped den.

Construction activities will be prohibited or greatly restricted within these exclusion zones throughout the construction period. Only essential vehicular operation on existing roads and foot traffic should be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited in the exclusion zones.

Other Protected Migratory Birds and Raptors: Grubbing (including tree removal) or ground disturbance that occurs during the breeding season (generally February through August) could result in take of migratory birds and/or raptors. Suitable raptor nesting habitat is present within riparian trees along nearby Tassajara Creek. Noise and disturbance associated with construction activities that occurs during the breeding season could disturb nesting raptors if an active nest is located near these activities. Any disturbance that causes migratory bird or raptor nest abandonment and/or loss of eggs or developing young at active nests located at or near the Project Site would violate the MBTA and CFGC. However, implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-1c and BIO IV(a)-6 will avoid impacts to migratory birds and raptors and violation of the MBTA and CFGC.

The project is not anticipated to substantially impact any special-status species with implementation of the mitigation and Mitigation Measures described above. Therefore, project impacts will **be less**

than significant with mitigation incorporated.

- b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

There are eight roadside ditches in the Area of Potential Impact, totaling 0.302 acre. However, these roadside ditches do not qualify as waters of the U.S. according to verification by the U.S. Army Corps of Engineers. There are no other Natural Communities of Special Concern in the BSA. Permanent and temporary impacts to habitat types located within the BSA are summarized in Table 3, above. The Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or CDFW and USFWS regulations, including critical habitat. For these reasons, implementation of the proposed Project will have a **less than significant impact** on these types of habitats.

- c) *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Refer to response IV.b, above. There are no Waters of the U.S., including wetlands, in the Project Site. As such, there will be **no impact**.

- d) *Would the project 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?*

There is no habitat for native resident or migratory fish in the Project area. Common and special-status wildlife species could potentially disperse through the Project area. Migratory birds and raptors could potentially nest in the general Project area and native mammals could potentially roost or den in the general Project area. However, the Project is limited to shoulder widening and will not increase capacity of the roadway or create new permanent barriers to wildlife movement. With limited exceptions, Project improvements will occur in the existing road right-of-way. As such, impacts to wildlife breeding habitat will be negligible. Temporary barriers will be installed during construction to limit wildlife passage through the Project Site. These barriers are designed to avoid impacts to wildlife and will be completely removed at the end of construction. Moreover, implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-9 will ensure that the Project will have less-than-significant impacts to the movement or reproduction of wildlife species. As such, this impact will be **less than significant with mitigation incorporated**.

- e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?*

The Project will not conflict with any local policies or ordinances protecting biological resources. There will be **no impact**.

- f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?*

The Project is not located within an adopted Habitat Conservation Plan or other approved local, regional, or state habitat conservation plan. Therefore, the Project will have **no impact**.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

CEQA requires lead agencies to determine if a project will have an adverse impact on a significant cultural resource (includes historical and archaeological) (Public Resources Code Sections 21084, 21084.1, 21083.2). A resource is considered significant if it 1) is listed in or has been determined eligible for listing in the California Register of Historic Resources (CRHR); 2) is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k); 3) has been identified as significant in an historical resources survey, as defined in Public Resources Code 5024.1(g); or 4) is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. The following CRHR eligibility criteria need to be considered when making a significance determination.

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. 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.

To be considered a historical resource for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance.

However, because a resource does not appear in the CRHR does not mean that it is not a historical resource. A historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant (PRC Section 5020.1).

California Public Resources Code Section 21083.2 also addresses the identification and protection of unique archaeological resources. A “unique archaeological resource” is an archaeological artifact, object, or site for which there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality, such as being the oldest of its type or the best available example of its type.
3. Is associated with a scientifically recognized important prehistoric or historic person or event.

In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of historical resource. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR.

Environmental Setting

While the western border of Contra Costa County approaches the San Francisco Bay, and the northern border lies along the southern banks of the Carquinez Strait and Suisun Bay, this Project’s Area of Potential Effect (APE) lies about 18 miles east of the Bay and 17 miles south of the Strait in a narrow inland valley. The topography of the Project APE includes relatively gently sloping terrain within a natural valley, with elevations within the APE ranging from about 520 feet to about 670 feet above mean sea level. Hills rise to the east and west of the Project area, in terrain common over much of the area between the San Francisco Bay and the Coastal Ranges. Tassajara Creek meanders through the valley, roughly parallel to Camino Tassajara Road, and is a persistent source of water. The main ecological zone in this area is currently Foothill Grassland. The environment of this area, like much of California, has changed dramatically since the 1800s. Historical accounts describe large portions of the County as a rolling open grassland environment, but the composition of the grasses in this area changed drastically with the introduction of foxtail, wild oat, and other non-native species. While tule elk and pronghorn antelope are no longer present in the environment, deer, raccoon, foxes, skunks, rabbits, gophers, rats, mice, and a wide variety of bird species do remain.

Cultural Resource Assessment Report

A Cultural Resources Assessment was prepared for the Project by Condor Country (Condor Country 2017). The following analysis is based on that report. Condor conducted a records search within 0.25 miles around the project segments. The records search included review at the Northwest Information Center (NWIC) of the California Historical Resource Information System (CHRIS) located in Rohnert Park, California. In addition, the Native American Heritage Commission (NAHC) was contacted for a Sacred Lands File search to determine if any recorded Native American sites occur within the project area. The NAHC provided a list of Native American tribal representatives and organizations that may have knowledge of unrecorded sites within the vicinity of the sites. A field survey was also conducted of the sites to determine if any cultural resources are present. Section XVII discusses Tribal Cultural Resources under Assembly Bill 52.

- a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

Two historical resources were identified within a 0.5-mile radius of the APE. The two resources were the remains of a ranch complex located near the intersection of Tassajara Road and Finley Road, and part of the Rasmussen Ranch Complex located east of Tassajara Road between Segments 2 and 3 of the Project. However, these resources were identified outside of the APE and would therefore, not be affected by the Project. Nevertheless, the potential for subsurface resources cannot be completely ruled out and Project construction may unearth unanticipated historic or pre-historic resources; therefore, the following Mitigation Measures will be followed in the event subsurface resources are discovered during Project construction. In addition, Project contract specifications stipulate that construction shall stop in the area if historical resources (i.e. structure/building remains, bottle glass, ceramics, etc.) are encountered until a qualified archaeologist evaluates the findings. With implementation of Mitigation Measure CUL-1, Project impacts on historical resources would be **less than significant with mitigation incorporated**.

IMPACT CUL-1

Development of the Project could disturb unanticipated historic or pre-historic, archaeological, or paleontological resources.

MITIGATION MEASURE CUL-1:

The following Best Management Practices will be implemented during Project construction to protect unanticipated historic or pre-historic, archaeological, or paleontological resources.

- 1) Contractor will be notified of the possibility of encountering historic, pre-historic, archaeological, or paleontological materials during ground-disturbing activities and will be educated on the types of historic and pre-historic Native American period archaeological materials that may be encountered.
- 2) If an inadvertent discovery is made, the Contractor will cease all ground-disturbing activities in the area of discovery.
- 3) The Contractor will immediately notify the County Public Works Department Resident Engineer who will then request a qualified archaeologist to evaluate the finding(s).
- 4) If the finding(s) is determined to be potentially significant, the archaeologist in consultation with the appropriate Native American tribal representative or historical society will develop a research design and treatment plan outlining management of the resource, analysis, and reporting of the find.

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The records search and field study did not identify archaeological resources within the APE. While no archaeological resources were identified, there is the potential of encountering unrecorded archaeological resources. Project contract specifications stipulate that construction shall stop in the area if potential archaeological resources (i.e., unusual amounts of shell, stone tools, animal bone, etc.) are encountered until a qualified archaeologist evaluates the findings. In addition, Mitigation Measure CUL-1, will be followed in the event subsurface resources are discovered during project construction. As such, Project impacts on archaeological would be **less than significant with mitigation incorporated**.

- c) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

The records search results and the field survey found no evidence of unique paleontological resources (i.e., fossil remains) or geologic features have within the APE. While no paleontological resources were identified, there is the potential for encountering unrecorded paleontological resources during Project construction. However, Project contract specifications would stipulate that construction shall stop in the area if such potential resources are discovered. In addition, Mitigation Measure CUL-1 will be followed in the event subsurface resources are discovered during project construction. Therefore, Project impacts on paleontological resources would be **less than significant with mitigation incorporated**.

- d) *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No formal cemeteries are present within or adjacent to the Project site. As part of the cultural review conducted for the Project, the NAHC was contacted to determine if there are any recorded Native American burial grounds and/or sacred land sites in the Project vicinity. The NAHC reported that no recorded sites occur in the Project APE. In accordance with California Health and Safety Code (Section 7050.5), if human remains are uncovered during ground disturbances, Project contract specifications stipulate that the Contractor stop work in the area and immediately notify the CCCPWD Resident Engineer. CCCPWD will immediately notify the County Coroner and a qualified archaeologist. The County Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of discovery. If the County Coroner believes, or has reason to believe, that the human remains are those of a Native American, the County Coroner is required to contact the NAHC within 24 hours of making that determination. The archaeologist and NAHC designated Most Likely Descendent will determine the ultimate treatment and disposition of the remains. In addition, Mitigation Measure CUL-2, will be followed in the event subsurface resources are discovered during project construction. As such, Project impacts on archaeological would be **less than significant with mitigation incorporated**.

IMPACT CUL-2

The Project could impact previously undiscovered human remains.

MITIGATION MEASURE CUL-2:

If human remains are encountered, work within 25 feet of the discovery shall be redirected and the Contra Costa County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the project applicant, Contra Costa County, and the Northwest Information Center.

VI. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The geology of Contra Costa County is dominated by several northwest trending fault systems, which divide the County into large blocks of rock. The County is subject to seismic events originating on faults within the County and in other parts of the region.

Seismic Hazards

Contra Costa County is located within a region of high seismicity; the San Francisco Bay Region has been impacted by severe earthquakes during historic time (Contra Costa County 2005h). In order to provide safety of structures for human occupancy, the Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazards. The law requires the state Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. The Project site is not located in an Alquist-Priolo Fault Zone (SCDC 2017). However, faults occur in the general area (Contra Costa County 2005h).

a) *Would the project expose people or structures to potential substantial adverse effects, including the risk of*

loss, injury, or death involving?

- 1 *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.*

The Project Site is not within an Alquist-Priolo Fault Zone and no known faults cross the Project site. The Project does not include elements that would increase risk to people or structures, as it is limited to shoulder widening of an existing roadway. Therefore, the Project will have **no impact**.

- 2 *Strong seismic ground shaking?*

Faults occur in the area that could potentially cause seismic ground shaking. The duration and intensity of shaking will depend upon both the magnitude of the earthquake, distance from the epicenter, and ground conditions. The Project design and construction will take the existing seismic conditions into account and the Project will be designed in accordance with local design practice. Further, because the Project is limited to lane and shoulder widening, the risk of loss of and the risk of injury or death resulting from implementation of the Project is unlikely. Therefore, Project impacts will be **less than significant**.

- 3 *Seismic-related ground failure, including liquefaction?*

According to Figure 10-5 of the General Plan, the general Project area has potential for liquefaction. The Project design and construction will take existing soil conditions into account and the Project will be designed in accordance with local design practice. Further, because the Project is limited to lane and shoulder widening, the risk of loss of and the risk of injury or death resulting from implementation of the Project is unlikely. Therefore, Project impacts will be **less than significant**.

- 4 *Landslides?*

According to Figure 10-6 of the General Plan, there is some evidence of landslide deposits in the general Project area. The Project is located in a valley therefore landslides could occur on associated hills. Segments 2 and 3 are located some distance from slopes and Segments 1 and 4 have slopes that are close to the roadway. Further, because the Project is limited to lane and shoulder widening, the risk of loss of and the risk of injury or death resulting from implementation of the Project is unlikely. Therefore, Project impacts will be **less than significant**.

- b) *Would the project result in substantial soil erosion or the loss of topsoil?*

Grading and excavation will disturb soils and create the potential for soil erosion. The Project will incorporate Mitigation Measures BIO IV(a)-1e and BIO IV(a)-1f that require adherence to standard dust control and erosion control practices during construction and preparation of a Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) will identify appropriate erosion control measures to be implemented, after approval by the CCCPWD. Upon Project completion, all areas left exposed will be re-seeded or stabilized in order to prevent erosion. In addition, the Project will implement Mitigation Measure AIR-1 during construction which would further ensure that soil erosion impacts are reduced. Implementation of these measures will minimize soil erosion and loss of topsoil to the extent possible. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

- c) *Would the project 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?*

According to Figure 10-5 of the General Plan, the general Project area has generally high or generally moderate to low potential for liquefaction depending on the precise location (Contra Costa County 2005h). The Project design and construction will take the existing soil conditions into consideration and the Project will be designed in accordance with local design practice. Further, the Project is limited to lane and shoulder widening of an existing road and will not introduce new land uses that could be impacted by unstable soils. Therefore, Project impacts will be **less than significant**.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

The Project Site is located on clay type soils, which tend to be expansive soils. The Project will be engineered according to standard industry practice, which includes design considerations for soil type. Moreover, the Project is limited to lane and shoulder widening of an existing road, which will not create substantial risk to life or property from expansive soils. Therefore, Project impacts will be **less than significant**.

- e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater?*

Septic tanks and alternative wastewater disposal systems are not part of the Project. Therefore, the Project will have **no impact**.

VII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. (California Office of Planning and Research [OPR] 2008).

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, recognized that California is the source of substantial amounts of GHG emissions which poses a serious threat to the economic well-being, public health, natural resources, and the environment of California (OPR 2008). This bill directed the California Air Resources Board to begin developing discrete early actions to reduce GHGs to reach the GHG reduction goals by 2020.

In order to address global climate change associated with air quality impacts, CEQA statutes were amended to require evaluation of GHG emissions. In developing the threshold of significance for GHG emissions included in the BAAQMD CEQA Guidelines, the BAAQMD identified the emissions level for which a project would conflict with existing California legislation adopted to reduce Statewide GHG emissions. While the BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions, sources of construction-related GHGs include exhaust (carbon dioxide, nitrous oxide) for which the same detailed guidance as described for criteria air pollutants and precursors should be followed (BAAQMD 2012).

In December 2008, CARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of CO₂-equivalent (CO₂e) emissions, or approximately 21.7 percent from the State's projected 2020 emission level of 545 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 47 MMT CO₂e, or almost 10 percent, from 2008 emissions) (CARB 2008). In May 2014, CARB released and has since adopted the First Update to the Climate Change Scoping Plan to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012 (CARB 2014). Per the update, California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB 2014). The update also reports the trends in GHG emissions from various emission sectors (e.g., transportation, building energy, agriculture).

On January 20, 2017, CARB released its proposed 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update), which lays out the framework for achieving the 2030 reductions as established in

more recent legislation (CARB 2017). The proposed 2017 Scoping Plan Update identifies the GHG reductions needed by each emissions sector to achieve a statewide emissions level that is 40 percent below 1990 levels before 2030.

In December 2015, the Contra Costa County Board of Supervisors adopted the Contra Costa Climate Action Plan (CAP). The CAP identifies how the County will achieve the AB 32 GHG emissions reduction target of 15 percent below baseline levels by the year 2020, in addition to supporting other public health, energy efficiency, water conservation, and air quality goals identified in the County's general plan and other policy documents.

An emissions assessment was prepared for the Project by Nichols Consulting Engineers (NCE 2017). The following analysis is based on the results of that assessment.

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the Project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The operational aspect of the Project will not result in an increase of GHG emissions; however, construction activities will generate GHG through vehicle exhaust. The BAAQMD does not have an adopted Threshold of Significance for construction related GHG emissions but states that lead agencies should quantify and disclose GHG emissions that would occur during construction, and make a determination on the significance of these construction-generated impacts. Using the Road Construction Emissions Model, it is estimated that the Project will generate approximately 265 metric tons of CO₂e during construction of the Project. The Project's emissions will be short term and the Project will implement standard best management practices (BMPs) stated in Mitigation Measure AIR-1 which include measures to reduce emissions from construction vehicles such as minimizing idling times and requiring properly maintained and tuned equipment which will further reduce GHG emissions. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

- b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Contra Costa County adopted the Contra Costa County Climate Action Plan in December 2015, developed for the purpose of reducing the County's GHG emissions and contribution to climate change. Most of the measures identified in the Climate Action Plan consist of programs and incentives to be implemented by the County and are not applicable to the Project (CCCD CD 2015).

As indicated in the analysis presented above, the Project will not generate emissions that would exceed the project-level significance criteria established by the BAAQMD and, therefore, the Project will not conflict with plans adopted for the purpose of reducing GHG emissions. Therefore, Project impacts will be **less than significant**.

VIII. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 for people residing or working in the project area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. The California Environmental Protection Agency (Cal EPA) which consists of the Air Resources Board, Department of Pesticides Regulation, Department of Resources and Recycling and Recovery, Department of Toxic Substance Control (DTSC), Office of Environmental Health Hazard Assessment, and State Water Resources Control Board (SWRCB) regulates hazardous materials and waste (CalEPA 2017a). Under Government Code Section 65962.5, the DTSC maintains a list of hazardous substance sites (Cortese List) which includes leaking underground storage tank sites, hazardous material sites, and landfills with evidence

of groundwater contamination (CalEPA 2017b; DTSC 2017). The Contra Costa County Health Services, Hazardous Materials Program (2016) serves area residents by responding to emergencies and monitoring hazardous materials.

- a) *Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?*

During construction, trucks will travel to and from the Project Site. Vehicles would include diesel-powered trucks, backhoes, graders, dump trucks, excavators, water trucks, compactors, skid steers, pick-up trucks, pavers, and hoppers. This equipment may require the use of fuels and other common liquids that have hazardous properties (e.g., fuels, oils, fluids that are flammable) but they would be handled in small quantities that would not create a substantial hazard for construction workers and/or the public. Compliance with federal, State, and local hazardous materials regulations would minimize the risk to the public presented by these potential hazards during construction of the Project. Completion of the shoulder widening would not involve routine transport, use, or disposal of hazardous materials or involve potential releases of hazardous materials into the environment. Therefore, construction and operation of the Project will result in less-than-significant impacts associated with hazardous materials, and no mitigation is required. Therefore, this impact would be **less than significant**.

- b) *Would the project 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?*

As discussed in further detail below in Section VIII.d, the Project Site is not located on a list of hazardous material sites and is not expected to create a significant hazard to the public or the environment. Project construction could cause an unforeseen release of hazardous materials such as a hazardous materials spill or equipment leak. In addition, the Project will remove existing striping that could contain traces of lead. However, the Project contract specifications will require the contractor to implement BMPs such as hazardous materials spill management and regular maintenance of vehicles to minimize potential impacts from accidental spills associated with Project construction or construction equipment. The Contractor will also be required to submit a lead compliance plan for approval by CCCPWD. Therefore, Project impacts will be **less than significant**.

- c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?*

Tassajara Hills Elementary School is located approximately one mile to the northeast of Segment 1 and is the closest school to the Project site. Moreover, the Project does not propose land uses that are associated with hazardous substances. Therefore, the Project will have **no impact**.

- d) *Would the project 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?*

A database search of the Regional Water Quality Control Board's GeoTracker and Contra Costa County Department of Toxic Substance Control's EnviroStore was conducted on September 11, 2017 and revealed no record of hazardous materials release or other potential for contamination on any of the Project segments. The closest record was a Leaking Underground Storage Tank (LUST) approximately 650 feet north of Segment 2. That site is closed and cleanup is complete. No other potential sources of contamination were indicated. Further, land use in the Project area (primarily ranching and residential) is not associated with hazardous materials so possibility of contamination is low. Therefore, Project

impacts will be **less than significant**.

- 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 for people residing or working in the project area.*

The Project site is not within two miles of an airport. According to Figure 3-1 of the Livermore Executive Airport Land Use Compatibility Plan the Project is not within the Livermore Executive Airport Influence Area nor are any Project segments within two miles of any public airport. Therefore, the Project will have **no impact**.

- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

No Project segments are located in the vicinity of a private airstrip. Therefore, the Project will have **no impact**.

- g) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The Project will not result in significant changes to existing roadways, change traffic patterns, or interfere with emergency access. Emergency vehicles will have access at all times during construction. Therefore, Project impacts will be **less than significant**.

- h) *Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The Project site is not located in an area identified as at risk for wildland fires (ABAG 2016). Moreover, no residences, gathering places, or structures are proposed by the Project and the Project does not propose uses that would put residences in danger or increase the risk of wildland fire hazards. Therefore, the Project will have **no impact**.

IX. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner which would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Project site is located within the southern foothills of Mount Diablo within the Tassajara Creek drainage corridor. Slopes within the Project site range from 0 to 5 percent and fall toward Tassajara Creek. Tassajara Creek originates within the Black Hills to the north of the Project site and flows in a southerly direction past the Project site towards Arroyo de la Laguna Creek. Arroyo de la Laguna Creek empties into Alameda

Creek. Roadside ditches in the project area drain to Tassajara Creek.

Flood Hazard Areas

100-year Floodplains

The Federal Emergency Management Agency (FEMA) produced a Flood Insurance Study (FIS) and printed Flood Insurance Rate Maps (FIRMs). These maps show watershed areas which are re-studied and re-mapped periodically and show areas with a one percent chance of flooding each year. These areas are commonly referred to as 100-year floodplains, and are shown as Special Flood Hazard Areas (SFHAs) on the FIRM maps (FEMA 2009). According to the FIRM associated with the Project sites, portions of Segment 4 are located within a Zone A 100-year flood zone area.

a) Would the project violate any water quality standards or waste discharge requirements?

The Project will not create wastewater discharge. Tassajara Creek parallels the Project site (varying from 30 to 70 feet away) and is not listed as an impaired water body in the SWRCB 303(d) list. There will be no in-creek work or discharge into the creek. The Project does not add additional lanes and therefore is not trigger County C.3 requirements. As stated in Mitigation Measures BIO IV(a)-1e and BIO IV(a)-1f, a SWPPP or WPCP will be prepared for the Project and standard BMPs will be implemented during construction activities to minimize sediment or pollutants from construction activities from accidentally entering the creek. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The Project will not require any withdrawals from an aquifer or groundwater table and will have a negligible effect on groundwater recharge. Project impacts will be **less than significant**.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The Project will include widening the existing roadway along four segments of Camino Tassajara between Finley Road and Windemere Parkway to provide two 12-foot travel lanes with 8-foot shoulders. The Project will widen approximately 5,050 feet of the existing roadway. All drainage improvements are designed to collect and convey storm water to Tassajara Creek consistent with the existing conditions. Minor modifications to the planned design may occur during the final design phase. Any changes resulting from the Project will be negligible and would not change overall drainage patterns or hydrology of the area or result in erosion or siltation on or off site. Therefore, Project impacts will be **less than significant**.

d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner which would result in flooding on-or off-site?

The Project will create additional impervious surface area as a result of the pavement widening. However, as discussed above in Section IX.c, the Project will not substantially alter the existing drainage pattern of the area. The area surrounding Camino Tassajara Road primarily consists of grasslands, orchards, and other pervious surfaces. The surrounding area will remain pervious, vegetated and

unpaved, which will provide opportunity for stormwater to percolate into the ground. In addition, the amount of new impervious surface relative to the surrounding area is negligible.

The Project will extend culverts and modify inlets as necessary to accommodate the road widening and will re-grade ditches to maintain the existing drainage patterns. In addition, all drainage will be designed to collect and convey stormwater to Tassajara Creek consistent with the existing conditions. The Project will not construct new obstacles that could block or redirect stormwater flows. The Project will not substantially alter the existing drainage or flooding pattern of the Project sites. Therefore, Project impacts will be **less than significant**.

- e) *Would the project 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?*

The Project will not create or contribute runoff water that would exceed the capacity of the existing stormwater drainage system in the area. As stated above in Section IX.d, the proposed Project will not substantially alter the existing drainage pattern of the area. The surrounding area will remain pervious, vegetated and unpaved, which will provide opportunity for stormwater to percolate into the ground. Stormdrain modifications will be limited to those necessary to accommodate the new pavement width. The Project will not add additional travel lanes and is therefore does not trigger C.3 requirements. Further, the Project does not increase capacity of the roadway for vehicle traffic so there will be no additional sources of polluted runoff. Increased safety for bicyclists may encourage alternative modes of transportation which could reduce potential for polluted runoff from vehicles. Re-graded ditches will remain pervious and will be seeded with a native seed mix and sterile nurse crop. Therefore, Project impacts will be **less than significant**.

- f) *Would the project otherwise substantially degrade water quality?*

No potential impacts to water quality other than those discussed above are anticipated. Therefore, Project impacts will be **less than significant**.

- g) *Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

The Project does not include the construction of housing. Therefore, the Project will have **no impact**.

- h) *Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

The Project does not include the construction of structures that would impede or redirect flows. Therefore, the Project will have **no impact**.

- i) *Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

A small portion of the Project site within Segment 4 is located within a Zone A 100-year flood zone area identified on the FIRM for the area, however the Project will not construct structures or provide places for people to gather or linger that might expose them to danger of flooding. The Project does not include the construction or alteration of any levees or dams and according to Contra Costa County Flood Control and Water Conservation District maps. In addition, the Project is not located within an area that would be inundated by failure of an existing dam. Therefore, Project impacts will be **less than significant**.

- j) *Would the project the expose people or structures to risk of inundation by seiche, tsunami, or mudflow?*

The Project site is located in an inland area and is therefore not subject to seiches or tsunamis. Mudslides and debris flows are characterized by fast moving saturated earth. They develop when water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt, changing the earth into a flowing river of mud or “slurry” (FEMA 2017). Areas identified by ABAG as Debris Flow Areas occur approximately one quarter mile to the east and west of the Project site, on the slopes of hillsides (ABAG 2017). However, the Project is limited to lane and shoulder widening of an existing road and will not introduce new land uses that could be impacted by mudslides. Therefore, Project impacts will be **less than significant**.

X. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or the regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

General planning policies and provisions are contained in the General Plan and the Contra Costa County Zoning Ordinance. The Contra Costa County Transit Authority is a public agency that manages the County's transportation sales tax program and is responsible for countywide transportation planning. The East Bay Regional Park District manages open space and trails near the Camino Tassajara Valley. The County has an adopted Habitat Conservation Plan/Natural Community Conservation Plan however the Project is not within the plan's inventory area.

a) *Would the project physically divide an established community?*

The Project is limited to lane and shoulder widening of an existing road and will not physically divide a community. Therefore, the Project will have **no impact**.

b) *Would the project conflict with any applicable land use plan, policy, or the regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

The proposed project does not conflict with any applicable land use plan, policy or regulation. The project is consistent with the Transportation and Circulation Element goals and policies of the County General Plan including (Contra Costa County 2005c):

- Roadway and Transit Goal #5-A: To provide a safe, efficient and balanced transportation system
- Roadway and Transit Goal #5-D: To maintain and improve air quality above air quality standards.
- Roadway and Transit Goal #5-J: To reduce single-occupant auto commuting and encourage walking and bicycling.
- Roadway and Transit Goal #5-L: To reduce greenhouse gas emissions from transportation sources through provision of transit, bicycle, and pedestrian facilities.
- Roadway and Transit Policy # 5-9: Existing circulation facilities shall be improved and

maintained by eliminating structural and geometric design deficiencies.

- Roadway and Transit Policy #5-13: The use of pedestrian and bicycle facilities shall be encouraged. Proper facilities shall be designed to accommodate bikes, pedestrians, and transit.
- Roadway and Transit Policy #5-14: Physical conflicts between pedestrians, bicyclists, and vehicular traffic, bicyclists, and pedestrians shall be minimized.
- Roadway and Transit Policy #5-18: The design and the scheduling of improvements to arterials and collectors shall give priority to intermodal safety over other factors including capacity.
- Roadway and Transit Policy #5-23: All efforts to develop alternative transportation systems to reduce peak period traffic congestion shall be encouraged.
- Roadway and Transit Policy #5-24: Use of alternative forms of transportation, such as transit, bike and pedestrian modes, shall be encouraged in order to provide basic accessibility to those without access to a personal automobile and to help minimize automobile congestion and air pollution.

According to the Contra Costa County Countywide Bicycle and Pedestrian Plan, a Class II bicycle lane has been proposed for the Project segments of Camino Tassajara. The Project will provide the desirable pavement width for a Class II bike lane; therefore, the Project is consistent with this plan. According to the East Bay Regional Park District 2013 Master Plan Map, no Parklands or Trails are planned for Camino Tassajara along the Project length (EBRPD 2013). Other potential impacts associated with specific topical sections are discussed in those sections.

Based on the analysis above, the Project is consistent with environmental land use policies or plans. Therefore, Project impacts will be **less than significant**.

c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

The Project does not fall within the inventory area of the Contra Costa County Habitat Conservation/Natural Community Conservation Plan. Therefore, the Project will have **no impact**.

XI. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss or availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Mineral resources such as crushed rock, sand, and other resources, are important minerals in the region as they provide the necessary components for construction materials including asphalt and concrete for current and future development in the region. The most important mineral resources that are currently mined in the County include diabase near Mt. Zion on the north side of Mt. Diablo, which provides crushed rock primarily for roadbase and streambank stabilizations; domengine sandstone, located in the eastern portion of the County just south of Camino Diablo and east of Vasco Road in the Byron area, which is the sole deposit in the state; and shale in the Port Costa area, which has been designated for protection by the County General Plan (Contra Costa County 2005f).

- a) *Would the project 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?*

There are no mapped mineral resource areas near the Project. Therefore, the Project will have **no impact**.

- b) *Would the project 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?*

There are no mapped mineral resource areas near the Project. Therefore, the Project will have **no impact**.

XII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Background

Section 65302(f) of the California Government Code requires that a noise element be prepared as a part of all city and county general plans. The Contra Costa County General Plan Noise Element follows the guidelines established by the California Department of Health Services entitled *Guidelines for the Preparation and Content of the Noise Element of the General Plan*, which defines noise metrics, discusses the process of noise element development, and presents land use compatibility guidelines based on various noise levels and provides goals, policies, and implementation measures for consideration (Contra Costa County 2005h).

Contra Costa County does not have a noise ordinance and therefore, does not specify operational or construction noise level limits. The Noise Element of the General Plan does specify that construction activities shall be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods. Construction activities are generally limited to the hours between 7 a.m. to 5 p.m. (Contra Costa County 2005h).

- a) *Would the project cause exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Operational Impacts

The Project will not increase capacity of the road and no significant changes to topography would occur. Shoulder widening on either side of the roadway will result in small changes (increases and decreases) in the distance of the travel way from nearby receptors although related changes in roadway noise will be negligible.

Construction Impacts

The Project will result in an increase in ambient noise associated with project construction. However, these impacts would be short-term and temporary in nature. In general, construction equipment generates noise levels ranging from approximately 74 to 90 dBA at 50 feet from the noise source, with higher levels up to 101 dBA for less typical equipment such as pile drivers and rock drills (USDOT 2006). Construction activities for this Project will fall within a typical range between 74 to 90 dBA at 50 feet.

There are numerous residences and other sensitive land uses located within the vicinity of the four roadway segments included as part of the Project. At Segment 1, there are approximately six residences located within 500 feet east of the site and another residence located approximately 250 feet northwest of the segment. In some areas along this segment, existing vegetation provides a buffer against roadway noise. At Segment 2, an equestrian center and swimming facility are located within 500 feet north of the segment. A single residence is located approximately 500 feet south. Segment 3 contains a variety of agricultural operations within the vicinity of the site. Two residences are located north of the segment within 400 feet. Segment 4 contains a variety of residences and agricultural operations immediately to the east and west of the segment.

As stated above, Contra Costa County does not have a noise ordinance but the General Plan specifies that construction activities shall be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses. Construction activities will be generally limited to the hours between 7:00 a.m. to 5:00 p.m. Although unanticipated, if work is necessary outside of these hours, the Resident Engineer shall approve the work and will be available to address any noise concerns during all construction activities. In addition, implementation of Mitigation Measure NOI-1 would further ensure that potentially significant impacts are reduced to a less-than-significant level.

IMPACT NOI-1

Development of the Project will result in a temporary increase in ambient noise levels during Project construction.

MITIGATION MEASURE NOI-1:

The project contractor shall employ the following noise-reducing practices during project construction:

1. Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
2. Unnecessary idling of internal combustion engines within 100 feet of residences should be strictly prohibited.
3. Locate stationary noise generating equipment as far as possible from sensitive receptors.
4. Utilize 'quiet' air compressors and other 'quiet' equipment where such technology exists.
5. Avoid staging of construction equipment within 200 feet of residences and locate all stationary

noise-generating construction equipment as far as practical from noise sensitive receptors.

6. Require all construction equipment to conform to Section 14-8.02 Noise Control, of the latest Standard Specifications.
7. Provide notification to the adjacent noise-sensitive receptors including the specific construction schedule for major noise-generating construction activities.

Therefore, Project impacts will be **less than significant with mitigation incorporated**.

- b) *Would the project cause exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels?*

Excessive ground borne vibration from construction activities results from equipment such as pile drivers, which will not be used to construct the Project. Some ground borne vibration may result from construction but will not be excessive based on the types of construction equipment that will be used and will be short term in nature. Therefore, Project impacts will be **less than significant**.

- c) *Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

The Project will not increase the capacity of the roadway and no significant changes in topography will occur from Project implementation. As stated above, any changes in perceptible roadway noise will be negligible. Therefore, Project impacts will be **less than significant**.

- d) *Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

As discussed in Section XII.a, the Project will result in temporary construction noise. Construction noise sources would be temporary and short-term in nature. With implementation of Mitigation Measure NOI-1, project impacts would be reduced to a less-than-significant level. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

- 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 expose people residing or working in the project area to excessive noise levels?*

There is no public airport located within two miles of the project area. Therefore, the Project will have **no impact**.

- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

The Project is not located in the vicinity of a private airstrip. Therefore, the Project will have **no impact**.

XIII. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Section 15126.2(d) of the CEQA Guidelines requires a lead agency discuss ways in which the Project could foster economic or population growth, either directly by construction of businesses or housing, or indirectly by removing obstacles to population growth; for example, extending infrastructure into previously unserved areas. Increases in population may stress existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

- a) *Would the project induce substantial 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)?*

The Project does not include new homes or businesses that could directly induce population growth. The Project will not increase the capacity of the roadway. Drainage modifications are limited to that which is necessary to accommodate the new pavement width and storm drain capacity will not be increased. No other infrastructure is proposed that could indirectly induce population growth. Therefore, the Project will have **no impact**.

- b) *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

The Project will not displace any existing housing; as such, no replacement housing is necessary. Therefore, the Project will have **no impact**.

- c) *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The Project will not displace any people; as such, no replacement housing construction is necessary. Therefore, the Project will have **no impact**.

XIV. PUBLIC SERVICES

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project:

- 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 any of the public services?

1 Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The San Ramon Valley Fire Protection District provides fire protection services and emergency services to the Tassajara Valley and the Contra Costa County Sheriff's Department provides general public safety and law enforcement services in unincorporated areas of Contra Costa County (Contra Costa County 2005e). The Project is located in the San Ramon Valley Unified School District. (SRVSD 2017)

- 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 any of the public services?*

The Project will not result in new development that could increase demand on public services and therefore will not necessitate the construction of new facilities or the alteration of facilities that could result in environmental impacts. Because the Project will not result in population growth, nor does it propose land uses that increase demand on police and fire services, the Project will not impact service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, or other public facilities. Therefore, the Project will have **no impact**.

XV. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a) *Would the project 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?*

The Project does not include new development that could increase use of existing parks or recreational facilities that could result in deterioration of facilities. Therefore the Project will have **no impact**.

- b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

As noted above, the Project does not include new development that could require construction of existing recreational facilities. Therefore, the Project will have **no impact**.

XVI. TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

The Contra Costa Transportation Authority (CCTA) is a public agency formed to manage the County's transportation sales tax program and to conduct countywide transportation planning. CCTA is responsible for maintaining and improving the County's transportation system by planning, funding, and delivering critical transportation infrastructure projects and programs that connect the communities safely and efficiently including bicycle and pedestrian projects as described in the *2009 Countywide Bike and Pedestrian Plan* (CCTA 2009). In addition, the Transportation and Circulation Element of the County General Plan includes transportation goals and policies (Contra Costa County 2005c).

- a) *Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

The Project does not include elements that could increase traffic on local roadways (for example residential

or commercial construction). Changes to the roadway are limited to lane and shoulder widening to bring the road up to current County standards and will not substantially change the configuration of the road or increase capacity. As such, the Project will not conflict with plans, ordinances or policies that establish measures of effectiveness for roadway performance.

According to the County Connection website, there are no County Connection bus routes along the Project length of Camino Tassajara. According to the Livermore Amador Valley Transit Authority, Wheels, System Maps does not identify bus routes along the Project length of Camino Tassajara. As such, no public transit routes will be affected. According to the Contra Costa County Countywide Bicycle and Pedestrian Plan, a Class II bicycle lane has been proposed for the Project segment of Camino Tassajara. The Project will provide the desirable pavement width for a Class II bike lane. Therefore, the Project is consistent with this plan. According to the East Bay Regional Park District 2013 Master Plan Map, no Parklands or Trails are planned for Camino Tassajara along the Project length.

Through Project implementation, the roadway would be signed and striped for a Class II bike lane. This use is consistent with General Plan Policy 5-L, which encourages increased opportunity for bicycle use for recreation as well as transportation. For the reasons stated, the Project does not conflict with applicable plans and Project impacts will be **less than significant**.

- b) *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

As discussed above, the Project does not include elements that could increase traffic on roadways nor does it propose significant changes to the road. The Project would not increase the capacity of the road or result in any permanent impacts to any level of service or other roadway standards. The Project is estimated to take approximately 45 working days per segment to construct and during certain items of work, the Project may require a full or partial lane closure for short durations. As such, temporary traffic disruptions will occur along segments of the Project roadway where work is taking place.

It is anticipated that no more than two segments would be constructed at a time. During short-term lane closures, traffic control measures such as flaggers and signage are expected to minimize significant congestion or delays. In addition, at least one lane will be open at all times to accommodate vehicles and to the extent feasible, any lane closure will be conducted during off-peak hours. Messaging boards will also be utilized to inform roadway users of upcoming construction delays. At the end of each workday, any lane closures will be re-opened to traffic. Full road closure is not anticipated and no detours will be necessary. Therefore, Project impacts will be **less than significant**.

- c) *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The Project is not located near an airport nor does it propose creation of structures or land uses that could affect air traffic patterns. Therefore, the Project will have **no impact**.

- d) *Would the project substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

The Project will not increase hazards due to a design feature as the purpose of the Project is to provide safer roadway conditions along the roadway by bringing these segments up to current County standards. During construction, the Project contract specifications will require the contractor to implement measures

to minimize potential construction impacts. Therefore project impacts will be **less than significant**.

e) Would the project result in inadequate emergency access?

Emergency vehicles will have access through the Project site at all times. Contract specifications will require the Contractor to notify local authorities of the Contractor's intent to begin work at least 5 days before work is scheduled to begin. The Contractor will be required to cooperate with local authorities relative to handling traffic through the Project area and will make arrangements relative to keeping the work area clear of parked vehicles. Therefore, Project impacts will be **less than significant**.

f) Would the project conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

As stated above, the roadway would be signed and striped for a Class II bike lane, which is consistent with the goals and policies contained in the General Plan and the 2009 Countywide Bicycle and Pedestrian Plan. In addition, no public transit routes are located along the Project segment of Camino Tassajara. Therefore, Project impacts will be **less than significant**.

XVII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of Historical Resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Assembly Bill 52, which became law on January 1, 2015, provides for consultation with California Native American tribes during the CEQA environmental review process, and equates significant impacts to “tribal cultural resources” with significant environmental impacts. Section 21074 of the Public Resources Code defines California Native American tribes as “a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004.” This includes both federally and non-federally recognized tribes. Section 21074(a) of the Public Resource Code defines Tribal Cultural Resources for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are any of the following:
 - a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
 - b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
 - c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

A “historical resource” (PRC Section 21084.1), a “unique archaeological resource” (PRC Section 21083.2(g)), or a “nonunique archaeological resource” (PRC Section 21083.2 (h)) may also be a tribal cultural resource if it is included or determined to be eligible for inclusion in the California Register of Historical Resources. Tribal Cultural Resources may or may not exhibit archaeological, cultural, or physical indicators. The consultation provisions of the law require that a public agency consult with local Native American tribes that have requested placement on that agency’s notification list for CEQA projects.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies carry out consultation with tribes at the commencement of the CEQA process to identify Tribal Cultural Resources. Furthermore, because a significant effect on a Tribal Cultural Resource is considered a significant impact on the environment under CEQA, consultation is required to develop appropriate avoidance, impact minimization, and mitigation measures. Consultation is concluded when either the lead agency and tribes agree to appropriate mitigation measures to mitigate or avoid a significant effect, if a significant effect exists, or when a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)), whereby the lead agency uses its best judgement in requiring mitigation measures that avoid or minimize impact to the greatest extent feasible.

- a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of Historical Resources as defined in Public Resources Code section 5020.1(k); or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

The Wilton Rancheria Tribe has submitted a general request letter to be notified of Projects within Contra Costa County under AB52. On May 25, 2016 an offer to consult was sent to the AB52 contact indicated in the Wilton Rancheria general request letter. No response was received in the 30-day response period. Therefore the consultation period under AB52 closed with no response from the Tribe regarding presence of potential resources. As noted in Section V, Cultural Resources, a cultural resource assessment was completed and did not identify any historical resources within the APE.

As is typical for general cultural resource investigations, throughout all stages of Project planning and archaeological investigations, Condor Country Consulting, Inc. (Condor) conducted consultations with local Native American representatives. On November 15, 2016, Condor faxed a letter to the NAHC requesting a search of the Sacred Lands File for the Project area, and program analysts conducted the records search on November 21, 2016. According to the NAHC, the search of the Sacred Lands File failed to identify any culturally sensitive locations within the Project APE. As per California Public Resources Code §5097.98, the NAHC provided Condor with a list of Native American contacts for further consultation regarding the Project. Six Native American tribal representatives and/or organizations were identified as possibly having information relevant to the Project area or concerns regarding proposed Project activities.

On May 25, 2017, Condor mailed letters and Project maps through the United States Post Service (Priority Mail) to the contacts provided by the NAHC. In addition to the maps, the letters included a description of the Project and the Project location, as well as the negative results of the records search and archaeological

reconnaissance survey. The letters' purpose was to inform the individuals and organizations representing the Native American community of the Project and to seek information regarding any areas of concern within or adjacent to the APE. In soliciting comments, questions, and concerns with regard to the Project, Condor specifically requested any information on Traditional Cultural Properties or places, such as traditional plant gathering sites, and whether any other sites of historic interest were in or immediately adjacent to the Project area, particularly those that may not have been previously recorded. The following contacts received letters:

- Chairperson Irene Zwierlein (Amah Mutsun Tribal Band of Mission San Juan Bautista)
- Chairperson Ann Marie Sayers (Indian Canyon Mutsun Band of Costanoan)
- Chairperson Rosemary Cambra (Muwekma Ohlone Indian Tribe of the SF Bay Area)
- Chairperson Katherine Erolinda Perez (North Valley Yokuts Tribe)
- Representative Andrew Galvan (The Ohlone Indian Tribe)
- Chairperson Raymond Hitchcock (Wilton Rancheria)

Subsequent attempts to reach the representatives were made by telephone on June 5, 2017 to solicit comments, questions, or concerns regarding the Project. Chairperson Sayers, expressed her confidence in the archaeological assessment and asked to be notified if any Native American cultural resources are encountered during construction. Detailed messages were left with Ms. Cambra, Mr. Galvan, and Mr. Hitchcock. These messages referenced the previously sent letters, described the nature and location of the Project, and asked that the representatives call to discuss any concerns or additional information that they may have regarding cultural resources in the vicinity of the APE. Calls to Ms. Zwierlein and Ms. Perez went unanswered. Ms. Zwierlein's voicemail box was full, and Ms. Perez had not made voicemail available. Second attempts to reach the remaining representatives were made on June 7, 2017, but no new responses were received. Voice messages were again left with Ms. Cambra, Mr. Galvan, and Mr. Hitchcock, but voicemail was still unavailable for Ms. Zwierlein and Ms. Perez.

A written reply was received from Mr. Antonio Ruiz, Jr. Cultural Resources Officer for the Wilton Rancheria of Wilton California on June 19, 2017. The reply did not contain information regarding cultural resources. Mr. Ruiz requested that all Wilton Rancheria correspondences be kept confidential and only shared between the Tribe and County and as such, their specific requests do not appear in this document.

None of the other Native American representatives identified by the NAHC has voiced any concerns with regard to the potential for discovery of Native American cultural resources within APE, Mitigation Measures CUL-1 AND CUL-2 will be implemented to minimize unanticipated impacts to previously undiscovered resources. Therefore, Project impacts will be **less than significant with mitigation incorporated**.

XVIII. UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) <i>Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) <i>Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) <i>Require or result in the construction of new storm water drainage facilities, the construction of which could cause significant environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) <i>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?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) <i>Be served by a landfill with sufficient permitted capacity to accommodate the project's waste disposal needs?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Comply with federal, state and local statutes and regulations related to solid waste?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a) *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

The Project will not exceed wastewater requirements because the completed Project will not result in the need for wastewater treatment. Therefore, the Project will have **no impact**.

- b) *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

The Project does not include nor will it require construction of new water or wastewater treatment facilities or expansion of existing facilities. Therefore, the Project will have **no impact**.

- c) *Would the project require or result in the construction of new storm water drainage facilities, the construction of which could cause significant environmental effects?*

Drainage modifications will be limited to those necessary to accommodate shoulder widening. Capacity

would not be increased. The impacts associated with minor drainage modifications are analyzed in this document and were found to be less than significant. No other storm water drainage facilities are proposed or will be necessary for implementation of the Project. Therefore, the Project's impacts will be **less than significant**.

- d) *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

The completed Project will not require water service, and any water needed during project construction would be provided by water trucks from off-site water sources. Therefore, the Project will have **no impact**.

- e) *Would the project 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?*

The Project does not require wastewater treatment services. Therefore, the Project will have **no impact**.

- f) *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's waste disposal needs?*

The Project will not generate operational waste and will not result in the need for a new solid waste facility. However, a small amount of construction waste including vegetative matter, asphalt, and concrete may be generated. The County has active solid waste facilities with capacity to accommodate any construction waste that may be generated (CalRecycle, 2017). In addition, Project contract specifications will require that the contractor dispose of solid waste in accordance with all federal, state and local regulations. Therefore, the Project impacts will be **less than significant**.

- g) *Would the project comply with federal, state and local statutes and regulations related to solid waste?*

As stated above, Project contract specifications will require that the contractor dispose of solid waste in accordance with all federal, state and local regulations. Therefore, Project impacts will be **less than significant**.

XVIV. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section IV, implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-9 would ensure that development of the Project would not: 1) substantially reduce the habitat of a fish or wildlife species; 2) cause a fish or wildlife species population to drop below self-sustaining levels; 3) threaten to eliminate a plant or animal community; or 4) reduce the number or restrict the range of a rare or endangered plant or animal. Specifically, implementation of Mitigation Measures BIO IV(a)-1a through BIO IV(a)-9 would ensure that potentially significant impacts would be reduced to less-than-significant levels. As discussed in Section V, the Project would not impact on- and/or off-site historic resources with implementation of Mitigation Measures CUL-1 and CUL-2. As such, the proposed Project will result in **less-than-significant with mitigation incorporated**.

- 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)?*

All project impacts were found to be less than significant or less than significant with mitigation

measures incorporated. No other known projects that could result in cumulative construction impacts are currently planned. Therefore, the impacts will be **less than significant**.

- c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

The Project will not cause substantial adverse direct or indirect effects on human beings as impacts will be avoided and minimized where possible and mitigated when necessary. Mitigation measures will be implemented as described in the Air Quality, Agriculture and Forest Resources, Biological Resources, Cultural Resources, and Noise sections. Therefore, project impacts will be **less than significant with mitigation incorporated**.

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FIGURE 1: Regional Location Map

CONTRA COSTA COUNTY CALIFORNIA

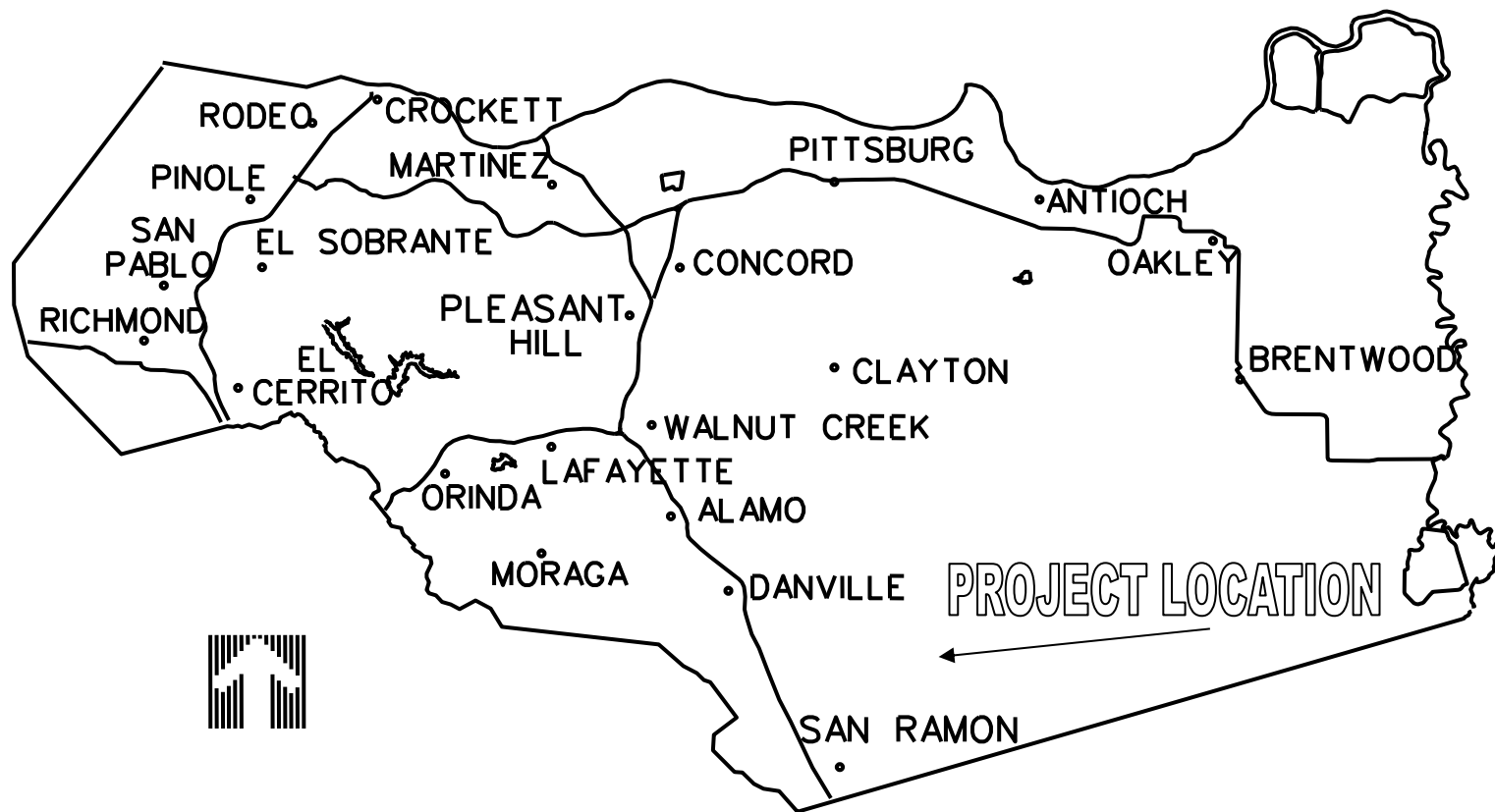


FIGURE 2: Project Vicinity Map



FIGURE 3: Aerial View of the Project Sites

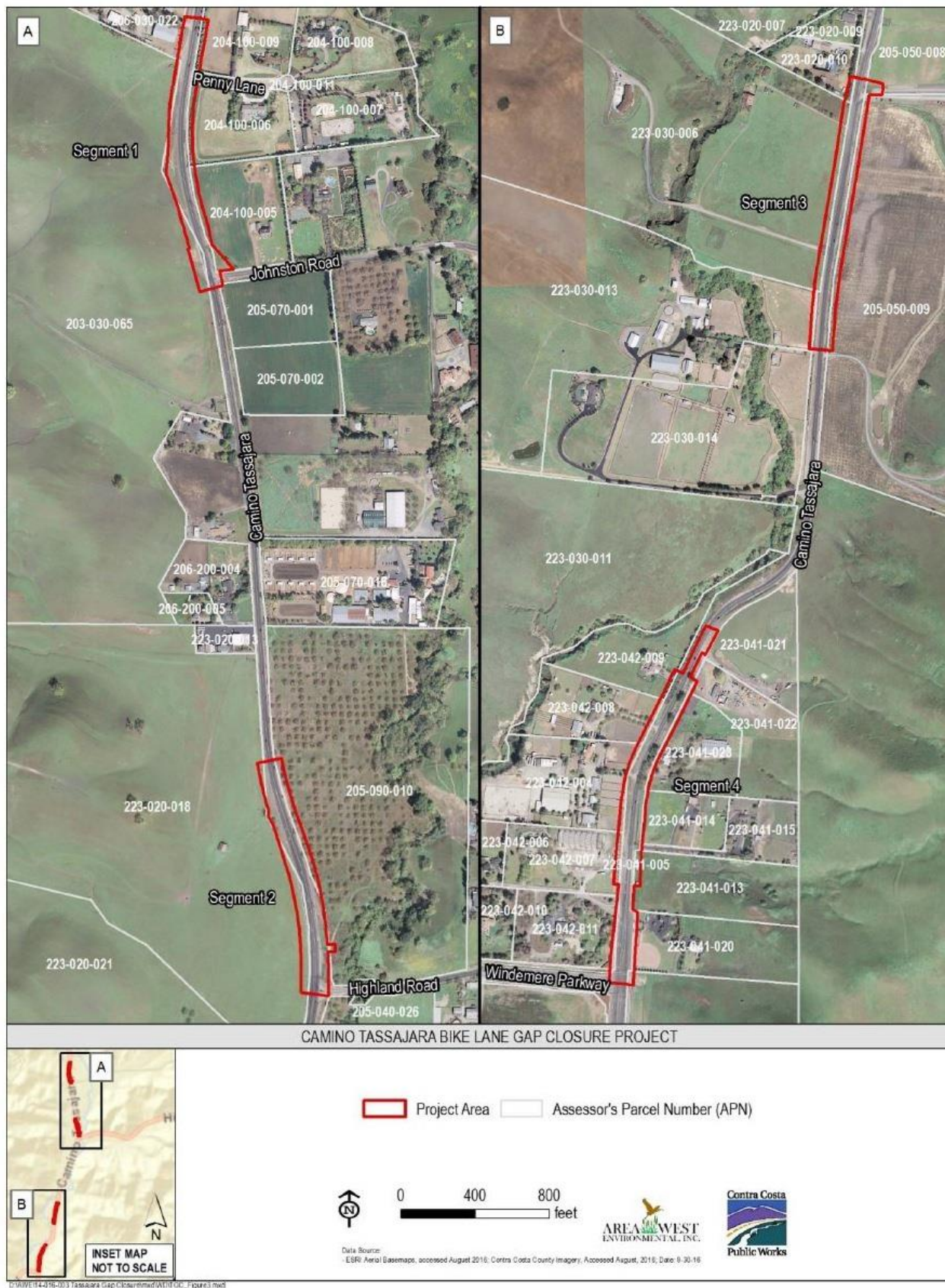


FIGURE 4: Segment 1 Area of Maximum Effect Map

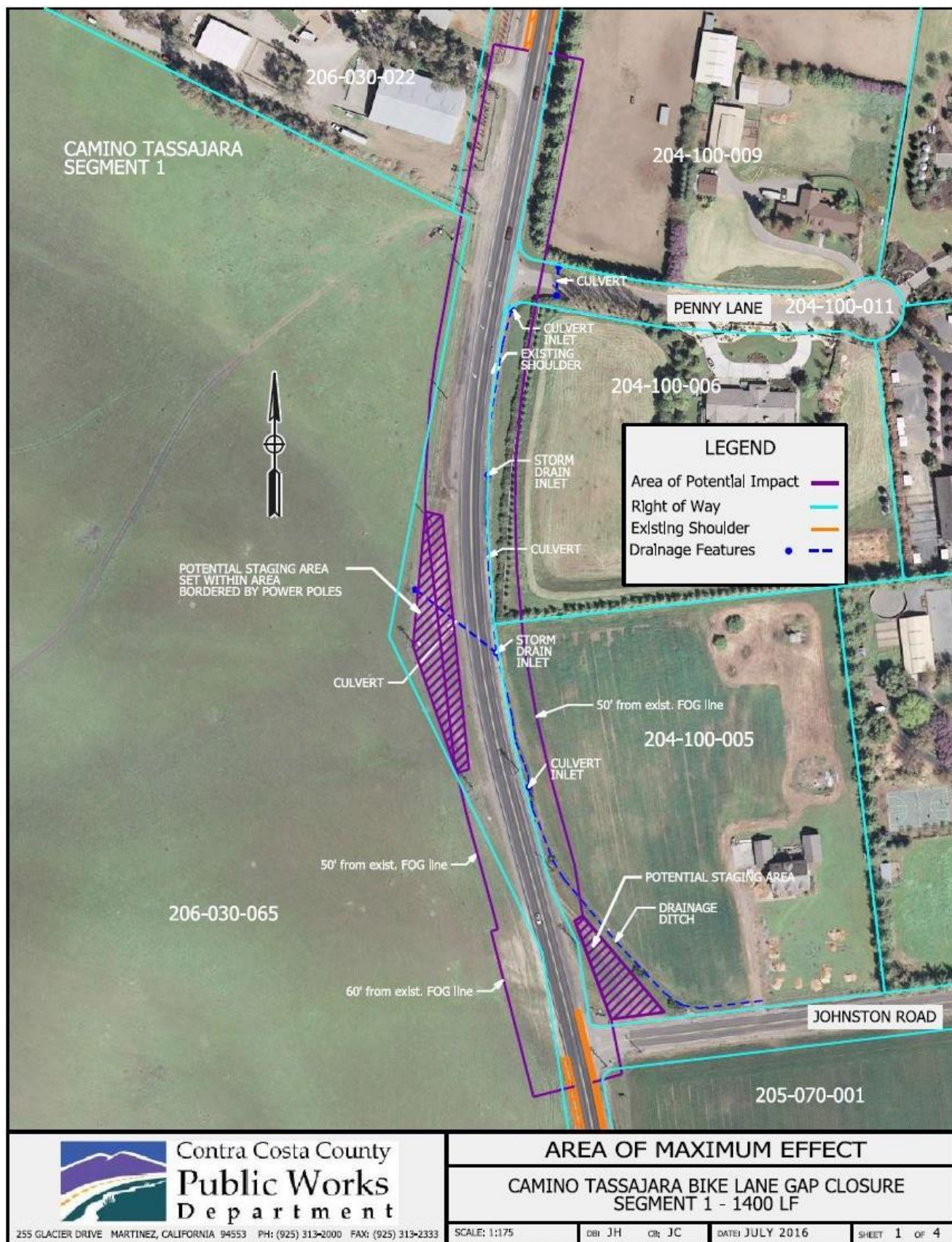


FIGURE 5: Segment 2 Area of Maximum Effect Map

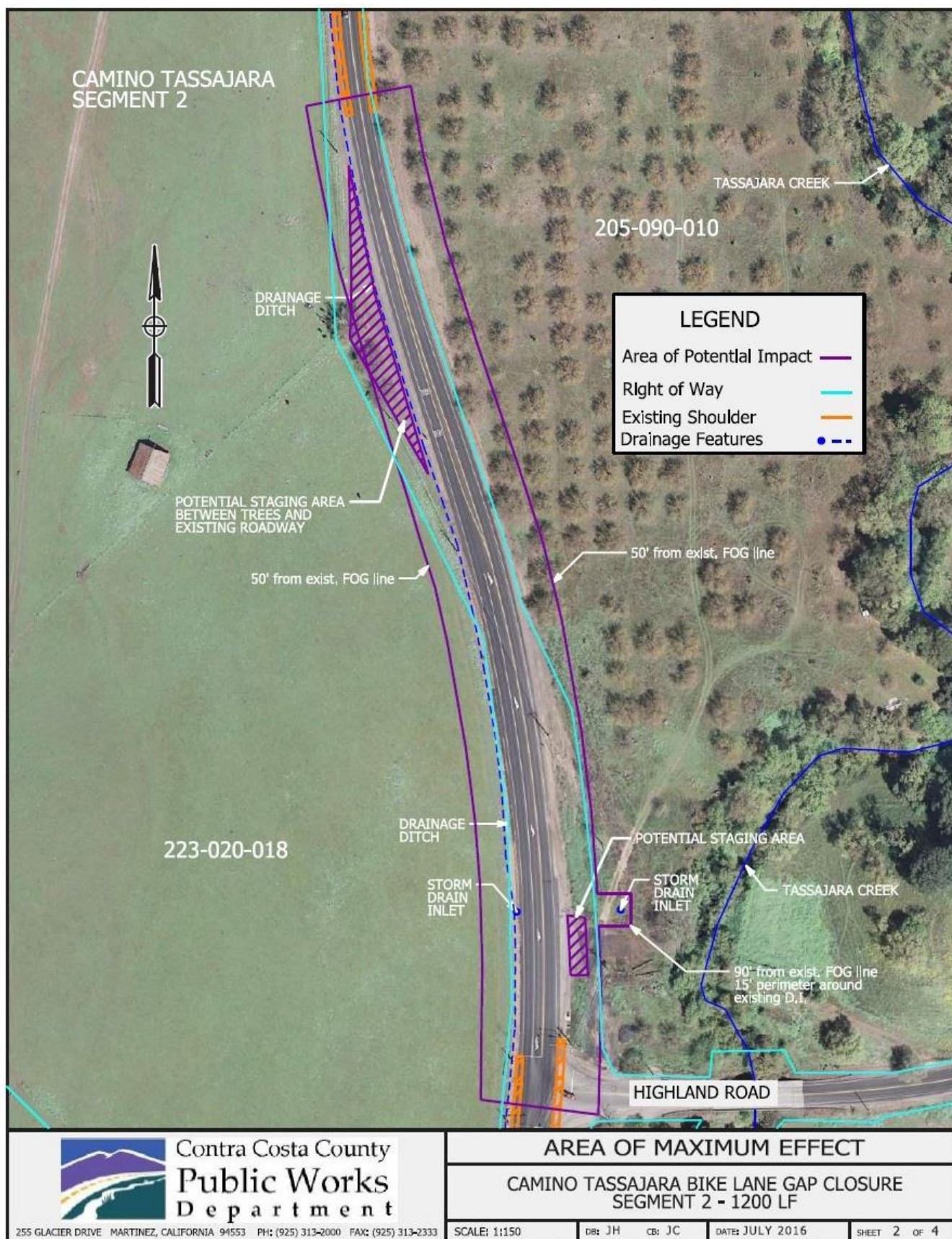


FIGURE 6: Segment 3 Area of Maximum Effect Map

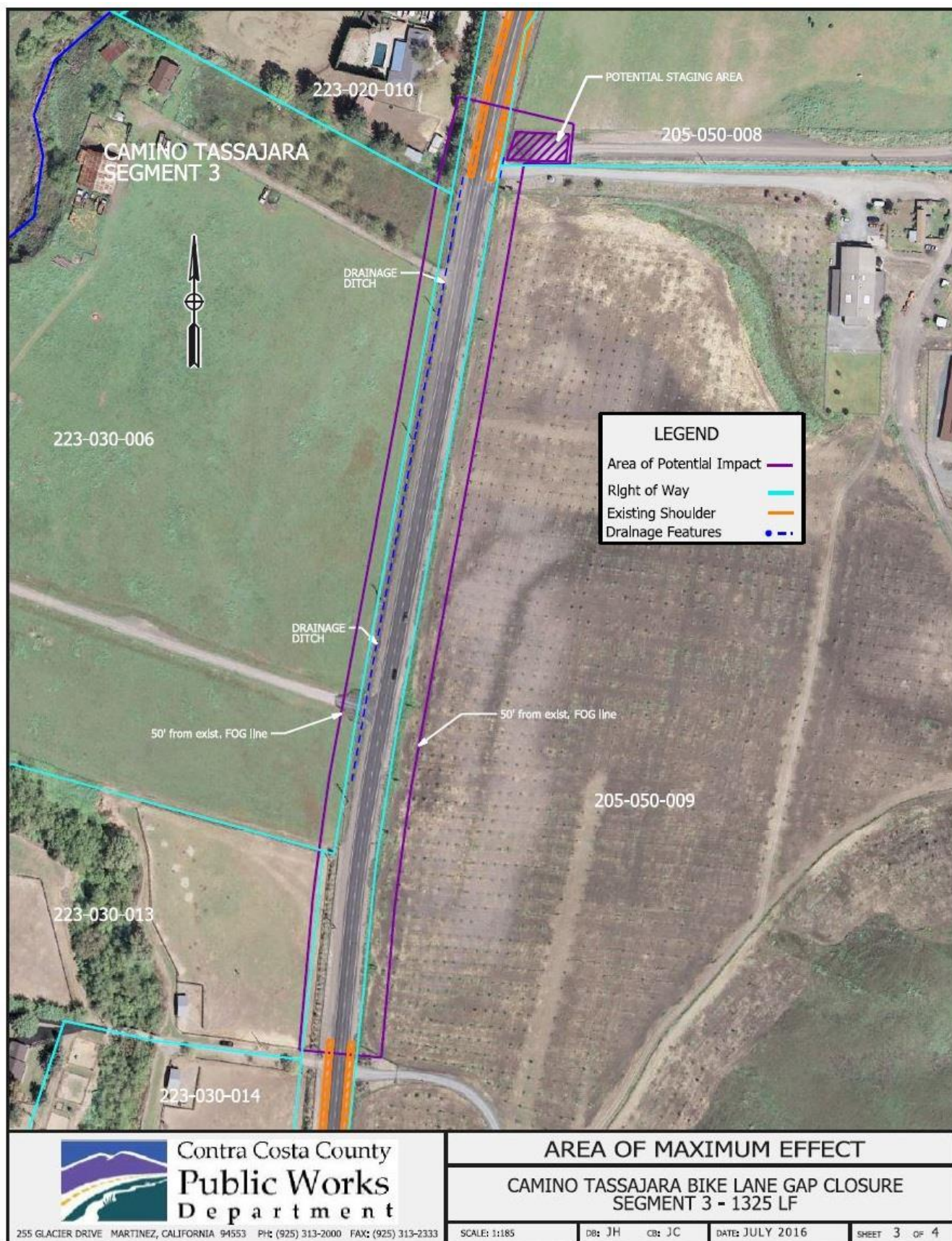


FIGURE 7: Segment 4 Area of Maximum Effect Map

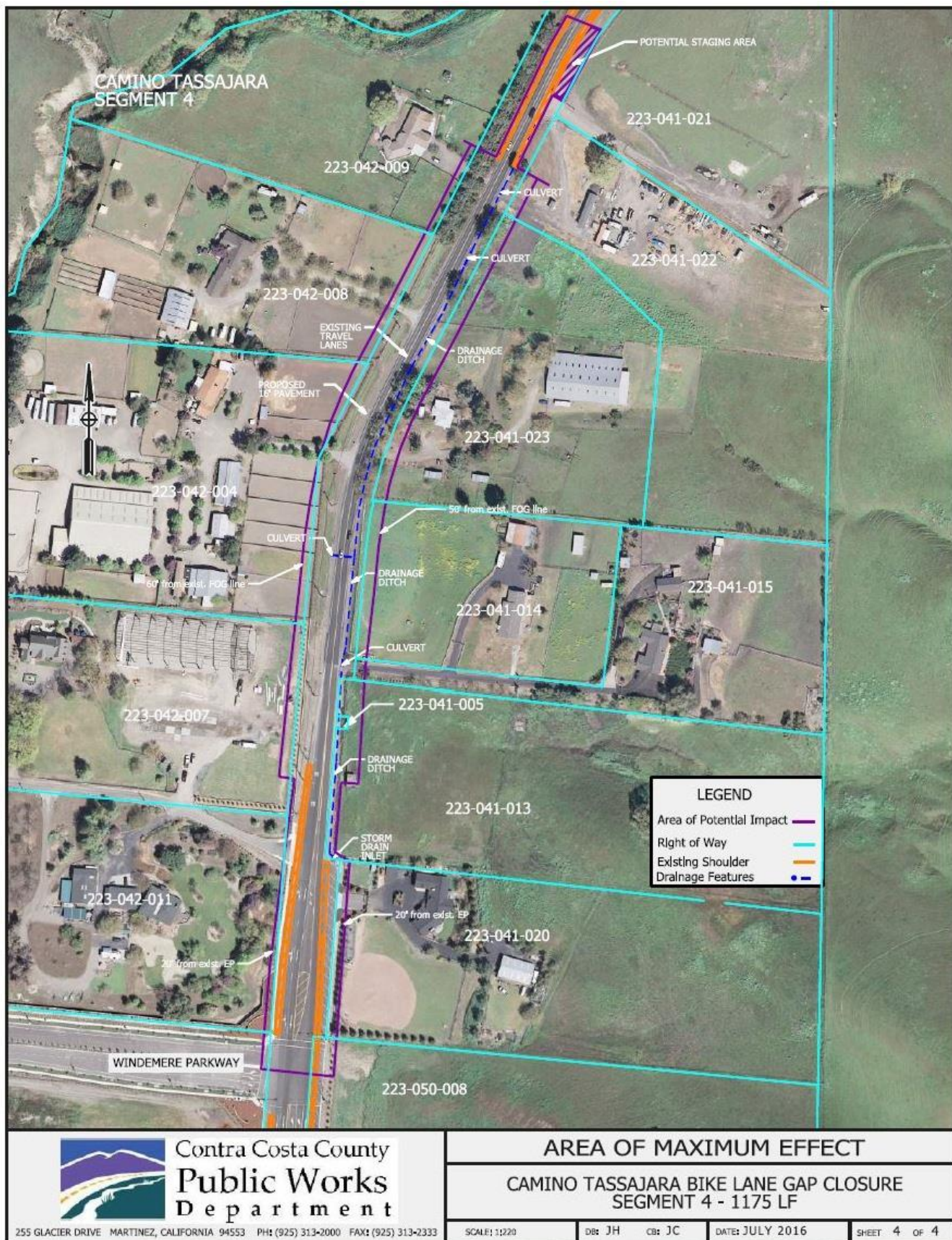
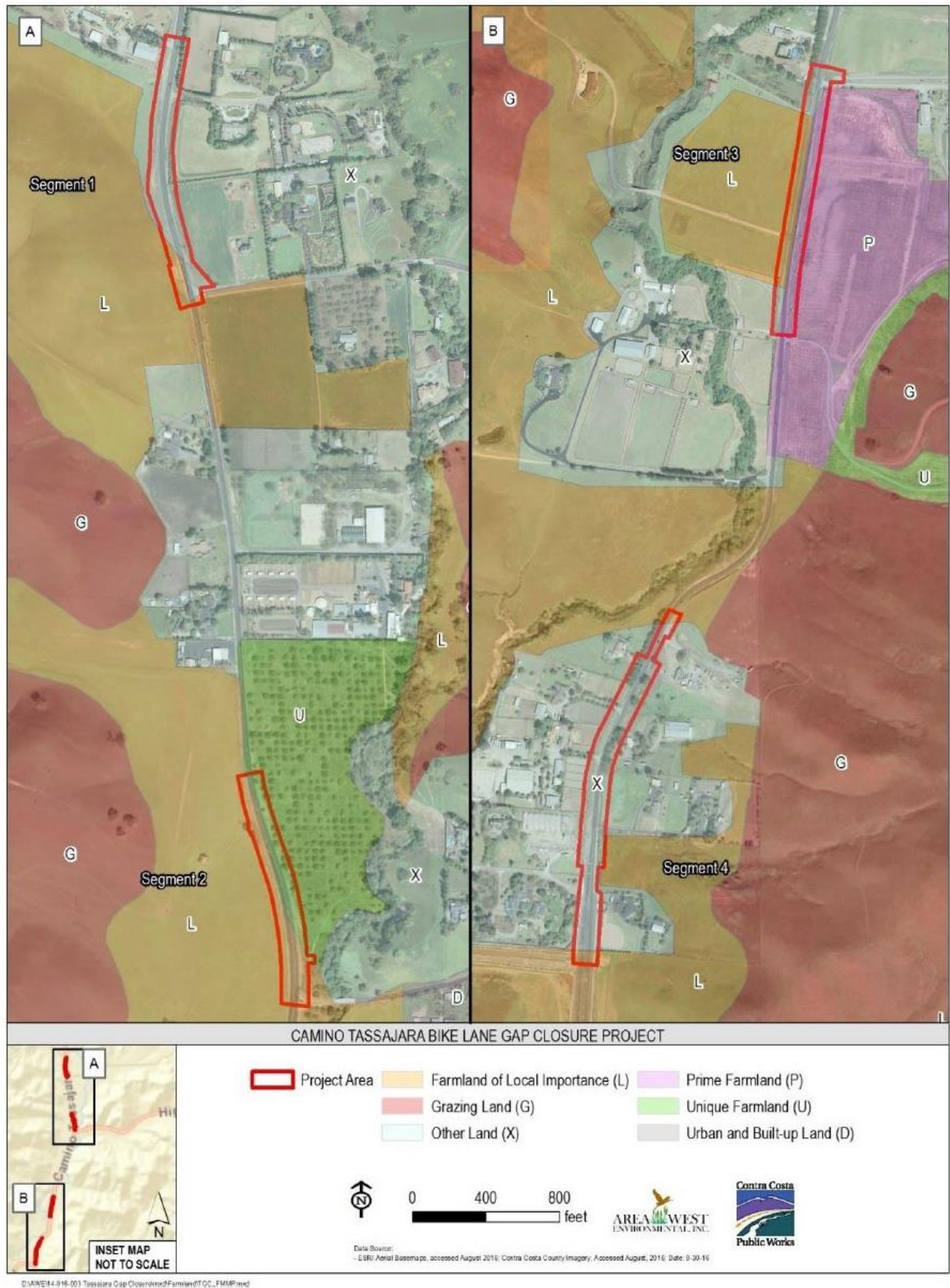


FIGURE 8: Zoning within the Project Area



FIGURE 9: Farmland Mapping and Monitoring Program Classifications within the Project Area



Mitigation Monitoring and Reporting Program

The following Mitigation Monitoring and Reporting Program (MMRP) identifies the Mitigation Measures that will be implemented as part of the Camino Tassajara Bike Lane Gap Closure Project. The Contra Costa County Public Works Department (CCCPWD) or its Contractors under the supervision of CCCPWD will be responsible for implementing the following measures. CCCPWD will be responsible for monitoring to ensure the following measures are implemented.

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
II. AGRICULTURE AND FORESTRY RESOURCES				
<u>IMPACT AGR-1</u> Development of the Project may require right of way acquisition of a small roadside area that is currently under Williamson Act.	<u>AGR-1:</u> If right of way takes of land under a Williamson Act Contract is necessary, prior to construction the CCCPWD or its designated representative will notify the Director of the California Department of Conservation and the Contra Costa County Department of Conservation and Development of the property acquisition and will provide a subsequent notification within 10 working days upon completion of the acquisition.	Prior to Construction	CCCPWD Environmental Services Division	CCCPWD
II. AIR QUALITY				
<u>IMPACT AIR-1</u> Construction activities could result in fugitive dust emissions during Project construction.	<u>AIR-1:</u> Consistent with the Construction Mitigation Measures required by the Bay Area Air Quality Management District (BAAQMD), the construction contractor shall comply with the following: <ol style="list-style-type: none"> 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3) All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4) All vehicle speeds on unpaved roads shall be limited to 15 mph. 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. 	During Construction	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p> <p>7) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</p> <p>8) A publicly visible sign shall be posted with the telephone number and contact information for the designated on-site construction manager available to receive and respond to dust complaints. This person shall report all complaints to Contra Costa County and take immediate corrective action as soon as practical but not more than 48 hours after the complaint is received. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.</p>			
<p><u>IMPACT AIR-2</u> Construction of three or four segments simultaneously (Scenario C and D) will result in NOx emissions that exceed the BAAQMD Thresholds of Significance.</p>	<p><u>AIR-2:</u> Prior to construction, the construction contractor shall provide a written calculation to the County, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of at least 28 percent of NOX and 45 percent of diesel PM reduction as compared to (CARB) statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products (e.g., CARB approved High Performance Renewable Diesel), alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The Construction Emissions Mitigation Tool development by the Sacramento Metropolitan Air Quality Management District (SMAQMD) may be used to calculate compliance with this condition and shall be submitted to the approving agency as described above.</p>	Prior to Construction	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
IV. BIOLOGICAL RESOURCES				
<u>IMPACT BIO IV(a)-1</u> Potential habitat for the special-status wildlife species is present within the Biological Study Area (BSA) and surrounding area. In addition, the BSA is located within California red-legged frog Critical Habitat Unit CCS-2B. Therefore, impacts to special status species and their habitats could occur as a result of Project implementation. The following mitigation measures will reduce potential impacts to all special status species and their habitat. Impacts to specific species and associated mitigation measures are discussed individually.	<u>BIO IV(a)-1a:</u> Before any Project work occurs, including installation of exclusion fencing, grading and equipment staging, all construction personnel will participate in an environmental awareness training given by a qualified biologist regarding special-status species and sensitive habitats present in the Biological Study Area (BSA). If new construction personnel are added to the Project, they must receive the mandatory training before starting work. As part of the training, an environmental awareness handout will be provided to all personnel that describes and illustrates sensitive resources (i.e., special-status plant populations and special-status wildlife habitat) to be avoided during Project construction and lists applicable permit conditions required to protect these resources. New construction personnel will receive the training from a qualified biologist or from staff deemed adequate to give the training by the qualified biologist.	Prior to and during Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD
	<u>BIO IV(a)-1b:</u> Before any Project equipment staging or ground-disturbing activity occurs, the County will ensure that appropriately sized temporary wildlife barrier fencing, buffer fencing, and/or silt fencing will be installed between the Project Site and adjacent habitats and any environmentally sensitive habitat areas (i.e., special-status plants, special-status wildlife habitat, active bird nests), as appropriate. Wildlife barrier fencing will be a minimum of 4 feet tall and made of suitable wildlife exclusion material (such as ERTECH E-Fence). As appropriate, the lower portion of barrier fence will be buried such that	Prior to Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>6 inches of the fence is below ground and at least 48 inches is above ground. Wildlife exclusion fencing will contain wildlife funnels that allow animals to leave the Project Site but not to enter it. Temporary silt fencing installed for erosion control will be 24 inches tall.</p> <p>Fencing will be installed in a manner that is consistent with applicable water quality requirements contained within the Project's Stormwater Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP). Construction personnel and construction activity will avoid areas outside the fencing. The exact location of the fencing will be determined by the resident engineer coordinating with a qualified biologist, with the goal of protecting sensitive biological habitat and water quality. Installation of fencing will occur under the supervision of a qualified biologist. The fencing will be checked regularly and maintained until all construction is complete. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until the County has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition will be shown on the final construction documents.</p>			
	<u>BIO IV(a)-1c</u> : A representative from the County will make weekly monitoring visits to construction areas occurring in or adjacent to environmentally sensitive habitat areas, (i.e., waters of the U.S. and State, special-status plants, special-status wildlife habitat). The County will be responsible for ensuring that the contractor maintains the construction barrier fencing protecting sensitive biological resources. Additionally, the County will retain a qualified biologist on-call to assist the County and the construction crew in complying with all Project implementation restrictions and guidelines.	Prior to Construction	CCCPWD Qualified Biologist	CCCPWD
	<u>BIO IV(a)-1d</u> : All temporarily disturbed areas will be returned to pre-project conditions upon completion of Project construction. These areas will be properly protected from washout and erosion using appropriate erosion control devices.	Following Construction	CCCPWD Contractor	CCCPWD
	<u>BIO IV(a)-1e</u> : The following Best Management Practices will be implemented during construction to protect water quality within the	Prior to, During, and	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>watershed:</p> <ol style="list-style-type: none"> 1) Final construction plans will depict the designated construction footprint as well as habitat to be avoided. 2) Before October 15 and/or immediately after construction is complete, stabilize exposed surfaces. 3) Temporarily affected areas will be restored to pre-Project conditions. 4) All exposed soils will be stabilized with an erosion control tackifier and will be seeded with a native seed mix with a sterilized nurse crop to reduce the effects of erosion. 5) Avoid construction within ponded or saturated areas to the maximum extent possible. 6) Staging areas will be contained within silt fencing or lined and bermed areas such that no leaks, runoff, or construction liquids could enter any drainage facilities. 7) No refueling, storage, servicing, or maintenance of equipment will take place within 50 feet of Tassajara Creek, its tributaries, or other adjacent wetland features. 8) All machinery used during construction of the Project will be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water. 9) Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) will be cleaned up in accordance with applicable local, state, and/or federal regulations. 	Following Construction		
	<p><u>BIO IV(a)-1f</u>: The County will comply with the National Pollution Discharge Elimination System (NPDES) requirements associated with construction activity as required under Section 402 of the Clean Water Act. As part of this requirement, the County will require the contractor to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). If the project qualifies for an erosivity waiver, a Water Pollution Control Program (WPCP) will be prepared. In either case, the document will include erosion control measures and construction-waste containment measures to ensure that waters of the U.S. and State are protected during and after Project construction.</p>	Prior to Construction	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>The SWPPP or WPCP will include measure to minimize offsite stormwater runoff. Components of the SWPP or WPCP will include but not be limited to:</p> <ol style="list-style-type: none"> 1) A comprehensive erosion and sediment control plan, depicting areas to remain undisturbed, and providing specifications for revegetation of disturbed areas. 2) A list of potential pollutants from building materials, chemicals, and maintenance practices used during construction, and the specific control measures to be implemented to minimize release and transport of these constituents in runoff. 3) Specifications and designs for the appropriate BMPs for controlling drainage and treating runoff in the construction phase. 4) A program for monitoring all control measures that includes schedules for inspection and maintenance, and identifies the party responsible for monitoring. 5) A site map that locates all water quality control measures and restricted areas to be left undisturbed. 			
	<p><u>BIO IV(a)-1g</u>: To prevent the accidental introduction of new invasive species into the Project Site during construction, the County will require that the Project contractor implement the following control measures:</p> <ol style="list-style-type: none"> 1) Only certified noxious weed-free erosion control materials will be used. All straw and seed material will be certified as weed-free prior to being used at the Project Site. 2) Contractor will wash all construction equipment prior to bringing it onto the job site. Inspection will ensure that equipment arrives on site free of mud and seed-bearing material. 3) Any reseeded of disturbed soil areas and newly constructed slopes will use an appropriate native seed mix. 	During Construction	CCCPWD Contractor	CCCPWD
<u>IMPACT BIO IV(a)-2</u> If present in the Project Site, the Project could impact	<p><u>BIO IV(a)-2a</u>: The following measures will be implemented to avoid impacts to special-status plants:</p> <ul style="list-style-type: none"> ▪ The County will minimize impacts to populations of 	Prior to and During Construction	CCCPWD	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
Congdon's tarplant individuals.	Congdon's tarplant in Segment 3 by establishing a work zone that avoids special-status plants to the greatest extent possible. To accomplish this measure, final design will focus on minimizing the Project footprint within areas that contain these special-status plants, as feasible. Anticipated locations of special status plants will be represented on final plans.			
	<p>BIO IV(a)-2b: Prior to any unavoidable excavation work in any areas identified during botanical surveys that support Congdon's tarplant, seeds will be collected from plants located in the Project footprint. After finished grades generally have been achieved, the collected seeds will be redistributed within areas disturbed by the Project that provide appropriate habitat for the species. Specific actions that will be employed to ensure successful establishment of Congdon's tarplant include the following:</p> <ol style="list-style-type: none"> 1) Prior to construction, all areas of permanent disturbance that are within 100 feet of Congdon's tarplants will be flagged for seed salvage. 2) Prior to other earthwork, at the appropriate time when seeds have developed but just before seeds drop, typically late summer and early fall, seeds will be collected and stored in a cool, dry location. 3) Once construction is complete in an area, seeds will be evenly spread over areas of exposed soil and raked in. 4) In areas where seed has been spread, equipment traffic will be limited, to the extent practicable, to minimize compaction. 5) Post construction, areas where seed was spread will be protected from wind and water erosion until after the next growing season (spring/summer) using typical stabilization methods. If hydroseeding is used, hydroseed will be comprised of a native seed mix with a sterilized nurse crop. 	Prior to, During, and Following Construction	CCCPWD	CCCPWD
IMPACT BIO IV(a)-3 Project construction could directly and indirectly impact California red-legged frog,	BIO IV(a)-3a: All ground-disturbing activities associated with construction of the Project will be restricted to the dry season (estimated between April 15 and October 15) to avoid the period when listed amphibians (California red-legged frog and California	During Construction	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
California red-legged frog Critical Habitat, and California tiger salamander and its habitat.	tiger salamander) could be actively dispersing through upland habitats. If construction will need to continue past October 15, to avoid potential impacts to these species a qualified biologist will be present during any work conducted after October 15 and no work will occur during rain events. Also refer to Mitigation Measure BIO IV(a)-1d.			
	<u>BIO IV(a)-3b</u> : To avoid entrapment of wildlife, all excavated steep-walled holes or trenches more than 2 feet deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday. If escape ramps cannot be provided, then holes or trenches will be covered with plywood or similar materials. Providing escape ramps or covering open trenches will prevent injury or mortality of wildlife resulting from falling into trenches and becoming trapped. The trenches will be thoroughly inspected for the presence of wildlife species at the beginning of each workday. If wildlife is discovered in the trenches work will not occur within 50-feet and the qualified biologist will be called immediately to determine if it is a special status species. Special status species will be left to leave the area on its own. Non-special status species may be removed by a qualified biologist and may require consultation with CDFW prior to removal as determined by the qualified biologist. Also refer to Mitigation Measure BIO IV(a)-3d.	Prior to and During Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD
	<u>BIO IV(a)-3c</u> : A preconstruction survey will be conducted immediately preceding initial ground disturbing activities. A qualified biologist will carefully search all suitable habitat areas within the Project Site for California red-legged frogs, California tiger salamanders, or Alameda whipsnakes. A qualified biologist will monitor all initial ground disturbance and habitat removal e.g. grading, removal of vegetation, removal of culverts or rocks that could provide habitat for California red-legged frogs, California tiger salamanders, or Alameda whipsnakes. If any California red-legged frogs, California tiger salamanders, or Alameda whipsnakes are found during these surveys, work will stop	Prior to Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	within that segment and they will be allowed to move outside the Project Site on their own. Work may resume on approval by the County Environmental Division Project Manager.			
	<p><u>BIO IV(a)-3d</u>: Following preconstruction surveys and Project initiation, it is possible that wildlife species could subsequently enter or return to the Project Site. The following measures shall be implemented to avoid disturbance or harm to these species:</p> <ol style="list-style-type: none"> 1) If any special-status species or other wildlife species, alive or dead, are observed in the Project Site during construction, construction shall cease in that segment until the qualified biologist can determine if it is a special status species and/or that it is safe to continue. 2) Non-special status species may be relocated by a qualified biologist, CDFW coordination may be required as determined by the qualified biologist. Work may resume when the wildlife is a safe distance away as determined by the qualified biologist. 3) A living special status species will be allowed to leave the site on its own and work will not resume in that segment until approved by the County Environmental Division Project Manager. 4) Any special status species found in the work area, alive or dead will be documented and reported to the wildlife agencies as appropriate by the County Environmental Division Project Manager. 	Prior to and During Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD
	<u>BIO IV(a)-3e</u> : During construction, tightly woven fiber netting (no monofilament netting) or similar material will be used for erosion control or other purposes within the Project Site to ensure that wildlife are not trapped. Coconut coir matting and burlap contained fiber rolls are an example of acceptable erosion control materials.	During Construction	CCCPWD Contractor	CCCPWD
	<u>BIO IV(a)-3f</u> : During construction, all food-related garbage will be placed in tightly sealed containers at the end of each workday to avoid attracting predators. Containers will be emptied and garbage removed from the construction site at the end of each work week. If sealed containers are not available, garbage will be removed from the	During Construction	CCCPWD Contractor	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	construction site upon completion of daily activities. All garbage removed from the construction site will be disposed of at an appropriate offsite refuse location.			
IMPACT BIO IV(a)-4 The Project has the potential to affect Western Pond Turtle habitat. Project construction could directly and indirectly impact western pond turtle individuals and will temporarily disturb western pond turtle habitat.	BIO IV(a)-4: A qualified biologist will conduct a preconstruction clearance survey for western pond turtles immediately preceding initial ground disturbing activities within the Project Site. Any western pond turtles found within the Project Site will be allowed to voluntarily move out of this area or will be captured and held by a qualified biologist for the minimum amount of time necessary to release them in suitable habitat outside the Project Site.	Prior to Construction	CCCPWD Qualified Biologist	CCCPWD
IMPACT BIO IV(a)-5 The Project could impact the burrowing owl. Project construction could directly and indirectly impact burrowing owl individuals and will permanently and temporarily impact burrowing owl habitat.	BIO IV(a)-5: The County will retain a qualified biologist to conduct a one-day preconstruction survey to locate any active burrowing owl burrows within the Project Site or within a 500-foot-wide buffer around the Project Site, if feasible. The preconstruction survey will be conducted in accordance with recommendations provided in CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) and no more than 14 days before the start of construction activities (including grading and equipment staging). If no burrowing owls or burrows exhibiting burrowing owl use (i.e., whitewash, owl pellets, feathers, or egg fragments) are detected, then construction may proceed. Preconstruction surveys must be reinitiated if more than 30 days lapse between the survey dates and construction activities. If active burrowing owls or occupied burrows are detected in the survey area, the following measures will be implemented. 1) Occupied burrows will not be disturbed during the nesting season (generally February 1–August 30). A no-disturbance buffer will be established around the burrow to avoid disturbance of nesting burrowing owls until a qualified biologist, coordinating with CDFW, determines that the young have fledged and are foraging on their own. The extent of these buffers will be determined by the biologist (coordinating with the CDFW) and will depend on the level	Prior to Construction	CCCPWD	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.</p> <p>2) If the survey finds an active burrowing owl nest in an area of permanent or temporary impact including staging areas, that cannot be avoided due to spatial restrictions, burrowing owls may be passively relocated in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012). This recommends that passive relocation occur following approval from the agencies, outside of the nesting season, and after an agency-approved biologist determined that owls have not begun laying eggs or there is not young of the year present. Per CDFW 2012, passive relocation will include the installation of one-way doors within the burrow to let owls escape, but not allow them to re-enter the burrow. Once the owls have been excluded from the burrow, it will be collapsed by hand by an agency-approved biologist. If passive relocation is necessary, artificial or natural burrows should be in close proximity (100 meters) from the eviction site.</p>			
<p>IMPACT BIO IV(a)-6 The Project could impact nesting birds and raptors. The BSA provides habitat for nesting raptors and other birds that are protected under the MBTA.</p>	<p>BIO IV(a)-6: The following will be completed to avoid potential impacts to nesting birds:</p> <p>1) If construction (including utility pole relocation, equipment staging, and vegetation removal) will occur during the breeding season for migratory birds and raptors (generally January through August), the County will retain a qualified biologist to conduct pre-construction nesting bird and raptor surveys prior to construction activities.</p> <p>2) The pre-construction nesting bird and raptor surveys will be conducted prior to the start of construction within suitable habitat in and near (within half a mile for golden eagle and 500 feet for all other raptors) the Project Site. For raptor surveys outside the Project Site where property access has not been granted, the surveying biologist will use binoculars</p>	Prior to Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>to scan any suitable nesting substrate for potential raptor nests.</p> <p>3) The surveys will be conducted no more than 14 days before the initiation of construction activities in the Project Area.</p> <p>4) The known golden eagle nesting territory near Segments 3 and 4 will be observed adequately to determine if it is active. If nesting behavior is observed and the nest is determined to be active, no construction will occur within the line of site of the nest until a qualified biologist coordinating with CDFW determines that the young have fledged and are foraging on their own.</p> <p>5) If an active bird nest is identified within the Project Area or an active raptor nest is identified in or within 500 feet from the Project Area, then a no-disturbance buffer will be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist coordinating with CDFW determines that the young have fledged and are foraging on their own. The extent of these buffers will be determined by the biologist (coordinating with the CDFW) and will depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers (generally 50 feet for passerine, 500 feet for raptors, or as agreed on during coordination with CDFW). In addition to the establishment of buffers, other avoidance measures (determined during CDFW coordination) may include monitoring of the nest during construction and restricting the type of work that can be conducted near the nest site. If no active nests are found during the preconstruction surveys, then no additional mitigation is required.</p>			
<u>IMPACT BIO IV(a)-7</u> The Project could impact the western red bat and its habitat	<u>BIO IV(a)-7</u> : A qualified biologist will conduct a preconstruction survey of all trees proposed for removal or trimming within the Project Site for the presence of bat roosts. Surveys will entail direct	Prior to Construction	CCCPWD Contractor and Qualified	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
during project construction.	inspection of trees, including around the base within piles of leaf litter, or nocturnal surveys (if not conducted during the hibernation period for bats). The survey will occur no more than 2 weeks prior to the removal or trimming of trees within the Project Site. If bats are not found and there is no evidence of use by bats, construction may proceed. If roosting habitat is present and occupied, then a qualified biologist will determine the type of roost. If roosting bats are present, measures shall be implemented to avoid or minimize disturbance to the colony. Measures may include excluding bats from the tree before their hibernation period (mid-October to mid-March) and before construction begins. Alternatively a phased approach to removal may be used: small branches and non-habitat features will be carefully removed from the tree under the supervision of a qualified biologist. The next day larger features will be carefully removed under the supervision of a qualified biologist. On the third day a qualified biologist will inspect the tree for the presence of roosting bats, if no bats are present removal can commence.		Biologist	
IMPACT BIO IV(a)-8 The Project could impact the American badger. Project construction could directly and indirectly impact American badger individuals and will temporarily impact American badger habitat. Noise and disturbance from construction activities could indirectly disrupt foraging and/or denning activities.	BIO IV(a)-8: A preconstruction survey for the American badger will be conducted within the BSA no more than 14 days prior to initial ground disturbing activities. The surveys will be conducted by a qualified wildlife biologist with experience identifying badger burrows. Any potential badger burrow identified should be clearly marked in the field and avoided if feasible. If avoidance is not feasible, the biologist will determine if the burrow is being used as a natal den (young rearing generally occurs between April and September). If young are determined to be present, the burrow will be avoided until the young vacate the burrow. If the biologist determines that the burrow is not being used for breeding, then a one way door will be installed on the burrow (upon approval by CDFW) to passively exclude the badger from the burrow. Once the badger has been excluded the burrow will be collapsed.	Prior to Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD
IMPACT BIO IV(a)-9 The Project has the potential to affect San Joaquin kit fox. Project construction could	BIO IV(a)-9: A qualified biologist will conduct a preconstruction survey no more than 30 days before the beginning of ground disturbance or any activity likely to affect San Joaquin kit fox. Where accessible, or using binoculars in inaccessible areas, the biologist will	Prior to Construction	CCCPWD Contractor and Qualified Biologist	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
<p>directly and indirectly impact San Joaquin kit fox individuals and will temporarily impact San Joaquin kit fox habitat. Noise and disturbance from construction activities could indirectly disrupt foraging and/or denning activities.</p>	<p>survey the proposed Project Site and a 200-foot buffer area around the Project Work Area to identify suitable dens (e.g., burrow, pipe, or culvert approximately 5 to 8 inches in diameter). The biologist will conduct den searches by systematically walking transects spaced 30–100 feet apart through the survey area. Transect distance should be determined on the basis of the height of vegetation such that 100% visual coverage of the Project Area is achieved. If dens are found during the survey, the biologist will map the location of each den as well as record the size and shape of the den entrance; the presence of tracks, scat, and prey remains; and if the den was recently excavated. The biologist will also record information on prey availability (e.g., ground squirrel colonies). The status of the den will also be determined and recorded. Dens may be classified in one of the following four den status categories.</p> <p>Potential den: Any subterranean hole within the species’ range that has entrances of appropriate dimensions for which available evidence is sufficient to conclude that it is being used or has been used by a kit fox.</p> <p>Known den: Any existing natural den or artificial structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records; past or current radiotelemetry or spotlighting data; kit fox sign such as tracks, scat, and/or prey remains; or other reasonable proof that a given den is being or has been used by a kit fox.</p> <p>Natal or pupping den: Any den determined to be used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice,</p>			

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	<p>however, it is difficult to distinguish between the two; therefore, for purposes of this definition either term applies.</p> <p>Atypical den: Any artificial structure that has been or is determined to be used by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings.</p> <p>After preconstruction den searches and before the commencement of construction activities, a qualified biologist will establish and maintain exclusion zones (varying between 50 and 200 feet) measured in a radius outward from the entrance or cluster of entrances of each mapped den.</p> <p>Construction activities will be prohibited or greatly restricted within these exclusion zones throughout the construction period. Only essential vehicular operation on existing roads and foot traffic should be permitted. All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited in the exclusion zones.</p>			
V. CULTURAL RESOURCES				
<u>IMPACT CUL-1</u> Development of the Project could disturb unanticipated historic or pre-historic, archaeological, or paleontological resources.	<u>CUL-1:</u> The following Best Management Practices will be implemented during Project construction to protect unanticipated historic or pre-historic, archaeological, or paleontological resources. <ol style="list-style-type: none"> 1) Contractor will be notified of the possibility of encountering historic, pre-historic, archaeological, or paleontological materials during ground-disturbing activities and will be educated on the types of historic and pre-historic Native American period archaeological materials that may be encountered. 2) If an inadvertent discovery is made, the Contractor will cease all ground-disturbing activities in the area of discovery. 3) The Contractor will immediately notify the County Public Works Department Resident Engineer who will then request a qualified archaeologist to evaluate the finding(s). 4) If the finding(s) is determined to be potentially significant, the archaeologist in consultation with the appropriate Native 	Prior to and during Construction	CCCPWD Contractor and Qualified Archaeologist	CCCPWD

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
	American tribal representative or historical society will develop a research design and treatment plan outlining management of the resource, analysis, and reporting of the find.			
IMPACT CUL-2 The Project could impact previously undiscovered human remains.	<p>CUL-2: If human remains are encountered, work within 25 feet of the discovery shall be redirected and the Contra Costa County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.</p> <p>Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the project applicant, Contra Costa County, and the Northwest Information Center.</p>	During Construction	CCCPWD Contractor and Qualified Archaeologist	CCCPWD
XII. NOISE				

Impact	Mitigation Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility
<u>IMPACT NOI-1</u> Development of the Project will result in a temporary increase in ambient noise levels during Project construction.	<u>NOI-1:</u> The project contractor shall employ the following noise-reducing practices during project construction: <ol style="list-style-type: none"> 1) Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. 2) Unnecessary idling of internal combustion engines within 100 feet of residences should be strictly prohibited. 3) Locate stationary noise generating equipment as far as possible from sensitive receptors. 4) Utilize 'quiet' air compressors and other 'quiet' equipment where such technology exists. 5) Avoid staging of construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment as far as practical from noise sensitive receptors. 6) Require all construction equipment to conform to Section 14-8.02 Noise Control, of the latest Standard Specifications. 7) Provide notification to the adjacent noise-sensitive receptors including the specific construction schedule for major noise-generating construction activities. 	During Construction	CCCPWD Contractor	CCCPWD