YOLO COUNTY
COMMUNITY SERVICES DEPARTMENT

Draft Initial Study/
Mitigated Negative Declaration
File #PW 2021-4589

County Road 98 Bike and Safety
Improvement Project, Phase II

County Work Order 4589
Federal Project Number STPL-5922(102)
August 2021 Recirculation

Table of Contents

Figures

Tables

Appendix

1. Introduction

The Yolo County Department of Community Services, Public Works Division (County), and the California Department of Transportation (Caltrans) Division of Local Assistance is proposing to construct Phase II of the County Road (CR) 98 Bike and Safety Improvement Project, which will extend improvements from the first phase of the CR 98 project (from the City of Woodland to the CR 29 / CR 98 intersection) completed in 2014, which included adding paved shoulders, clear recovery zones, and improved major intersections. The extent of Phase II will be 4.1 miles, starting from approximately 1300± feet south of the CR 98/CR 29 intersection to the Solano County Line, serving the needs of many diverse users, including farmers, aggregate suppliers and other inter-region truckers, rural residents, commuters, and bicyclists.

1.1 Regulatory Framework

The Yolo County Department of Community Services has determined that the CR 98 Bike and Safety Improvement Project, Phase II, meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a project. CEQA Guidelines Section 15378 defines a project as the following:

> *"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.*

In accordance with the CEQA (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to identify potentially significant impacts upon the environment resulting from the construction, operation, and maintenance of the CR 98 Bike and Safety Improvement Project, Phase II (Project or proposed Project). In accordance with Section 15063 of the State CEQA Guidelines, this Initial Study is a preliminary analysis prepared by the Yolo County Department of Community Services as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public, of potential environmental impacts associated with the implementation of the Project.

2. Environmental Checklist Form

Project Title	County Road 98 Bike and Safety Improvement Project, Phase II (Project)
Lead Agency Name and Address	Yolo County Department of Community Services 292 West Beamer Street Woodland, CA, 95695-2598
Contact Person and Phone Number	Lilia Razo, Senior Civil Engineer 530-666-8845
Project Location	The Project is located on County Road 98, west of the City of Davis, in Yolo County, California.
Project Sponsor's Name and Address	Nicholas Burton, Director Public Works Division Yolo County Department of Community Services 292 W. Beamer St. Woodland, CA 95695
General Plan Designation	Agriculture (AG) Public and Quasi-Public (PQ) Residential Rural (RR)
Zoning	County Road Right of Way Agricultural Commercial (A-C): Assessor's Parcel Number (APN) 037 050 07 Cities Jurisdiction (City): 036 430 46 Agricultural Intensive (A-N): 036 010 04; 036 010 05; 036 010 07; 036 010 08; 036 450 01; 036 450 02; 037 040 01; 037 040 05; 037 050 04; 037 050 05; 037 050 06; 037 050 08; 037 050 09; 037 140 06; 037 140 08; 037 140 10; 037 140 13; 037 140 14; 037 140 16; 037 140 19; 037 140 024; 037 140 25; 040 200 15; 040-200-016; 040 200 31; 040 200 32; 041 120 02; 041 120 52; 041 120 53 Public and Quasi-Public (PQP): 036 160 08; 036 160 38; 036 170 01; 036 170 02; 036 170 12; 037 190 09 Rural Residential – 2 Acre (RR-2)/Planned Development 67 (Patwin Road) (PD 67): 036 160 01; 036 160 02; 036 160 05; 036 160 06; 036 160 25; 036 160 28; 036 160 32; 036 160 33
Project Description Summary: The Yolo County Department of Community Services, Public Works Division (County), and the California Department of Transportation (Caltrans) Division of Local Assistance are proposing to implement the second phase of County Road (CR) 98 Bike and Safety	

Improvement Project, which will widen and improve shoulders along CR 98. Roundabouts will be constructed at the intersections with CR 31 (Covell Boulevard), CR 32 (Russell Boulevard), and Hutchison Drive. Implementation of the Project will require the relocation of drainage ditches and utilities outside the clear recovery zone, which will include extension, replacement, and/or relocation of existing drainage structures to accommodate the widened road. All construction staging will occur within the existing right-of-way. The purpose of the Project is to improve public safety while traveling on the County road. Construction of this Project is planned to commence in spring 2025 or later and to be completed within two construction seasons. A more detailed project description is provided in Section 4 of this document.

Surrounding Land Uses and Setting: Land uses/types surrounding (within 5 miles) the Project area consist of oak-foothill pine, valley foothill riparian, undeveloped grazing land, orchards, agricultural facilities, hiking trails, other park uses, open space, and a few rural residences.

Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement.):

- Caltrans — National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Fish and Wildlife Service – Section 7 Endangered Species Act Consultation
- U.S. Army Corps of Engineers — Section 404 Clean Water Act Nationwide Permit
- Central Valley Regional Water Quality Control Board — Section 401 Water Quality Certification
- State Water Resources Control Board – Section 402 NPDES Construction General Permit
- California Department of Fish and Wildlife — Section 1602 Streambed Alteration Agreement
- Yolo Habitat Conservancy

Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?:

The Native American Heritage Commission (NAHC) was contacted to request sacred lands file search and contact list. On April 11, 2019, the NAHC returned a negative result for sacred lands within the Project's Area of Potential Effects (APE). Additionally, the NAHC listed five Native American Tribes who may have knowledge of sites or traditionally cultural properties that may be affected by Project-related activities. All tribes listed, and including those Tribes requesting notification in Yolo County, were delivered a letter via email on September 27, 2019, giving formal notice and invitation by Yolo County to initiate SB 18/AB 52 consultation on the proposed Project and to request participation of interested parties.

The Yocha Dehe Wintun Nation responded via letter dated October 7, 2019, indicating a cultural interest and authority in the proposed Project area. The Yocha Dehe Wintun Nation indicated they were not aware of any known cultural resources near the Project site but recommends cultural sensitivity training for any pre-project personnel.

As of the date of developing this document, no additional responses from Native American Tribes have been received.

2.1 **Project Description**

Location

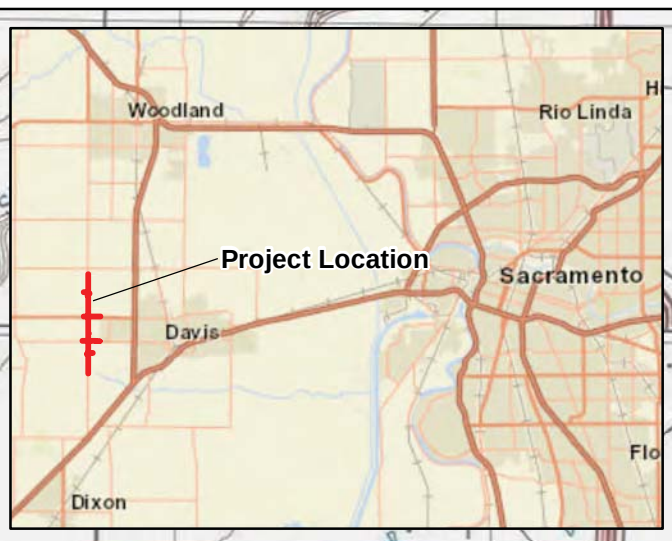
The Project is located within unincorporated Yolo County, California on County Road (CR) 98 from approximately 1300 feet south of CR 29 to the Solano County Line (Figures 1 and 2). The Project is located within the US Geological Survey (USGS) "Merritt" Quadrangle, Sections 1, 12, 13 and 24, Township 08N, Range 01E, Sections 6, 7, 18, and 19, Township 08N, Range 02E, Section 31, Township 09N, Range 02E, and Section 36, Township 09N, Range 01E.

History

The first phase of the CR 98 Bike and Safety Improvement Project was completed in 2014 and consisted of widening and improving shoulders between the City of Woodland boundary and the CR 98 and CR 29 intersection in an effort to provide safer access and improved visibility for vehicles and bicyclists. Three years following the completion of Phase I of the project, the improved roadway saw a 70% reduction in non-intersection accidents. The second proposed phase of this project will continue southward toward the Yolo County line. Phase II will implement shoulder widening as well as intersection improvements in an effort to reduce intersection-related accidents and injuries.

Project Purpose and Need

The purpose of the Project is to improve safety along the County Road (CR) 98 corridor for automobiles, farm equipment, farm-to-market trucking, aggregate product suppliers, commuters, residents, and bicyclists. The Project is the second phase of the overall CR 98 Bike and Safety Improvement Project, and will rehabilitate the entire width of the cross roads as part of the intersection improvements from CR 98 to an approximate length of 1,000 feet on either direction, except on the eastern segments of CR 31 and CR 32, which will extend to the City of Davis limits.



Project Boundary - (106.7 acres)

USGS 7.5' Quad: Merritt
T08N, R01E, Sections 1, 12,13,24,
T09N, R02E, Section 31,
T08N, R02E, Sections 6, 7,18,19,
T09N, R01E, Section 36
UTM Zone 10

1:24,000
0 0.25 0.5 Miles
Data Sources: ESRI, USGS, Yolo County

NORTH

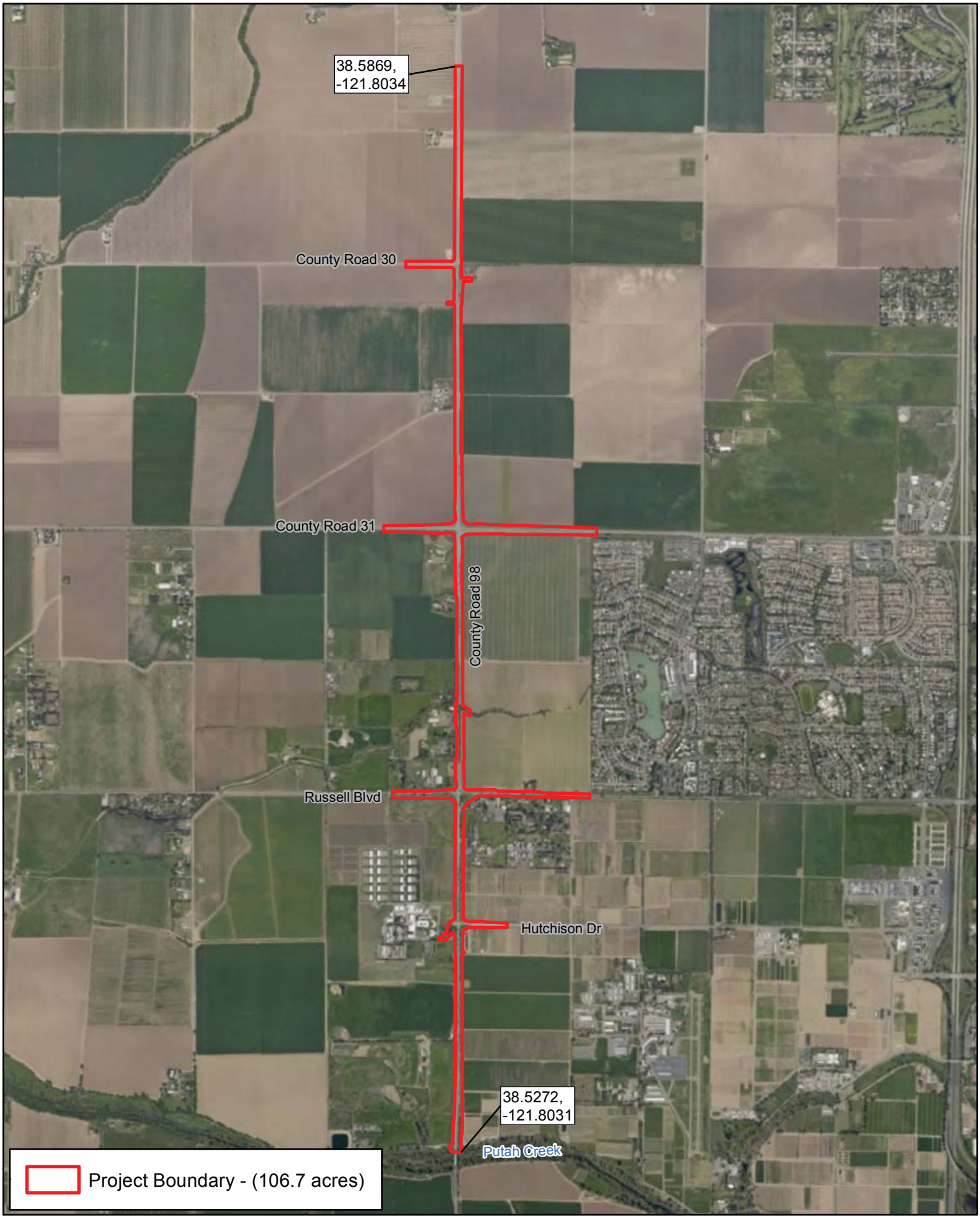
County Road 98 Bike and Safety Improvements Phase II

Project Location Map

Figure 1

gallaway ENTERPRISES

GE: #18-119 Map Date: 08/20/2020



NORTH

1:30,000

0 1,000 2,000 Feet

Data Sources: ESRI, Yolo County, Maxar 07/13/2017

County Road 98 Bike and Safety Improvements Phase II
Aerial Photograph
Figure 2

gallaway ENTERPRISES

GE: #18-119 Map Date: 08/20/2020

Project Description

Yolo County (County) is proposing to construct Phase II of the CR 98 Bike and Safety Improvement Project, which will extend improvements from the first phase of the CR 98 project completed in 2014, which included adding paved shoulders, clear recovery zones, and improved major intersections between the City of Woodland and CR 29/CR98 intersection. The extent of Phase II will be 4.1 miles, starting from approximately 1300± feet south of the CR 98/CR 29 intersection to the Solano County Line serving the needs of many diverse users, including farmers, aggregate suppliers, and other inter-region truckers, rural residents, commuters, and bicyclists.

Construction of the proposed Project will result in the addition of eight-foot paved shoulders as shared bike lanes, and an additional twelve-foot clear recovery zone along the entire length of both sides of the existing two-lane arterial road. The Project also proposes to construct a Class 1 shared path to close the gap between the existing Class 1 bike paths on Russell Blvd and the Class 2 bike lanes on Hutchison Drive on the University of California, Davis campus. The Project will reconstruct and improve the road structure throughout the extent of the Project. Roundabouts will be constructed at the intersections with CR 31, CR 32, and Hutchison Drive, calming entering speeds at the intersections and improving safety for all users. Implementation of the Project will require the relocation of drainage ditches and above-ground utilities outside the clear recovery zone, which will include extension, replacement, and/or relocation of existing drainage structures to accommodate the widened road. This will also include relocation and/or abandonment of underground utilities, where they are in conflict with the Project. The Project may include the installation of high-speed internet as well as relocation of AT&T, PG&E (electric & gas), Wave, UC Davis facilities, and Slawson gas facilities.

All construction staging will occur within County right of way (ROW). Acquisition of ROW and Temporary Construction Easements (TCE) will necessitate coordination with affected property owners, restoration of temporarily impacted infrastructure, and compensation to landowners and easement holders to replace losses. Acquisition of property under a farmland conservation easement will necessitate coordination with the property owners as well as Yolo Land Trust.

The drainage slough/ditch on the east side of CR 98 north of CR 32 will be reconstructed and relocated to the east. Native trees will be planted along the corridor, and off-site to replace trees that will be removed by the Project.

Site Restoration

The construction documents will identify the locations of sensitive natural communities, roadside trees, shrubs, and other plants that are not to be removed or damaged, and all other improvements or facilities within or adjacent to the roadway. Suitable safeguards would be installed to protect existing features from injury or damage. Environmentally Sensitive Area (ESA) fencing will be used to delimit work areas in the vicinity of protected resources. Areas temporarily disturbed by construction will be restored and revegetated with native plant species. If an object or facility is damaged as a result of construction activities, the contractor or other Project-related responsible party will provide restoration that meets the equal or above quality conditions of the damaged property before the onset of work or degrading incident.

Yolo HCP/NCCP Avoidance and Minimization Measures

The proposed Project is required to follow the conditions of the Yolo HCP/NCCP with the incorporation of Avoidance and Minimization Measures (AMMs) that are applicable to the proposed Project activities. The following AMMs were identified during the development of the Natural Environment Study prepared for the Project. See Appendix A: Natural Environment Study.

- **AMM1 - Establish Buffers**
- **AMM2 - Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces**
- **AMM3 - Confine and Delineate Work Area**
- **AMM4 - Cover Trenches and Holes during Construction and Maintenance**
- **AMM5 - Control Fugitive Dust**
- **AMM6 - Conduct Worker Training**
- **AMM7 - Control Nighttime Lighting of Project Construction Sites**)
- **AMM8 - Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas**
- **AMM9 - Establish Buffers around Sensitive Natural Communities**
- **AMM10 - Avoid and Minimize Effects on Wetlands and Waters**
- **AMM12 - Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle**
- **AMM14 - Minimize Take and Adverse Effects on Habitat of Western Pond Turtle**
- **AMM16 - Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite**
- **AMM21 - Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird**

The application of the aforementioned AMMs and integration within specific Mitigation Measures is described in detail in the Biological Resources section of this document.

3. Environmental Factors Potentially Affected

This Initial Study has determined that, in the absence of mitigation, the proposed Project could have the potential to result in significant impacts associated with the factors checked below. Mitigation measures are identified in this Initial Study that would reduce all potentially significant impacts to less-than-significant levels.

	Aesthetics		Land Use and Planning
	Agricultural Resources		Mineral Resources
	Air Quality		Noise
✓	Biological Resources		Population and Housing
	Cultural Resources		Public Services
✓	Tribal Cultural Resources		Recreation
	Energy		Transportation/Traffic
	Geology and Soils		Utilities and Service Systems
	Greenhouse Gas Emissions		Wildfire
	Hazards and Hazardous Materials	✓	Mandatory Findings of Significance
	Hydrology and Water Quality		None Identified

4. Determination

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 the Project-specific mitigation measures described in Section III have been added to the Project. 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 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 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 mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature _____ **Date** 8/20/2021

Name and Title: Stephanie Cormier, Principal Planner

5. Evaluation of Environmental Impacts

- Responses to the following questions and related discussion indicate if the proposed Project will have or potentially have a significant adverse impact on the environment.

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by referenced information sources. A "No Impact' answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors or general standards.

- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- Once it has been determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there is at least one "Potentially Significant Impact" entry when the determination is made an EIR is required.

- Negative Declaration: "Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The initial study will describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 4, "Earlier Analysis," may be cross-referenced).

- Earlier analyses may be used where, pursuant to tiering, a program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)].

- Initial studies may incorporate references to information sources for potential impacts (e.g. the general plan or zoning ordinances, etc.). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list attached, and other sources used or individuals contacted are cited in the discussion.

- The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

5.1 **Aesthetics**

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

Environmental Setting

The following information is from the 2009 County General Plan CEQA Environmental Impact Report (EIR, Yolo County 2009b). The General Plan EIR characterizes the unincorporated area of the County as having seven separate subareas of distinct natural resources, geographic, or developed qualities in order to describe the varying visual and scenic resources found within the County.

Yolo County is predominantly rural, having an agricultural character throughout most of the eastern portion of the County and a more topographically varied foothill/mountain character in the western portion of the County.

The Valley Floor subarea where the proposed Project is located generally includes those lands south of the Cache Creek subarea and north of the Putah Creek/Lake Berryessa subarea as well as lands east of the Dunnigan Hills subarea and west of the Sacramento River subarea. The area includes the City of Woodland and the City of Davis, as well as the towns of Esparto and Madison and the Monument Hills community. These lands are almost entirely agricultural in land use and include vast stretches of alfalfa, rice, and tomato fields as well as other varieties of field crops and tree crops. The landscape within this subarea is predominantly flat, with expansive views of cultivated fields uninterrupted by natural or constructed landforms or significant development. Adding to the visual character of this subarea are intermittent farm implement storage and agricultural industrial buildings, including barns, processing facilities, and storage areas, which give the Valley Floor subarea a truly rural character.

Yolo County has no designated federal or State Scenic Highways. There are no local scenic highways designated by Yolo County within the Project area (Yolo County 2009a).

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The landscapes and visual features of the County are of predominantly local importance and the County does not host significant numbers of viewers (Yolo County 2009a). The County's scenic areas, vistas, and views are predominantly accessible by the County's locally designated scenic highways. The Project is not located on or near a County designated scenic highway. Views form the Project location include Putah Creek at the southernmost end and open views of agricultural fields. Construction of roadway improvements is anticipated to require the removal of native and non-native trees. The final tree removal will be determined by the County during final design.

The proposed vegetation removal will result in a minor change to the views of the Project site. Upon completion of the Project, existing views will be maintained. The proposed improvements are consistent with the existing land use and aesthetic features of the area. Proposed roadway improvements will not result in a substantial adverse impact to any scenic vistas. Project impacts are less than significant.

b) ***Less Than Significant Impact.*** Yolo County has no designated federal or State Scenic Highways. See also discussion under item a) above.

c) ***Less Than Significant Impact.*** See discussion of a) and b) above.

d) ***Less Than Significant Impact.*** The Project may include the use of pole mounted lighting to provide safety and security for those using the roadway corridor. Any lighting installed would be downward facing with read cut-off panels to prevent light spillage. Project impacts are less than significant.

Mitigation Measures: None required.

5.2 **Agricultural and Forestry Resources**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Setting

The Project is located in an agricultural area of County jurisdiction. There is farmland designated as Prime farmland in the Project area as defined by the Farmland Mapping and Monitoring Program (FMMP). There are also parcels within the Project area that have Williamson Act contracts. See Appendix B: Farmlands Study Report for details.

It is anticipated that no Williamson Act contracts will be terminated, although parcels currently under contract may require minor contract revisions, due to the changes to access for adjacent property owners, temporary construction easements, and minor loss of farmland resulting from right of way acquisitions. The remaining acreage from each parcel under contract will continue to meet Yolo County's criteria for eligibility to remain enrolled in the Williamson Act.

Government Code §51295 states that when a public improvement project acquires or modifies only a portion of a parcel of land subject to a Williamson Act contract, the contract is deemed null and void only as to that portion of the contracted farmland taken. The remaining land continues to be subject to the contract unless it

is adversely affected with property acquired by eminent domain or in lieu of eminent domain. Section 15206(b)(3) of the California Environmental Quality Act Guidelines identifies the cancellation of 100 acres or more of an open space contract under the Williamson Act by a project as constituting a project of statewide, regional, or areawide significance. Although the Project bisects land that is enrolled in the Williamson Act, the Project only affects 10.18 acres of Williamson Act contract land. These impacts to lands enrolled in the Williamson Act affect 15 parcels with impacts ranging from 0.14 acres to 1.99 acres. As stated above, it is anticipated that no Williamson Act contracts will be terminated, although parcels currently enrolled will require minor revisions to their contracts due to the new right of way acquisitions resulting from fill slope intrusions onto adjoining properties.

The project will not result in any impacts to agricultural improvements that might be needed for the cultivation of the affected parcels, such as wells or canals. Title 49 of the Code of Federal Regulation Part 24 Uniform Relocation Assistance and Real Property Acquisition Act (URA) for Federal and Federally-assisted Programs (section 24.102 Basic Acquisitions policies or section 24.103 Criteria for appraisals) would apply to the compensation for improvements and the need to pay for salvage value. These sections would apply to the compensation to landowners for any right of way acquisition as a result of project activities. Accordingly, the landowners would be compensated to replace any affected improvements.

When farmland is affected on State-funded projects, Caltrans consults with the U.S. Department of Agriculture's Natural Resources Conservation Service. Caltrans uses the U.S. Department of Agriculture's Farmland Conversion Impact Rating Form NRCS-CPA-106 to determine impacts to farmland. The evaluation form is submitted to the U.S. Department of Agriculture's Natural Resources Conservation Service, which assigns a score for a site's relative value. The Natural Resources Conservation Service returns the evaluation form, and Caltrans completes a site assessment with the score assigned from the Natural Resources Conservation Service. A combined score in part V and part VI under 160 indicates no further consideration for protection. A total score of between 160 and 220 requires two alternative corridors to be evaluated. The proposed Project will permanently impact 16.97 acres of prime farmland, which includes 3.19 acres containing Farmland Conservation Easements. A Farmland Conversion Impact Rating Form was submitted to Caltrans to utilize and consult with the Natural Resource Conservation Service. Based on the amount of impacts to farmlands, the U.S. Department of Agriculture's Farmland Conversion Impact Rating was 175, above the 160 score threshold for minimal impacts. The Farmland Protection Policy Act (Title 7 Code of Federal Regulation 658.4(c)(3)), states that "sites receiving scores totaling 160 or more be given increasingly higher levels of consideration for protection," and therefore a review of alternatives was required to evaluate impacts to farmlands.

The alternatives analysis for farmland impacts included the review of two alternatives and a no-project alternative. The first alternative (Proposal/Alternative B) considered for this plan, but dropped from consideration, was to utilize standard drainage ditch slopes which resulted in a larger impact to farmlands and associated resources. Proposal/Alternative B resulted in 25.63 acres of impacts to farmlands as shown on Exhibit B. Alternative A was developed to increase the slope of the drainages with the intended goal of reducing the total impact on the surrounding farmland. Implementing this alternative would not have a negative impact on the purpose of this project to improve public safety by widening and improving the shoulders along County Road (CR) 98. Increasing the slope of the drainages reduces the impacts to FMMP farmland by 8.66 acres. The third alternative is a no project alternative. The no project alternative does not meet the operational and safety goals established in the County's General Plan or SACOG's Metropolitan

Transportation Plan, to provide a corridor that meets the travel demand model and vehicle miles travelled (VMT) reduction and therefore does not meet the project purpose and is removed from consideration.

After review of the alternatives analysis for impacts to farmlands, NRCS determined that no further evaluation is required and no further steps were needed to mitigate or reduce impacts to agricultural lands.

The Yolo County Agricultural Conversion and Mitigation Program (Yolo County Ordinance §8-2404) requires mitigation for conversion of agricultural lands to predominately non-agricultural use. Section 8-2404 (c)(2)(ii) of the ordinance allow for facilities and infrastructure that do not generate revenue, such as this project, to be exempt from farmland conversion mitigation requirements.

In determining whether an impact is considered substantial or not, the County has discretion in choosing a threshold of significance. Yolo County does not have a specific threshold of significance to assess potentially significant impacts to farmland for purposes of analysis under CEQA. However, the County has established different criteria for protecting farmland in different contexts. First, the County's Agricultural Conservation and Mitigation Program (County Code Sec. 8-2.404 & 405) sets an impact threshold of 20 acres for projects that require the acquisition of a permanent conservation easement, rather than the payment of in-lieu fees. Second, the County's Agricultural Zoning Regulations (County Code Sec. 8-2.302) sets forth minimum parcel size for new parcels in the agricultural zones of 40 acres for irrigated parcels in permanent crops, 80 acres for irrigated parcels, and 160 acres for uncultivated and not irrigated. Similarly, the County does not allow new Williamson Act contracts that are less than 40 acres of irrigated farmland; 80 gross acres where the soils are capable of cultivation but are not irrigated; and 160 acres where the soils are not capable of cultivation. These thresholds show that parcels typically require a certain minimum size to contain viable farming operations. Finally, the County's Williamson Act Guidelines determine a project's compatibility with agriculture based on the principles of compatibility in Government Code section 51238.1:

> (1) The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.
>
> (2) The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
>
> (3) The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

Accordingly, significance under CEQA can be evaluated through a three-step evaluation: 1) does the Project remove more than 20 acres of farmland, 2) does the Project reduce the irrigated farmland of any given parcel to less than 40 acres, or 3) are there aspects of the project that are incompatible with agriculture on the affected parcel(s) or neighboring farmland?

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The proposed Project will permanently impact 16.97 acres of land designated as Prime Farmland by the California Department of Conservation Farmland Mapping & Monitoring Program (FMMP) which includes 10.18 acres of land that falls under the Williamson Act and 3.19 acres of Farmland Conservation Easements. There is no farmland designated as "Unique" or "Of Statewide Significance." The permanent impacts to farmland do not remove more than 20 acres of farmland, do not reduce the size of a parcel to the 40 acres applicable to irrigated farmland, and will not significantly compromise the long-term productive agricultural capability of any parcel, displace any current or foreseeable farming operations, or remove adjacent agricultural or open space land. Due to the relatively minor amount of farmland conversion, this impact is considered to be less than significant.

b) ***Less Than Significant Impact.*** The affected parcels within the Project area are zoned by Yolo County as Agricultural Intensive (A-N) and are designated for Agriculture (AG) in the Yolo County General Plan. Roads are not separately zoned and are included in any zone without the need for a special designation. Construction activities are expected to permanently impact approximately 16.97 acres of agricultural land, which includes 10.18 acres of land enrolled in the Williamson Act and 3.19 acres of farmland protected under conservation easement(s). Based on data from the California Department of Conservation, the proposed Project will permanently impact 10.18 acres of Prime Farmland with Williamson Act contracts. The removal of Williamson Act contracted land to accommodate the Project is authorized by the California Land Conservation Act, and therefore does not conflict with the Williamson Act (California Department of Conservation 2020).

c) ***No Impact.*** The proposed Project consists solely of roadway improvements and does not include any rezoning activities.

d) ***No Impact.*** The proposed Project will not result in the loss of conversion of forest land.

e) ***No Impact.*** The Project does not include other activities that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Mitigation Measures: None required

5.3 **Air Quality**

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

Environmental Setting

The Project area is located in the Sacramento Valley Air Basin (SVAB). The air quality of a region is determined by the air pollutant emissions (quantities and type of pollutants measured by weight) and by ambient air quality (the concentration of pollutants within a specified volume of air). Air pollutants are characterized as primary and secondary pollutants. Primary pollutants are those emitted directly into the air, for example carbon monoxide (CO), and can be traced to a single pollutant source. Secondary pollutants are those pollutants that form through chemical reactions in the atmosphere, for example reactive organic gasses (ROG) and nitrogen oxides (NO_X) combine to form ground level ozone, or smog.

Congress established much of the basic structure of the Clean Air Act in 1970, and made major revisions in 1977 and 1990. The Federal Clean Air Act established national ambient air quality standards (NAAQS). These standards are divided into primary and secondary standards. Primary standards are designed to protect public health and secondary standards are designed to protect other values. Because of the health-based criteria identified in setting the NAAQS, the air pollutants are termed "criteria" pollutants. California has adopted its own, more stringent, ambient air quality standards (CAAQS). Table 2 lists the SVAB attainment status for federal and state criteria pollutants.

Table 1. Attainment Status for SVAB in Yolo County

Pollutant	National Designation	State Designation
Ozone	Nonattainment (8 hr.)	Nonattainment-Transitional
PM_{10}	Unclassified	Nonattainment
$PM_{2.5}$	Unclassified/ Attainment	Unclassified
CO	Unclassified/ Attainment	Attainment
NO_2	Unclassified/ Attainment	Attainment
SO_2	Unclassified/ Attainment	Attainment
Sulfates	NA	Attainment
Lead	Unclassified/ Attainment	Attainment
Hydrogen Sulfide	NA	Unclassified
Visibility Reducing Particles	NA	Unclassified

(Source: CARB 2020)

Yolo County is currently in nonattainment status for the 8-hour ozone NAAQS. The County is in nonattainment-transitional status for the ozone and nonattainment status for the PM10 CAAQS.

The Yolo-Solano Air Quality Management District (YSAQMD) administers the state and federal Clean Air Acts in accordance with state and federal guidelines. The YSAQMD regulates air quality through its district rules and permit authority. It also participates in planning review of discretionary project applications and provides recommendations. The following YSAQMD rules may apply to the Project:

- **Rule 2.3 Visible Emissions:** The purpose of this rule is to limit the emissions of visible air contaminants to the atmosphere.
- **Rule 2.5 Nuisance:** Prohibits the discharge of air containments which cause injury, detriment, nuisance, or annoyance.
- **Rule 2.11 Particulate Matter:** The purpose of this rule is to protect the ambient air quality by establishing a particulate matter emission standard.
- **Rule 2.28 Cutback and Emulsified Asphalts:** The purpose of this Rule is to limit the emissions of organic compounds from the use of cutback and emulsified asphalts in paving materials, paving, and maintenance operations.
- **Rule 2.32 Stationary Internal Combustion Engines:** The purpose of this Rule is to limit the emission of oxides of nitrogen (NOx) and carbon monoxide (CO) from stationary internal combustion engines.
- **Rule 9.8 Stationary Internal Combustion Engines:** The purpose of this Rule is to limit asbestos emissions to the atmosphere from serpentine rock by prohibiting the use or sale of serpentine rock containing more than one percent (1%) asbestos for surfacing applications.

The YSAQMD sets threshold levels for use in evaluating the significance of criteria air pollutant emissions from project-related mobile and area sources in the *Handbook for Assessing and Mitigating Air Quality Impacts* (the Handbook, YSAQMD 2007). The Handbook identifies the following significance thresholds for use in evaluating criteria air pollutant emissions from project-related activities.

- Reactive Organic Gases (ROG) 10 tons per year (approx. 54.8 pounds per day)
- Oxides of Nitrogen (NOx) 10 tons per year (approx. 54.8 pounds per day)
- Particulate Matter (PM10) 80 pounds per day
- Carbon Monoxide (CO) Violation of State ambient air quality standard

The Project will not increase the capacity of CR 98. Since the Project does not increase the capacity of CR 98, the Project will not result in increased operational vehicular emissions. The air quality analysis below is focused on potential construction related impacts.

Construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM), Version 9.0.0 (Appendix C). The RCEM was developed to estimate emissions from linear projects types including road and bridge construction. The RCEM divides the Project into four 'Construction Periods':

- Grubbing/Land Clearing
- Grading/Excavation
- Drainage/Utilities/Sub-Grade
- Paving

Based on similar road projects, the assumptions presented in Table 2 regarding type of construction equipment and use duration were used in the RCEM. Other project assumptions used in the RCEM include a total ten-month construction schedule starting in 2025, and equipment assumed to run eight hours per day Results of the RCEM based on the Project assumptions are in Table 3.

Table 2. Construction Equipment and Use Assumptions.

Construction Period	Equipment	
	Quantity (Assumed Running Hrs Per Day)	**Type**
Grubbing/ Land Clearing	1(8) 2(8) 9(8)	Crawler Tractors Excavators Signal board
Grading/Excavation	1(8) 3 (8) 2(8) 2(8) 1(8) 2(8) 9(8) 4(8)	Crawler Tractors Excavators Graders Roller Rubber Tired Loader Scrapers Signal board Tractor/Loader
Drainage/Utilities/Sub-Grade	1(8) 1(8) 1(8) 1(8) 1(8) 1(8) 1(8) 9(8) 3(8)	Air Compressor Generator Set Grader Plate Compactor Pump Rough Terrain Forklift Scrapers Signal Board Backhoe
Paving	1(8) 1(8) 2(8) 9(8) 3(8)	Paver Paving Equipment Roller Signal Board Tractor/Loader

Table 3. Estimated Construction Emissions with Mitigation Options

Project Phases	ROG lbs/day	NOx lbs/day	PM10 Total lbs/day	CO lbs/day
Grubbing/ Land Clearing	1.3	10.04	10.47	12.56
Grading/excavation	4.54	41.10	11.74	45.05
Drainage/utilities/sub-grade	2.94	25.41	11.07	30.06
Paving	1.61	13.41	0.66	20.16
Maximum lbs/day	4.54	25.41	11.74	45.05
Significance Threshold (tons/year)	*10*	*10*	--	--
Significance Threshold lbs/day	*54.8*	*54.8*	*80*	--
Significant?	**No**	**No**	**No**	***N/A***

Notes: Data entered to emissions model: Project Start Year: 2025; Project Length (months): 10; Total Project Area (acres): 106.7; Total Soil Imported/Exported (yd^3/day): 20. PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures. Total PM10 emissions are the sum of *exhaust* and *fugitive dust* emissions.

Potential Environmental Effects

a) ***No Impact.*** A project is inconsistent with the applicable air quality plan if it would result in population and/or employment growth that exceeds growth estimated in the applicable air quality plan. The proposed Project does not include development of new housing or employment centers and would not induce population or employment growth; therefore, the proposed Project would not conflict with or obstruct the implementation of any air quality plan.

b) ***Less Than Significant Impact.*** In the Project area, Yolo County is currently in nonattainment status for the 8-hour ozone NAAQS as well as the ozone and PM10 CAAQS. Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. The RCEM estimates are below the Yolo County CEQA significance threshold of 10 tons per year (54.8 lbs per day) each for ROG and NOx and 80 lbs/day PM_{10}. The Project would not generate additional traffic on CR 98, would not affect intersection operations, and would not result in a potential violation of the CO standard. This impact is considered less than significant

c) ***Less Than Significant Impact.*** Sensitive individuals refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Sensitive land uses occur where sensitive individuals are most likely to spend time (e.g. schools and schoolyards, parks and playgrounds, day care centers, nursing homes, hospitals, and residential communities). Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution.

The Project is located west of the City of Davis. The site abuts small residential communities, especially along Russell Boulevard, and is located about a half-mile west of the Stonegate subdivision. Within the Stonegate subdivision, there is a small park, Stonegate Country Club, and a daycare center. The Project area abuts the UC Davis Putah Creek Riparian Reserve and its Pedrick Road Trailhead at the southern end of the Project. No other potential sensitive land uses occur within one mile. Sensitive individuals who utilize these facilities have the potential to be exposed to PM10, PM2.5, CO, ROG, and NOx during construction. Adherence to the YSAQMD rules (Rules 2.3, 2.5, 2.11, 2.28, 2.32, and 9.8 as applicable) will limit potential air quality impacts on sensitive receptors. These impacts are considered less than significant.

d) ***Less Than Significant Impact.*** Construction activities would involve the use of construction equipment, which have distinctive odors. Odors from construction activities are considered less than significant because of the limited number of the public affected and the short-term nature of the emissions. The proposed Project would not result in increased production of odors causing compounds beyond the construction period.

Mitigation Measures: None required.

5.4 **Biological Resources**

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

Environmental Setting

Potential impacts to biological and wetlands resources were evaluated in the following Project documents:

- **Natural Environment Study (NES):** The NES is a standard Caltrans report format for documenting and evaluating the potential Project impacts to biological resources (Gallaway Enterprises 2020a).
- **Biological Assessment (BA):** The BA is a standard United States Fish and Wildlife (USFWS) report format for documenting and evaluating the potential Project impacts to federally listed species (Gallaway Enterprises 2020b).
- **Draft Delineation of Waters of the United States**: This report evaluates and delineates wetland and other waters of the U.S. in the Project area (Gallaway Enterprises 2020c).

The documents conclude the following regarding biological resources:

- The Project area contains one (1) elderberry shrub that potentially contains suitable habitat for the federally listed valley elderberry longhorn beetle (VELB). The Project will have no effect on any other federally listed species or designated critical habitat.

- Potentially suitable habitat for other special-status wildlife species and wildlife species covered under the Yolo HCP/NCCP including western pond turtle (*Emys marmorata*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), tricolored blackbird (*Agelaius tricolor*), northern harrier (*Circus hudsonius*), and nesting migratory birds and raptors, occurs within or adjacent to the Project area.
- The Project area does not provide suitable habitat for special-status plant species.
- The Project will result in impacts to jurisdictional Waters of the United States (WOTUS) under §404 of the Clean Water Act (CWA).
- Permits and authorizations required for the Project include a §404 CWA Nationwide Permit from the U.S. Army Corps of Engineers (Corps), a §401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), a National Pollutant Discharge Elimination System (NPDES) Permit from the RWQCB, and a Fish and Game Code §1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). The Project will seek coverage under the Yolo County Habitat Conservation Plan & Natural Community Conservation Plan (Yolo HCP/NCCP).

Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP)

The Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP) is a comprehensive, county-wide plan to provide for the conservation of 12 sensitive species and the natural communities and agricultural land on which they depend, as well as a streamlined permitting process to address the effects of a range of future anticipated activities on these 12 species. The Yolo HCP/NCCP refers to the range of future anticipated activities as *covered activities* and the 12 sensitive species covered by this HCP/NCCP as *covered species*. The Yolo HCP/NCCP will improve habitat conservation efforts in Yolo County; encourage sustainable economic activity; and maintain and enhance agricultural production.

The Yolo County HCP/NCCP Section 4.3, Avoidance and Minimization Measures (AMMs), describes conditions that project proponents must adopt to receive coverage under the Yolo HCP/NCCP. These avoidance and minimization measures specify how project proponents will avoid and minimize take of covered species during implementation of covered activities and are referred to herein as AMMs. Section 4.3.1, General Project Design, describes AMMs that apply to the design of all development projects. Section 4.3.2, General Construction and Operations and Maintenance, describes AMMs that apply to all construction and operations, and maintenance activities. Section 4.3.3, Sensitive Natural Communities, describes AMMs that are specific to rare or sensitive natural communities, such as the fresh emergent wetland natural community and other natural communities associated with aquatic features, and therefore warrant specific avoidance and minimization measures. Section 4.3.4, Covered Species, describes AMMs that are specific to each covered species.

Physical Conditions

The Project area is located within the Sacramento Valley, west of Davis in unincorporated Yolo County, California. The Project area is composed primarily of existing asphalt roadway and gravel road shoulders. Land within the Project area that occurs outside of the gravel road shoulders is primarily composed of agricultural land and rural residences with associated planted trees and landscape plants. Soils within the Project area consist of silty clay loam. The average annual precipitation for the area is 17.55 inches and the

average temperature is 60.4° F (Western Regional Climate Center 2020). The Project area occurs at an elevation of approximately 70 feet above sea level and is sloped between 0 and 2 percent.

There are several drainages present within the Project area (See Appendix D: Draft Delineation of Waters of the U.S. Map). The Project limits terminate just before Putah Creek at the south end of the Project area. All of the drainages present within the Project area are man-made or man-altered and their hydrology is influenced by agriculture. There is one (1) wetland feature, a pond, present within the Project area.

Biological Conditions

Land cover types delineated by the Yolo HCP/NCCP within the Project area are Lacustrine and Riverine, Deciduous Fruits/Nuts, Field Crops, Grain and Hay Crops, Grassland Alliance, Great Valley Oak Riparian, Semi agricultural, Urban, and Vegetated Corridor. The Project area is also located within 100 feet of designated Lacustrine and Riverine land cover type at the southern end of the Project, where the Project terminates within 100 feet of Putah Creek. The existing roadway is not considered habitat.

Per the Project NES, the Project has the potential to affect five (5) HCP/NCCP covered species:

- Valley elderberry longhorn beetle (VELB, *Desmocerus californicus dimorphus*), federally listed as threatened
- Western pond turtle (*Emys marmorata*), California Species of Special Concern
- Swainson's hawk (*Buteo swainsoni*), California listed as threatened
- White-tailed kite (*Elanus leucurus*), California Fully Protected species
- Tricolored blackbird (*Agelaius tricolor*), California listed as threatened

The Project also has the potential to affect nesting migratory birds and raptors protected by the Migratory Bird Treaty Act (MBTA) and northern harrier (*Circus hudsonius*), a California Species of Special Concern.

A comprehensive list of species that are known to occur in the region and were evaluated for their potential to occur in the Project area is included in the NES (Appendix A). Field surveys conducted by Conservancy-approved qualified biologists identified the presence of habitat that could support the wildlife listed above.

Yolo HCP/NCCP Designated Land Cover Types within the Project Area

Fresh Emergent Wetland Sensitive Natural Community: Freshwater Marsh Alliance

Freshwater Marsh Alliance is a subset of the Fresh Emergent Wetland Sensitive Natural Community (SNC) as defined by the Yolo HCP/NCCP. Freshwater emergent wetland vegetation occurs along streams and rivers and at the margins of ponds with some areas of open water, dominated by bulrushes and cattails. There is one (1) wetland feature present near the western boundary of the Project area, south of CR 32, which is considered Freshwater Marsh Alliance per the Yolo HCP/NCCP. This wetland area is heavily vegetated with freshwater emergent wetland vegetation, including cattails (*Typha* sp.). This area is a man-made detention pond, built by U.C. Davis, with water diverted from the existing canal to the north. The Freshwater Marsh Alliance land cover type within the Project area could potentially support the Yolo HCP/NCCP-covered tricolored blackbird and western pond turtle.

Lacustrine and Riverine

The Lacustrine and Riverine SNC is defined by the Yolo HCP/NCCP as the open water portions of lakes, rivers, and streams. Within the Project area, there are six (6) drainages and one (1) wetland feature that qualify as Lacustrine and Riverine habitat. All drainages present within the Project area contained mud substrate and

exhibited evidence of either ephemeral or intermittent flows. These drainages were dry during the April site visit and likely convey precipitation and agricultural runoff during the wet season.

Other Agriculture: Deciduous Fruits/Nuts

The Other Agriculture: Deciduous Fruits/Nuts land cover type consists of orchards composed of nuts or fruits that are not citrus or subtropical. Deciduous orchards are dominated by tree species that lose their leaves during the winter months. The understory between the rows is typically composed of a variety of grasses and other herbaceous plants including mustards (*Brassica* sp.) or are managed to prevent growth totally or in part through the use of herbicides to facilitate harvest. Some species of birds and mammals have adapted to orchard habitats for foraging, nesting, and cover (Mayer and Laudenslayer 1988). Due to the monoculture and maintenance of most orchards, this environment does not support an abundance of breeding wildlife.

Cultivated Lands: Field Crops

The Cultivated Lands: Field Crops land cover type consists of agricultural fields planted in corn, dry beans, grain sorghum, safflower, sudan, sugar beets, sunflowers, or other crops grown in fields on a large scale that do not fit into other Cultivated Lands Semi Natural Community categories. Row and field crops do not conform to normal habitat stages and are regulated by the crop cycle in California. Rodents, birds, and some mammals have adapted to field crops and are controlled by fencing, trapping, and poisoning (Mayer and Laudenslayer 1988).

Cultivated Lands: Grain and Hay Crops

The Cultivated Lands: Grain and Hay Crops land cover type consists of irrigated and dryland grain and hay crops; predominantly wheat, barley, rye, and oat hay. Grain and hay crops do not conform to normal habitat stages and are regulated by the crop cycle in California. Rodents, birds, and some mammals have adapted to field crops and are controlled by fencing, trapping, and poisoning (Mayer and Laudenslayer 1988).

Grassland Natural Community: Grassland Alliance

The California Annual Grassland Alliance land cover type is a subset of the Grassland Natural Community and is dominated by annual grasses and forbs. Common species include wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), yellow star-thistle (*Centaurea solstitialis*), broadleaf filaree (*Erodium botrys*), cutleaf filaree (*Erodium cicutarium*), Italian ryegrass (*Festuca perennis*), medusahead (*Elymus caput-medusae*), various introduced clovers (*Trifolium* spp.), and Zorro fescue (*Vulpia myuros*). Associated native herbaceous species may also occur. Annual grasslands occur on open flat to gently rolling lands and are dominated by grasses and annual plants, with the dominant species varying depending on the climate and soils.

Valley Foothill Riparian Natural Community: Great Valley Oak Riparian

The Great Valley Oak Riparian land cover type is a subset of the Valley Foothill Riparian Natural Community, which is designated as a SNC by the Yolo HCP/NCCP. The Great Valley Oak Riparian land cover type consists of deciduous trees along streams and rivers, dominated by cottonwoods and willows, and areas dominated by herbaceous or shrubby riparian vegetation if less than 1 acre in size. Within the Project area, Great Valley Oak Riparian land cover occurs in association with the unnamed drainage north of CR 32 (Russell Boulevard) and Putah Creek in the southeast corner of the Project area.

Semi-agricultural/Incidental to Agriculture

Semi agricultural areas include livestock feedlots, farmsteads, and miscellaneous semi agricultural features such as small roads, ditches, and unplanted areas of cropped fields (e.g., field edges).

Developed: Urban

The Developed: Urban land cover type consists of areas dominated by pavement and building structures, including barren lands graded for development. This environment can present a mosaic of vegetation, including primarily ornamental landscaping, but can also incorporate native tree species. Generalist and invasive species often occupy urban habitat such as common raven (*Corvus corax*), house sparrow (*Passer domesticus*), and Brewer's blackbirds (*Euphagus cyanocephalus*) as well as small to medium mammals (e.g., raccoon, opossum, striped skunk) (Mayer and Laudenslayer 1988).

Developed: Vegetated Corridor

The Developed: Vegetated Corridor land cover type consists of areas planted in ornamental vegetation maintained adjacent to highways or in association with houses and developed areas, or other vegetated corridors associated with developed areas and isolated from intact stream channels. The vegetated corridor land cover type occurs along the sides of CR 98, primarily in the southern portion of the Project area, where ornamental black walnut (*Juglans nigra*) have been planted along the corridor.

Impacts to Yolo HCP/NCCP land cover types that occur within the Project area have been quantified below.

Table 4. Impacts to Land Cover Types within the CR 98 Bike and Safety Improvement Project

Impacts to Land Cover Types		
Land Cover Types	**Permanent Impacts Acres**	**Fee Buffer Acres**
Other Ag - Deciduous Fruits/Nuts	7.73	2.66
Cultivated Land - Field Crops	8.44	2.64
Cultivated Land - Grain and Hay Crops	3.76	1.94
Grassland Natural Community - Grassland Alliance	0.75	0.68
Valley Foothill Riparian - Great Valley Oak Riparian	0.71	0.18
Semi agriculture Incidental to Ag - Semi agricultural	4.59	1.06
Developed - Urban	36.97	1.44
Lacustrine and Riverine - Open Water	0.44	0.03
Fresh Emergent Wetland - Freshwater Marsh Alliance	0.00	0.00
Developed - Vegetated Corridor	10.57	8.38
Totals =	**73.96**	**19.03**

Yolo HCP/NCCP Avoidance and Minimization Measures

The Project will implement the following required Yolo County HCP/NCCP AMMs into the Project design and the mitigation measures (MM) presented in this document:

- **AMM1: Establish Buffers:** Addressed in MM BIO-6 (Wetlands and Waters)
- **AMM2: Design Developments to Minimize Indirect Effects at Urban-Habitat Interfaces**

- **AMM3: Confine and Delineate Work Area:** Addressed in MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Establish Buffers around Sensitive Natural Communities),
- **AMM4: Cover Trenches and Holes during Construction and Maintenance:** Addressed in MM BIO-2 (Western Pond Turtle).
- **AMM5: Control Fugitive Dust:** This Yolo HCP/NCCP AMM is addressed through adhering to YSAQMD Rules in section 5.3 above.
- **AMM6: Conduct Worker Training:** Addressed in MM BIO-8 (Worker Environmental Training Program).
- **AMM7: Control Nighttime Lighting of Project Construction Sites:** Addressed in MM BIO-10 (Control Nighttime Lighting)).
- **AMM8: Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas:** Addressed in MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Establish Buffers around Sensitive Natural Communities).
- **AMM9: Establish Buffers around Sensitive Natural Communities:** Addressed in MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Establish Buffers around Sensitive Natural Communities).
- **AMM10: Avoid and Minimize Effects on Wetlands and Waters:** Addressed in MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Establish Buffers around Sensitive Natural Communities)
- **AMM12: Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle:** Addressed in BIO-1 (Valley Elderberry Longhorn Beetle).
- **AMM14: Minimize Take and Adverse Effects on Habitat of Western Pond Turtle:** Addressed in MM BIO-2 (Western Pond Turtle).
- **AMM16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite:** Addressed in MM BIO-3 (Swainson's Hawk and White-Tailed Kite).
- **AMM19: Minimize Take and Adverse Effects on Least Bell's Vireo:** Addressed through planning surveys already conducted and documented in the NES.
- **AMM21: Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird:** Addressed in MM BIO-4 (Tricolored Blackbird).

Potential Environmental Effects

a) ***Less Than Significant with Mitigation Incorporated***

Special-Status Wildlife Species:

Valley elderberry longhorn beetle (VELB, *Desmocerus californicus dimorphus*): The VELB is listed as threatened under the federal ESA and is a covered species under the Yolo HCP/NCCP. The beetle is found only in association with its host plant, elderberry (*Sambucus* spp.). One (1) elderberry shrub was identified within the Project area during the planning level survey. It is located in the southern portion of the Project area, on the west side of CR 98. The shrub present within the Project

area contains stems of sufficient size (i.e., 1.0 inches or greater) to provide habitat for VELB. As a result of the protocol-level VELB survey, a total of 30 stems 1.0 inch or greater in diameter at ground level were recorded. Potential VELB exit holes were identified. Because of the potential for the proposed Project to affect a federally listed species, a biological assessment (BA) will be prepared for Caltrans to initiate consultation with the USFWS under Section 7 of the ESA.

Implementation of MM BIO-1 (Valley Elderberry Longhorn Beetle), which incorporates Yolo HCP/NCCP AMM12 (Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle), will transplant the elderberry shrub and pay fees for compensatory mitigation credits, thereby reducing potential impacts to less than significant.

Western pond turtle (*Emys marmorata*): The western pond turtle is a Species of Special Concern (SSC) in California and is a covered species under the Yolo HCP/NCCP. There is suitable habitat for western pond turtle present within the Lacustrine and Riverine habitat types within the Project area. The Project area is also located within 100 feet of Putah Creek, which provides suitable habitat for western pond turtle.

Implementation of MM BIO-2 (Western Pond Turtle), which incorporates Yolo HCP/NCCP AMMs 4 and 14 (Cover Trenches and Holes during Construction and Maintenance; Minimize Take and Adverse Effects on Habitat of Western Pond Turtle), will reduce potential impacts to western pond turtle by minimizing potential entrapment to less than significant. Implementation of MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Sensitive Natural Communities), and MM BIO-8 (Worker Environmental Training Program) will also reduce potential impacts to western pond turtle by avoiding environmentally sensitive areas and sensitive natural communities, and requiring that all construction personnel be properly trained in avoidance measures. Thus, impacts would be reduced to a less than significant level.

Nesting Migratory Birds and Raptors: The Project area provides potential nesting sites for birds listed under the federal Migratory Bird Treaty Act (MBTA) of 1918, the State Migratory Bird Policy Act (MBPA) of 2019, and regulated by the Yolo HCP/NCCP and the California Fish and Game Code. Depending on the species, birds may nest in trees, shrubs, in or on the ground, and on artificial structures such as buildings, culverts, headwalls, poles, and signs.

The planning level surveys determined that potentially suitable habitat for Yolo HCP/NCCP-covered bird species including Swainson's hawk, white-tailed kite, and tricolored blackbird occurs within or adjacent to the Project area. The removal of trees in the Project site has the potential to impact nesting sites.

There is modeled habitat for least Bell's vireo, a covered species under the Yolo HCP/NCCP, within 500 feet of the BSA. Modeled habitat represents land areas for which the Yolo HCP/NCCP expects to provide habitat for covered species based on modeled habitat parameters (e.g. land cover type, distance from aquatic areas, topography, species occurrences). Planning level surveys for least Bell's vireo were conducted consistent with the Yolo HCP/NCCP. No observations were made for least Bell's vireo and no suitable habitat will be removed by the proposed Project. The Project will have no impact on least Bell's vireo.

Implementation of MM BIO-3 (Swainson's Hawk and White-Tailed Kite) and MM BIO-4 (Tricolored Blackbird) will reduce potential impacts to Swainson's hawk, white-tailed kite, and tricolored

blackbird by requiring preconstruction surveys to identify active nests and/or presence of species. Impacts will be reduced to a less than significant level.

MM BIO-5 below provides for preconstruction surveys for other birds protected by the MBTA or California Fish and Game Code. Implementation of MM BIO-5 will reduce potential impacts to nesting migratory birds and raptors by restricting project activities and vegetation removal, thereby reducing impacts to a less than significant level.

Implementation of MM BIO-6 (Wetlands and Waters), and MM BIO-7 (Sensitive Natural Communities), and MM BIO-8 (Worker Environmental Training Program) will also reduce potential impacts to Swainson's hawk, white-tailed kite, tricolored blackbird, and nesting migratory birds and raptors by avoiding environmentally sensitive areas and sensitive natural communities, and requiring that all construction personnel be properly trained in avoidance measures. Thus, impacts would be reduced to a less than significant level.

b) ***Less Than Significant with Mitigation Incorporated.*** The Project area contains Sensitive Natural Communities designated by the Yolo HCP/NCCP: Fresh Emergent Wetland, Lacustrine and Riverine, and Valley Foothill Riparian. Drainages and wetlands within the Project area are potential waters of the United States (WOTUS) and State. Impacts to Wetlands and Waters are discussed under Item c) below.

Fresh Emergent Wetland: There is one (1) wetland within the Project area that is considered Freshwater Marsh Alliance. It is located on the western end of the Project area on CR 32. This wetland is man-altered and is fed hydrologically by agricultural canals and storm water. This Fresh Emergent Wetland SNC falls within the Project boundary but will not be directly impacted by project activities.

Valley Foothill Riparian: The Project area is located within 100 feet of the Valley Foothill Riparian SNC associated with Putah Creek and this SNC occurs marginally along the unnamed irrigation canal within the Project area.

Project implementation will result in 0.71 acre of permanent impact to Valley Foothill Riparian SNC in the Project area resulting from installation of the roadway improvements. Several trees will be removed as part of the proposed Project. Healthy trees will be retained and avoided to the extent practicable while maintaining safe design considerations for the proposed facilities. In order to ensure impacts to tree resources are maintained as a less than significant level implementation of MM BIO-9 (Tree Removal Documentation and Replacement) is required.

Yolo HCP/NCCP AMM9 (Establish Buffers around Sensitive Natural Communities, Valley foothill riparian) states that a 100 ft. buffer will be provided from the canopy drip-line of Valley Foothill Riparian habitat. AMM9 then goes on to state that '*Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.*' This roadway improvement project cannot completely avoid impacts to Valley Foothill Riparian in the Project area. The Project will implement all applicable Yolo HCP/NCCP AMMs as listed above and below.

Lacustrine and Riverine: The Project area contains Lacustrine and Riverine SNCs within the unnamed drainages present within the site, and the Project area is located within 100 feet of Putah Creek. There are six (6) intermittent or ephemeral drainages within the Project area. They have been altered for agricultural use and surrounding urbanization of the area; however, they are considered

open water land cover types within the Lacustrine and Riverine SNC when water is present. The proposed Project will be limited to roadwork within the Project area; however, the drainages present in the Project area fall within the area of anticipated impact. Approximately 0.27 acres of Lacustrine and Riverine SNC may be impacted by project activities.

Implementation of MM BIO-6 (Wetlands and Waters) and MM BIO-7 (Sensitive Natural Communities) will reduce potential impacts to valley foothill riparian, lacustrine and riverine habitats through avoidance and minimization of impacts, payment of Yolo HCP/NCCP fees, acquiring applicable permits and fulfilling compensatory mitigation requirements to less than significant level. Implementation of MM BIO-8 (Worker Environmental Training Program) will also reduce potential impacts to Sensitive Natural Communities by requiring that all construction personnel be properly trained in avoidance measures. Thus, impacts would be reduced to a less than significant level.

c) ***Less Than Significant with Mitigation Incorporated.*** The Project area contains 0.49 acres of potential waters of the U.S. and State and the Project proposes to directly impact 0.27 acres of potentially jurisdiction waters with the installation of roadway improvements.

Construction has the potential to temporarily impact water quality and fill state and federally protected wetlands. During construction, water quality will be protected by implementation of best management practices. Implementation of MM BIO-6 (Wetlands and Waters) will reduce potential impacts to State and federally protected waters and wetlands through avoidance and minimization of impacts, payment of Yolo HCP/NCCP fees, acquiring applicable permits and fulfilling compensatory mitigation requirements to less than significant level. Implementation of MM BIO-7 (Sensitive Natural Communities) and MM BIO-8 (Worker Environmental Training Program) will also reduce potential impacts to State and federally protected waters and wetlands by requiring that all construction personnel be properly trained in avoidance measures. Thus, impacts would be reduced to a less than significant level.

d) ***Less Than Significant Impact with Mitigation Incorporated.*** Construction of the Project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the Project area. In the event that lighting is required for either nighttime work or security reasons, lighting may be detrimental to native species. Both short- and long-term light exposure could affect wildlife. Short-term exposure to bright lights could temporarily reduce visual capacity in some species, making them vulnerable to predation. Longer-term night lighting could disorient wildlife, alter foraging and reproductive behaviors, increase predation risk, and inhibit movement to and from breeding areas by stimulating light-seeking behavior During project construction, wildlife will be able to move around the Project area or move through it at night. Additionally, once construction is complete the Project area will be restored and wildlife will continue to be able to move around the Project area, similar to existing conditions. Therefore, the Project would not interfere substantially with the movement of native fish and wildlife, resulting in a less than significant impact. Although construction disturbance may temporarily hinder wildlife movements within the Project area, the impact is less than significant due to its short-term nature and its alignment on the existing roadway. Due to the potential use of nighttime lighting there may be interference with wildlife species visual capacity, foraging and reproductive behaviors resulting in a potential impact. With the implementation of MM BIO-10 Control Nighttime Lighting which implements Yolo HCP/NCCP AMM7 (Control Nighttime Lighting

of Project Construction Sites) potential impacts from nighttime lighting on species and adjacent habitats will be minimize. impacts would be reduced to a less than significant level.

e) ***Less Than Significant Impact with Mitigation Incorporated.*** The 2030 Countywide General Plan contains Conservation policies that protect biological resources, including Policy CO-2.3, which encourages the preservation and enhancement of biological communities such as heritage valley oaks, remnant valley oak groves and roadside tree rows. A heritage tree preservation ordinance has not yet been adopted by the County. Several trees in the Project corridor that are planned for removal as part of the proposed Project are not of composition to be considered a remnant valley oak grove. Some of the oak trees are situated in a row configuration along CR 98 and meet the definition of an oak woodland as defined by the Oak Woodland Conservation Act (Fish and Game Code §1361). Some of the trees that are planned for removal are in a roadside tree row configuration, but do not embody the size or linear continuity characteristic of high value roadside tree rows found in other parts of the County. The final tree removal will be determined by the County during final design. In order to document the number of trees removed and to ensure that impacts to tree resources are minimized and mitigated, MM BIO-9 Tree Removal Documentation and Replacement is required. There will be no conflicts with local policies or ordinances that regulate or protect biological resources in the Project area; therefore, the Project would not conflict with any local policies or ordinances protecting biological resources. The Project does not conflict with any local policies or ordinances protecting biological resources. See also discussion below regarding the Yolo HCP/NCCP. With the implementation of MM BIO-9 Tree Removal Documentation and Replacement, the County will ensure that all trees proposed for removal will be documented, a plan for replacement will be developed and implemented and trees retained will receive adequate avoidance and minimization measures during construction activities. Thus, impacts would be reduced to a less than significant level.

f) ***No Impact.*** The Yolo HCP/NCCP addresses public and private activities and the protection of 12 covered species and the land on which these species depend within Yolo County. The Yolo HCP/NCCP ensures compliance with the federal Endangered Species Act (ESA), Natural Communities Conservation Planning Act (NCCPA), and CESA for covered activities that may affect the covered species. Pursuant to Section 10(a)(1)(B) of ESA and Section 2835 of the NCCPA chapter of the California Fish and Game Code (Fish & Game Code), the Yolo HCP/NCCP provides Permittees (i.e., Yolo County, the four incorporated cities, and the Conservancy) with incidental take permits for the 12 covered species.

The Project is a rural infrastructure project and is a "covered activity" under the HCP/NCCP. The Project will be implemented in compliance with permit requirements and conditions as well as avoidance and minimization measures that are listed in the HCP/NCCP. As applicable, the Project will pay mitigation fees for the acreage of land-cover types that are impacted by the Project and implement project-specific AMMs. The Project-specific Yolo HCP/NCCP AMMs that apply to the Project are AMMs 1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 14, 16, 19, and 21 which are described above and noted with the associated mitigation measures as applicable. Through adherence to the terms of the HCP/NCCP, which include payment of mitigation fees and implementation of the listed AMMs, there will be no conflict with the HCP/NCCP and therefore no impact as it relates to this topic.

Mitigation Measures

MM BIO-1 – Valley Elderberry Longhorn Beetle

Implements Yolo HCP/NCCP AMM12: Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on VELB to the maximum extent possible:

- The elderberry shrub will be transplanted to a USFWS- and Conservancy-approved beetle conservation bank in accordance with the guidelines set forth in AMM12.
- Impacts to 0.71 acres of Great Valley Oak Riparian habitat, which is designated as VELB habitat, will be mitigated for in accordance with the Yolo HCP/NCCP. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-2 – Western Pond Turtle

Implements Yolo HCP/NCCP AMMs 4 and 14: Cover Trenches and Holes during Construction and Maintenance; Minimize Take and Adverse Effects on Habitat of Western Pond Turtle

The following measures will reduce potential impacts to western pond turtles:

- A pre-construction survey for western pond turtle shall be conducted by a qualified biologist. If a western pond turtle nest is identified during the survey, the biologist shall flag the site and determine if construction activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the construction impact zone by a qualified biologist. The County will inform CDFW if the nest cannot be avoided and such an activity must occur.
- If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground-disturbing activity for nests that may be unearthed during the disturbance, and will move out of harm's way any turtles or hatchlings found.
- To prevent injury and mortality of western pond turtle, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

MM BIO-3 – Swainson's Hawk and White-Tailed Kite

Implements Yolo HCP/NCCP AMM16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on Swainson's hawk and white-tailed kite to the maximum extent possible:

- The Project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 1 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the Project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

MM BIO-4 – Tricolored Blackbird

Implements Yolo HCP/NCCP AMM21: Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on tricolored blackbird to the maximum extent possible:

- The qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).
- If active colony is present or has been present within the last 5 years, implement a species protection buffer within 1,300 feet of the colony site(s) from March 1 to July 30, unless a shorter distance is approved, based on site-specific conditions, by the Conservancy and CDFW.
- Per the Yolo HCP/NCCP, there is 12.95 acres of Cultivated Land and Grassland Alliance land cover types that could potentially serve as tricolored blackbird nesting and foraging habitat. Impacts to tricolored blackbird suitable habitat land cover types will be mitigated for in accordance with the Yolo HCP/NCCP. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-5 – Special-Status Bird Species, Migratory Birds, and Raptors

The following measures will be implemented to further reduce the potential for impacts on special-status and migratory birds and raptors that may nest in or near the Project area, including northern harrier:

- Project activities and vegetation removal within the Project area shall be initiated outside of the bird nesting season (February 1 – August 31).

- If project activities and vegetation removal cannot be initiated outside of the bird nesting season than the following will occur:

    - A qualified biologist will conduct a pre-construction survey within 7 days prior to the initiation of project activities.

    - If an active avian nest (i.e., with egg[s] or young) is observed within 250 feet of the Project area during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week and a report submitted to the lead agency weekly.

MM BIO-6 – Wetlands and Waters

Implements Yolo HCP/NCCP AMMs 1, 2, 3, 8, 9, and 10: Establish Buffers around Sensitive Natural Communities; Confine and Delineate Work Area to Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas; Avoid and Minimize Effects on Wetlands and Waters

The following measures shall be implemented to avoid or minimize the potential for project-related impacts on wetlands and waters:

- The County will comply with the terms of a Clean Water Act Section 404 permit issued by the Corps and Section 401 water quality certification issued by the RWQCB for activities involving the discharge of fill material into jurisdictional drainages. The County will also comply with terms of a Streambed Alteration Agreement with the CDFW (if determined necessary by the CDFW). Prior to any discharge into drainages, the required permits and authorizations will be obtained from the respective agencies. All terms and conditions of the required permits and authorizations will be implemented.
- The County will designate all wetlands outside the area of permanent impact as Environmentally Sensitive Areas (refer to MM BIO-8). These areas will be identified on construction drawings and demarcated in the field with flagging and/or signs identifying the area as off limits to all personnel, equipment, and ground-disturbing activities. In addition, water quality BMPs will be installed around the wetlands (outside the wetland boundaries) in a manner that prevents water, sediment, and chemicals from draining into the features, and all staging, storage, stockpile areas, and off-road travel routes will be located as far as practicable away from the wetlands.
- Mitigation for in 0.27 acres (1,483 linear feet) of permanent impacts to jurisdictional WOTUS will be addressed through the purchase of credits at a Corps-approved mitigation bank or payment to a Corps-approved in-lieu fund.
- Impacts to Lacustrine and Riverine and Fresh Emergent Wetland Sensitive Natural Communities will be mitigated for through the Yolo HCP/NCCP Natural Community and Land Cover Impacts Mitigation Fees. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-7 – Sensitive Natural Communities

Implements Yolo HCP/NCCP AMM9, Establish Buffers around Sensitive Natural Communities

Environmentally Sensitive Area (ESA) fencing will be established around the following Sensitive Natural Communities where they occur within or adjacent to the Project area, when feasible. These areas will be identified on construction drawings and demarcated in the field with flagging and/or signs identifying the area as off limits to all personnel, equipment, and ground-disturbing activities.

Per Yolo HCP/NCCP AMM9, the buffers for each Sensitive Natural Community are as follows:

- Valley foothill riparian: 100 feet from canopy drip-line. If avoidance is infeasible, a lesser buffer than is stipulated in the AMMs may be approved by the Conservancy, USFWS, and CDFW if they determine that the sensitive natural community or covered species is avoided to an extent that is consistent with the Project purpose (e.g., if the purpose of the Project is to provide a stream crossing or replace a bridge, the Project may encroach into the buffer and the natural community or species habitat to the extent that is necessary to fulfill the Project purpose). Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.
- Lacustrine and riverine: Outside urban planning units, 100 feet from the top of banks. Within urban planning units, 25 feet from the top of the banks.
- Fresh emergent wetland: 50 feet from the edge of the natural community.

MM BIO-8 – Worker Environmental Training Program

Implements Yolo HCP/NCCP AMM6: Conduct Worker Training

- All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

MM BIO-9 – Tree Removal Documentation and Replacement

The following measures shall be implemented to compensate for the removal of protected trees and to avoid or minimize the potential for Project-related impacts on tree resources.

- Final plans will identify the number, size and species of protected trees to be removed and include a planting plan, to ensure replacement of trees in a manner consistent with County and Resource Agencies policies. If replanting cannot completely compensate for the number of trees removed within the project site or on County managed land, purchase of compensatory mitigation credits will be required for the remainder of trees. The replanting plan must be approved by the County and any compensatory mitigation credits for tree resources must be purchased prior to vegetation clearing activities.

- A plan for avoidance and minimization of trees that are in the area of direct impact, but not removed shall be developed by an International Society of Arboriculture (ISA) Arborist and implemented by the County prior to vegetation clearing activities and throughout the construction of the Project.

MM BIO-10 Control Nighttime Lighting

Implements Yolo HCP/NCCP AMM7: (Control Nighttime Lighting of Project Construction Sites

- Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

5.5 **Cultural Resources**

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to§15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Environmental Setting

Record Search

An Archeological Survey Report (ASR) (Gallaway Enterprises 2020d), a Historical Property Survey Report (HPSR) (Gallaway Enterprises 2020d) and a Historic Resource Evaluation Report (HRER) (JRP Historical Consulting, LLC), 2020) were prepared for the Project.

Gallaway Enterprises conducted a cultural resources study of project area (2020d). Gallaway Enterprises requested a records search from the Northwest Information Center (NWIC) of the California Historical Resources Information System on March 21, 2019. The search included all previously recorded cultural resources and reports within a half mile radius of the APE. The record search was conducted to determine if any portion of the Project has been previously surveyed and if any cultural resources have been previously recorded within the Project APE. Additional archival research included the California Register of Historic Resources, the National Register of Historic Places, historic topographic maps, historical documentation, and BLM GLO records.

Results of the record search indicate 11 previous cultural resource assessments occur within a half mile of the APE and five reports with surveys that intersect portions of the APE. One archaeological resource is recorded within the APE and one resource is recorded within a half mile radius of the APE. The archaeological resource recorded within the Project boundary consists of a portion of the Lincoln Highway, a historic transcontinental highway. Four other resources, historic resource inventory properties, fall within the Project boundary. Portions of the APNs for the Adolph Oeste Home, Lynn N. Irwin Dairy Farm, James E. Doeherty House, and the Kunze Family home fall within the Project boundary where they meet County Road 98. None of the historic properties are placed close to the road or project APE. Per Caltrans direction through communication with Gail St. John (Caltrans District 3 Senior Environmental Planner, PAH), no further assessment is required for the Adolph Oeste Home, Lynn N. Irwin Dairy Farm, or the Kunze family home. The Doeherty House (Yol-HRI-6/183) contains a fence line close to County Road 98 that will be impacted, and the property requires further evaluation.

Archival Research

In addition to the record search, various historical maps, topographic quadrangles, land grants, and patents, Gallaway Enterprises reviewed the following resources:

- National Register of Historic Places (NRHP)

- California Register of Historic Resources (CRHR)
- General Land Office Plat maps and land patents
- Historic United States Geological Survey (USGS) topographic maps
- Yolo Historical Society
- Hattie Weber Museum
- Yolo County Library

As a result of archival research, one resource, Cactus Corner, was identified. Cactus Corner is a collection of planted cacti on the southeast corner of the junction of Russell Blvd. and CR 98. This resource does not appear to meet the criteria for listing in the NRHP. It has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and it is not a historical resource for the purposes of CEQA.

The entire APE has been heavily modified and disturbed by construction related activities in the development and maintenance of paved roads, graded shoulders and roadside ditches and culverts. Commercial and residential developments abut the entire APE. Ongoing disturbance and development within the APE greatly reduce the likelihood of intact cultural deposits. The Project area appears to contain lands with low to moderate sensitivity for intact prehistoric and historic period sites and/or features.

Native American Consultation
Gallaway Enterprises contacted the Native American Heritage Commission (NAHC) to request sacred lands file search and contact list. On April 11, 2019, the NAHC returned a negative result for sacred lands within the Project APE. Additionally, the NAHC listed three Native American tribes who may have knowledge of sites or traditionally cultural properties that may be affected by project-related activities. All tribes listed were contacted via letter on May 16, 2019 informing them of the proposed Project and to request participation of interested parties.

One response was received by Leland Kinter, Tribal Historic Preservation Officer of the Yocha Dehe Wintun Nation. Mr. Kinter stated the Project falls within the aboriginal territories of the Yocha Dehe Nation establishing the tribe as the authority in the proposed Project area. Mr. Kinter expressed concerned that the Project could impact known cultural resources and has requested detailed project information. Robert Geary was named the point of contact for the Yocha Dehe Tribe and a letter containing the detailed project description and project location was sent to Mr. Geary on October 7, 2020.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Research and evaluation of historical resources were conducted as part of the ASR, HPSR, and HRER documents. The research and findings contained within the aforementioned documents concluded that one resource (Cactus Corner) required evaluation. The HPSR and HRER concluded that Cactus Corner does not appear to meet the criteria for listing in the NRHP and no built environment or cultural landscape resources in the APE are historical for the purposes of CEQA. Due to the developed character of the site, the potential to encounter surface-level historical resources is considered low. However, there is the potential for accidental discovery of historical resources. In the event that resources are inadvertently discovered, California Public

Resources Code Sections 5097.5 prohibits further excavation, removal, or destruction of any historic or prehistoric ruins, burial grounds, archaeological or historical feature and requires the County to follow the professional standards for determining commercial and archaeological value, in accordance with those procedures established in the federal Archaeological Resources Protection Act of 1979 (Public Law 96-95), as amended, and in compliance with the Uniform Regulations set forth in Subpart A (commencing with Section 7.1) of Part 7 of Title 43 of the Code of Federal Regulations. Reliance on California Public Resources Code Sections 5097.5 will ensure that inadvertent discoveries will remain at a less than significant level.

b) ***Less Than Significant Impact.*** Research and evaluation of archaeological resources were conducted as part of the ASR document. The research and findings contained within the aforementioned document concluded that one resource (Cactus Corner) required evaluation. The ASR concluded that Cactus Corner does not appear to meet the criteria for listing in the NRHP or CRHR for the purposes of CEQA. Due to the developed character of the site, the potential to encounter surface-level archaeological resources is considered low. However, there is the potential for accidental discovery of archaeological resources. In the event that resources are inadvertently discovered, California Public Resources Code Sections 5097.5 prohibits further excavation, removal, or destruction of any historic or prehistoric ruins, burial grounds, archaeological or historical feature and requires the County to follow the professional standards for determining commercial and archaeological value, in accordance with those procedures established in the federal Archaeological Resources Protection Act of 1979 (Public Law 96-95), as amended, and in compliance with the Uniform Regulations set forth in Subpart A (commencing with Section 7.1) of Part 7 of Title 43 of the Code of Federal Regulations. Reliance on California Public Resources Code Sections 5097.5 will ensure that inadvertent discoveries will remain at a less than significant level.

c) ***Less Than Significant Impact.*** The ASR and HPSR documents show that that no known cemeteries or burials occur within the Project area of direct impact. In the event of discovery or recognition of any human remains within the project site, California Health and Safety Code Section 7050.5 requires excavation to cease in the vicinity of the discovery until the coroner of the County has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Reliance on California Health and Safety Code Section 7050.5 and Section 5097.98 of the Public Resources Code will ensure that inadvertent discoveries will remain at a less than significant level.

Mitigation Measures: None Required

5.7 **Energy**

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a) ***Less Than Significant Impact.*** All construction equipment would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. CARB standards for construction equipment includes measures to reduce emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements and imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles.

Project construction would also be required to comply with all applicable YSAQMD rules and regulations. Future maintenance activities (e.g. vegetation control) would likely involve the use of electric or gas-powered equipment.

The Project would be required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, which would ensure that the future activities would be energy efficient to the maximum extent practicable. The Project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and impacts related to construction and operational energy would be considered less than significant.

b) ***Less Than Significant Impact.*** Yolo County has taken steps to reduce overall emissions in the County in an effort to reduce GHG emissions and address economic and social adaptation to the effects of climate change. The County's General Plan policies and their Climate Action Plan (CAP) address these issues. In order to demonstrate project-level compliance with CEQA relevant to GHG emissions and climate change impacts, applications for discretionary projects must demonstrate consistency with the General Plan and CAP. Implementation of the proposed Project will establish and improve bicycle and pedestrian facilities in the Project site, which will have a secondary effect of encouraging non-automobile trips instead of vehicular trips. Implementation of the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Adherence to the YSAQMD rules (Rules 2.3, 2.5, 2.11, 2.28, 2.32, and 9.8 as applicable) will limit potential construction related GHG impacts. These impacts are considered less than significant.

Mitigation Measures: None required.

5.8 **Geology and Soils**

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

Environmental Setting

The Project area is located on the floor of the Central Valley, where the topography is relatively flat and level and there are no nearby active faults.

According to the 2030 Countywide General Plan, the only fault in Yolo County that has been identified by the California Division of Mines and Geology (1997) to be subject to surface rupture (within an Alquist-Priolo Earthquake Fault Zone) is the Hunting Creek Fault, which is partly located in a sparsely inhabited area of the extreme northwest corner of the County. Most of the fault extends through Lake and Napa Counties. The other potentially active faults in the County are the Dunnigan Hills Fault, which extends west of I-5 between Dunnigan and northwest of Yolo, and the newly identified West Valley and East Valley Faults (Fault Activity Map of California, California Geological Survey, 2010), which are also not in the vicinity of the proposed Project. These faults are not within an Alquist-Priolo Earthquake Fault Zone and are therefore not subject to surface rupture.

Potential Environmental Effects

a) ***a-i) Less Than Significant Impact.*** The site does not lie within an Alquist-Priolo Earthquake Fault Zone and no known active faults are mapped within or through the Project area. The Hunting Creek Fault is the only fault in the County that has been identified by the CGS to be active and subject to surface rupture (i.e., is delineated as an Alquist-Priolo Earthquake Fault zone) (Yolo County 2009b). Given the nature of the Project and the distance to the known active fault location, impacts are considered less than significant.

a-ii) Less Than Significant Impact. Earthquake shaking hazards are calculated by projecting earthquake rates based on earthquake history and fault slip rates, the same data used for calculating earthquake probabilities (California Department of Conservation 2020a). Calculations of earthquake shaking hazard for California are part of a cooperative project between USGS and California Geologic Survey (CGS) and are part of the National Seismic Hazard Maps. Yolo County General Plan DEIR Figure IV.L-4 (Regional Ground Shaking Hazard) shows potential seismic shaking based on National Seismic Hazard Map calculations plus amplification of seismic shaking due to the near surface soils. Per Figure IV.L-4 the Project is located in a region where shaking hazards that are '*distant from known, active faults and will experience lower levels of shaking less frequently. In most earthquakes, only weaker, masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking here.*' The Project is not in a seismic hazard zone, and impacts are considered less than significant.

a-iii) Less Than Significant Impact. The proposed Project involved the development of bicycle facilities along an existing roadway. The proposed Project will not directly or indirectly cause potential adverse effects including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction. Impacts are considered less than significant.

a-iv) Less Than Significant Impact. The Project is located on relatively flat ground. No over-riding geologic hazards, including landslides were identified by either published geologic mapping or observations made at the site. Impacts are considered less than significant.

b) ***Less Than Significant Impact.*** Construction of the proposed Project could introduce sediments and other contaminants typically associated with construction into stormwater runoff. The SWRCB is responsible for implementing the Clean Water Act and has issued a statewide General Permit (Water Quality Order 2009-0009-DWQ) for construction activities. In the Project area, the Construction General Permit is implemented and enforced by the Central Valley Regional Water Quality Control Board (CVRWQCB). Projects resulting in disturbance of one acre or more are required to obtain coverage under the Construction General Permit. The proposed Project will require coverage under the SWRCB Construction General Permit.

In accordance with the requirements of the Construction General Permit, prior to construction of the proposed Project, a risk assessment must be prepared and submitted to the CVRWQCB to determine the Project's risk level and associated water quality control requirements. These requirements will, at a minimum, include the preparation and implementation of a SWPPP identifying specific best management practices (BMPs) to be implemented and maintained on the site in order to comply with the applicable effluent standards.

Overall soil erosion and loss would be minimal with implementation of standard construction practices for dust control, erosion and stormwater pollution prevention. Erosion and sediment control measures

include the required Caltrans Standard Specifications (§13 Water Pollution Control and §21 Erosion Control) and a stormwater pollution prevention plan (SWPPP) that will be implemented during construction to minimize the potential for erosion. Post-project, the potential for erosion to occur in the Project area would be like current conditions; therefore, the Project would result in less than significant impacts relating to soil erosion and loss of topsoil.

c) ***Less Than Significant Impact.*** The Project does not include activities that would result in soil units onsite becoming unstable, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Impacts are considered less than significant.

d) ***Less Than Significant Impact.*** Expansive soils that may swell enough to cause problems with paved surfaces are generally clays falling into the AASHTO A-6 or A-7 groups, or classified as CH, MH, or OH by the Unified Soil Classification System (USCS), and with a Plasticity Index greater than about 25 as determined by ASTM D4318. Chapter 610 of the Caltrans Highway Design Manual (2012) defines an expansive subgrade to include soils with a Plasticity Index greater than 12 (Caltrans 2012).

The Project is being designed in accordance with the special engineering or construction considerations outlined in Chapter 610 *"Engineering Considerations"* of the Highway Design Manual, California Transportation Department. Because the Project is being designed in accordance with the Caltrans Highway Design Manual and will consider and address expansive soils, impacts are considered less than significant.

e) ***No Impact.*** The proposed Project does not include the use of septic tanks or alternative waste water disposal systems. No impact will occur.

d) ***Less Than Significant*****:** Paleontological resources are known to occur in Yolo County, and the geological formations that underlie Yolo County are generally paleontologically sensitive. The Project would not likely impact paleontological features due to the general disturbed conditions at the site. There is the possibility of accidental paleontological discoveries during construction-related ground-disturbing activities. Caltrans Standard Specification 14-7.03, which requires that if unanticipated paleontological resources are discovered, work shall halt within 60 feet of the discovery and the engineer shall be notified will ensure that inadvertent discoveries of paleontological resources will remain at a less than significant level.

Mitigation Measures: None required.

5.9 Greenhouse Gas Emissions

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs that are released from human activity include carbon dioxide, methane, and nitrous oxide. The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Greenhouse gas emissions for transportation projects can be divided into those produced during operations and those produced during construction. The proposed Project does not increase the capacity of CR 98 and would not increase operational GHG levels. The existing intersections of CR98 with CR31 (Covell Boulevard, CR32 (Russel Boulevard) are four-way stop controlled intersections and the intersection of CR98 and Hutchinson Drive is a two-way stop-controlled intersection. Cars generally emit more pollutants, including GHG gasses, when they travel at lower average speeds. It therefore follows that if delays are minimized (and average speed therefore raised), emissions would be reduced. Highway corridors where roundabouts have been installed have been observed to have lower operating speeds, but also significantly lower stopped delay time than stop controlled intersections, therefore the average speed is observed to be greater with roundabouts. The incorporation of roundabouts at the intersection of CR98 with CR31 (Covell Boulevard, CR32 (Russel Boulevard) and Hutchinson Drive would reduce GHG emissions associated with the existing traffic through the reduction in stopped delay time at intersections. The discussion below therefore focuses on construction related GHG emissions of the Project.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Off-site production of construction materials and onsite construction of the proposed Project would generate short-term emissions of greenhouse gases. Emissions of GHGs resulting from off-road heavy-duty diesel engines during construction activities would be short-term and minor. Adherence to the YSAQMD rules (Rules 2.3, 2.5, 2.11, 2.28, 2.32, and 9.8 as applicable) will limit potential air quality impacts. These impacts are considered less than significant.

b) ***Less Than Significant Impact.*** Yolo County has taken steps to reduce overall emissions in the county in an effort to reduce GHG emissions and address economic and social adaptation to the effects of climate change. The County's General Plan policies and their Climate Action Plan (CAP) address these issues. In order to demonstrate project-level compliance with CEQA relevant to GHG emissions and climate change impacts, applications for discretionary projects must demonstrate consistency with the General Plan and CAP. In addition, the County established a working group to implement the

County's Climate Change Initiative, aimed at reducing transportation emissions by encouraging the use of electric vehicles, reducing County vehicle trips and purchasing low-polluting construction equipment. Implementation of the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Adherence to the YSAQMD rules (Rules 2.3, 2.5, 2.11, 2.28, 2.32, and 9.8 as applicable) will limit potential construction related GHG impacts. These impacts are considered less than significant.

Mitigation Measures: None required.

5.10 Hazards and Hazardous Materials

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

Environmental Setting

A hazardous material is defined by the California EPA, Department of Toxic Substances Control (DTSC), as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 California Code of Regulations (CCR) 25501).

According to Title 22 of the CCR (22 CCR) Section 66261.20, the term "hazardous substance" refers to both hazardous materials and hazardous wastes; both are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity.

A hazardous material is defined by 22 CCR Section 66261.10 as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

While public health and safety is potentially at risk whenever hazardous materials are or will be used, the risk is determined by the probability of exposure and to the inherent toxicity of a material. Factors that can influence health effects when human beings are exposed to hazardous materials include the dose the person

is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (22 CCR Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific 22 CCR criteria.

Hazardous materials transport within California is subject to various federal, state, and local regulations including the California Vehicle Code California and Occupational Health and Safety Administration (CalOSHA) requirements. The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is generally restricted to these routes.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Small amounts of hazardous materials would be used during construction and operation activities (i.e., equipment maintenance, fuel, and solvents). Implementation of the proposed Project would continue the use, transport, and disposal of potentially hazardous materials on and in the vicinity of the Project site, similar to existing conditions. The Project is required to comply with federal, state, and local regulations regarding the storage, handling, transportation, disposal, and cleanup of hazardous materials. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would have a less than significant impact.

b) ***Less Than Significant Impact.*** Project construction and operation would not routinely generate any hazardous materials. Project operation would not involve the use or storage of any hazardous materials. Although construction would not generate any hazardous materials, a potential hazard to the public and the environment would be posed by using diesel or gasoline powered construction equipment (trucks, excavators, etc.) and lubricants such as oil and hydraulic fluids. The potential for such a hazard would be temporary and avoidable through the implementation of AMM3 (Confine and Delineate Work Area), AMM8 (Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas) as required by the Yolo HCP/NCCP. The use and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements. Adherence to the applicable federal, state and local laws and the application of AMMs from the Yolo HCP/NCCP would maintain the potential impacts at a less than significant level.

c) ***No Impact.*** No schools occur within 0.25 mile of the Project site.

d) ***No Impact.*** The Project area is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

e) ***Less Than Significant Impact.*** The UC Davis Airport, which is operated as a general aviation airport and is open to the public, is located approximately 0.5 miles east of the Project site. The University Airport does not have an airport land use plan that would identify noise contours or other safety hazards. However, University Airport Rules and Regulations have been established to protect health, safety, and peace and to provide for the orderly conduct of activities on the Airport site. The runways at the UC Davis airport are oriented in a north-south direction. The arrangement of the runways are

parallel to the direction of CR 98 and therefore it is not expected that airplane approaches and departures would be at low elevations over the Project site. Due to these conditions it is not expected that the Project will result in a safety hazard or excessive noise for people working in the Project site during construction activities. The proposed Project does not conflict with the Yolo County Airport Comprehensive Land Use Plan. There will be a less than significant impact.

f) ***Less Than Significant Impact.*** County Road 98 will remain open during construction. Although temporary, short duration disruptions to normal traffic operations would occur during construction, the impact would be less than significant. The Project is not anticipated to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan because vehicular access would be maintained through the Project area during construction.

g) ***No Impact.*** The completed project will not expose people or structures to a new or increased significant risk of loss, injury or death involving wildland fires.

Mitigation Measures: None required.

5.11 **Hydrology and Water Quality**

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

Pacific Hydrologic Incorporated (PHI) performed an evaluation of flood hydraulic conditions to determine the final centerline grade elevations of County Road 98 along with replacing and adding culverts (Hydraulics Report). The complete report is included as Appendix E. This study consists of a flood hydrologic analysis using a rainfall-runoff model to identify runoff approaching the County Road 98 corridor from six sub-basins to the west followed by a two dimensional (2D) backwater model identifying existing and proposed condition flood hydraulic characteristics through the study area. The 2D study area consists of a corridor approximately one mile wide extending the full reach of anticipated improvements. The County has modified the proposed road centerline elevations and removed and or replaced the culverts identified in the hydraulic report to negate any increase in the extent of inundation and flood impacts to structures. The Changes to the design are sufficient to meet FEMA's "no increase" requirement and will ensure there are less than significant impacts as they pertain to hydraulic conditions, potential flooding and stormwater issues.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Construction of the proposed Project could introduce sediments and other contaminants typically associated with construction into stormwater runoff. Stormwater flowing over the Project features during construction could carry various pollutants downstream such as sediment, nutrients, bacteria and viruses, oil and grease, heavy metals, organics, pesticides, and

miscellaneous waste. These pollutants could originate from soil disturbances, construction equipment, building materials, and workers. Erosion potential and water quality impacts are always present during construction and occur when protective vegetative cover is removed and soils are disturbed. In the case of the proposed Project, it is primarily grading and excavation associated with the roadway improvements.

As discussed in Section 5.8.b above, compliance with the various requirements of the SWRCB statewide general permit for construction (which include water pollution control, erosion control and the development of a SWPPP) will ensure that water quality impacts during the construction phase of the proposed Project would be less than significant.

b) ***No Impact.*** Construction and operation of the Project would have no effect on groundwater supplies. There would be no net change in local aquifers or the local groundwater table because of the Project.

c) ***i Less Than Significant Impact.*** The proposed project's grading and excavation are not anticipated to results in substantial erosion or siltation, on or off-site. Through the implementation and compliance with the various requirements of the SWRCB statewide general permit for construction (which include water pollution control, erosion control and the development of a SWPPP) will ensure that erosion or siltation on- or off-site during the construction phase of the proposed Project would be less than significant.

ii Less Than Significant Impact. The proposed Project includes widening the paved section of CR98 to include bicycle lanes and improved roadway infrastructure which will result in an increase in impervious surfaces. These increases in impervious surfaces are not a substantial increase when compared to existing conditions. The recontouring and re-establishment of roadway drainage facilities are designed to accommodate the predicted runoff from the proposed Project. The Project will not contribute to a substantial increase in water runoff from the site. Project impacts are less than significant.

iii Less Than Significant Impact. As mentioned above the proposed Project would include minor increases in runoff water, however the runoff water would not exceed the capacity of existing or planned stormwater drainage systems. The propose Project includes the widening of an existing road to include improved bicycle facilities and roadway conditions and will not introduce a substantial additional source of polluted runoff, since the exiting use is similar to the proposed used of the project site. Project impacts are less than significant.

iv Less Than Significant Impact. The proposed Project has been designed to avoid obstructions or redirection of flood flows. The proposed project design has gone through several revisions based on the results of third-party reviews conducted by PHI to ensure there are less than significant impacts as they pertain to hydraulic conditions, impediments, potential flooding and stormwater issues. The Federal Emergency Management Agency (FEMA) has a "no increase" requirement in relation to inundation, floodplain limits and water surface elevations as a result of the project. Through the standard process of design, peer review and meeting the requirements of FEMA, there will be a less than significant impact in regards to this topic.

d) ***Less Than Significant Impact.*** The Project traverses FEMA/FIRM panels 06113C0583G, 06113C0591G, and 06113C0593G. The Project crosses through areas that are designated as Zone X (areas of 0.2% annual chance flood; areas of 1% annual change flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood), Zone AE (base flood elevations determined), and Zone A (special flood hazard areas subject to inundation by the 1% annual chance flood). The completed project would not include

components that risk release of pollutants due to inundation, the Project is not located within a tsunami or seiche zones, and impacts would be considered less than significant.

e) ***No Impact.*** The proposed Project is the improvement of existing roadway infrastructure and does not include activities that would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures: None required.

5.12 Land Use and Planning

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Environmental Setting

The 2009 Yolo County General Plan is the relevant land use plan for the Project area.

Potential Environmental Effects

a) ***No Impact.*** The Project does not include activities that would result in physically dividing an established community.

b) ***No Impact.*** The proposed Project is consistent with the County General Plan.

Mitigation Measures: None required.

5.13 Mineral Resources

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Setting

Per the County General Plan, Yolo County contains important mineral resources. A variety of minerals are mined in the County. The chief minerals presently mined are aggregate and natural gas (Yolo County 2009b). The Project is located outside the Cache Creek Area Plan (CCAP) project area, a rivershed management plan that includes approximately 14.5 miles of lower Cache Creek, between the Capay Dam and the town or Yolo. Components of the CCAP establish goals to assist in the overall management and include the Off-Channel Mining Plan (OCMP).

Potential Environmental Effects

a) ***No Impact.*** The Project area is not in an important mineral resource zone or site, as depicted in the County's General Plan DEIR Figure IV.L-2 (Yolo County 2009b). The Project would have no impact on mineral resources.

b) ***No Impact.*** No locally important mineral resource recovery sites are located within the Project area.

Mitigation Measures: None required.

5.14 **Noise**

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

Environmental Setting

The 2009 Yolo County General Plan (GP), Chapter 8-Health and Safety Element, Section D (Noise) establishes policies and standards associated with noise producing sources.

Yolo County GP Action HS-A61 states:

"Adopt a comprehensive Noise Ordinance that includes the following components:

- Standards for acceptable exterior and interior noise levels, their applicability and any specific exceptions to those standards.
- Guidelines and technical requirements for noise measurements and acoustical studies to determine conformance with provisions of the ordinance.
- Standards for construction equipment and noise-emitting construction activities.
- Regulations for the noise generated by events, including truck loading and unloading, operation of construction equipment, and amplified music."

To date a County noise ordinance addressing construction noise has not been adopted; however, the County relies on the State Office of Noise Control Guidelines when considering new outdoor noise sources. No new stationary sources of noise will be established as part of the proposed Project; therefore the following discussion is focused on potential construction related noise impacts. Section 14-8.10 (Noise and Vibration) of the Caltrans Standard Specifications includes requirements for the control and monitoring of noise resulting from construction activities. The Caltrans Standard Specifics require construction noise to no exceed 86 dBa Lmax at 0 feet from the job site from 9:00p.m. to 6:00 a.am.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Construction activities would temporarily increase noise levels in the vicinity of the Project area. Actual noise levels would vary throughout the day depending on the type

of construction equipment involved, activities being implemented, and distance between the source of the noise and receptors. The contractor would comply with noise standards outlined in Caltrans Standard Specifications, and applicable construction equipment will be equipped with appropriate mufflers pursuant to the Standard Specifications and the YSAQMD rules. Long-term noise associated with use of CR 98 would be similar to current conditions. Temporary noise generated by construction would be less than significant.

b) ***Less Than Significant Impact.*** Project construction includes activities, such as operation of large pieces of equipment (e.g., heavy trucks), which may result in the periodic, temporary generation of ground-borne vibration. The Project does not introduce new sources of ground-borne vibration. Given the nature of any potential ground-borne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

c) ***Less Than Significant Impact.*** The UC Davis Airport, which is operated as a general aviation airport and is open to the public, is located approximately 0.5 miles east of the Project site. The University Airport does not have an airport land use plan that would identify noise contours or other safety hazards. However, University Airport Rules and Regulations have been established to protect health, safety, and peace and to provide for the orderly conduct of activities on the Airport site. The runways at the UC Davis airport are oriented in a north-south direction. The arrangement of the runways are parallel to the direction of CR 98 and therefore it is not expected that airplane approaches and departures would be at low elevations over the Project site. Due to these conditions it is not expected that the Project will result in a safety hazard or excessive noise for people working in the Project site during construction activities.

Mitigation Measures: None required.

5.15 **Population and Housing**

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

Potential Environmental Effects

a) ***No Impact.*** The Project does not include activities that would result in substantial unplanned population growth either directly or indirectly.

b) ***No Impact.*** The Project does not include any activities that would result in the displacement of housing or people.

Mitigation Measures: None required.

5.16 **Public Services**

Would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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:	☐	☐	☒	☐
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Environmental Setting

Project construction activities would be coordinated with local law enforcement and emergency services providers as applicable. The roadway will remain open during construction; however periodic and temporary delays may occur during construction activities. Priority will be given to emergency vehicles to traverse the Project site if and when necessary.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The Project makes improvements to existing public infrastructure. County Road 98 is not used to access any parks, or other public facilities. County Road 98 i does provide access to public/quasi-public uses, i.e., church, day care, and private school associated with Grace Valley Christian No adverse effects on service ratios, response times, or service objectives for any of the public services are anticipated. The Project would have a less than significant impact on fire and police protection and no impacts on schools, parks or other public facilities.

Mitigation Measures: None required.

5.17 **Recreation**

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
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?	☐	☐	☒	☐
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Environmental Setting

The Project is adjacent to the UC Davis Arboretum and Public Garden's Putah Creek Riparian Reserve.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The Putah Creek Riparian Reserve can be accessed on CR 98 just south of the Project at the Pedrick Road Trailhead. The proposed safety improvements on CR 98, including the installation of bike lanes, could lead to an increase in recreational users of the Reserve; however, this increase is not anticipated to result in accelerated substantial physical deterioration of the Reserve or its facilities. Project impacts are less than significant.

b) ***No Impact***. The Project would not require the construction or expansion of recreational facilities.

Mitigation Measures None required.

5.18 Transportation

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

Potential Environmental Effects

a) ***No Impact.*** The proposed Project does not include activities that would cause a permanent negative impact to the circulation system (roads), including transit, roadway, bicycle, and pedestrian facilities. The proposed Project is identified in the SACOG Metropolitan Transportation Plan / Sustainable Communities Strategy (MTP/SCS). The roadway improvements will occur on the same alignment as the existing CR 98 and are designed to improve circulation for transit, roadway, bicycle and pedestrian facilities.

Once constructed, the Project would not result in an increase in traffic in the area and will not conflict with the Yolo County General Plan, MTP/SCS, or any ordinance, policy, or congestion management program. The Project will have no impact on traffic circulation plans or policies.

b) ***Less Than Significant Impact.*** The Project would not have an impact on vehicle miles traveled. During the 10-month construction period, worker commute and equipment hauling vehicles would be traveling to and from the Project site causing a minor temporary increase in localized traffic; however, this would be temporary and would cease once construction is complete. There may be a minor increase in regional commuting times during construction activities, which is estimated to be between 4 – 6 minutes longer than normal when using alternative routes, however upon completion of the project, regional commuting times will return to pre-project conditions. Once completed, the Project would not result in any changes to vehicle miles travelled. The impact associated with temporary increases in Project-related traffic would be less than significant.

c) ***No Impact.*** The Project rehabilitates the existing roadway to improve public safety. The Project does not include features that introduce or exacerbate any transportation or traffic hazards due to a design feature. The proposed roadway improvements have been designed to accommodate automobiles as well as farm equipment, while providing improvements to the safety of bicycle facilities.

d) ***Less Than Significant Impact.*** The completed Project will have no impact on emergency access. The Project construction activities would be coordinated with local law enforcement and emergency

services providers as applicable. Priority will be given to emergency vehicles to traverse the Project site if and when necessary during construction. Impacts would be considered less than significant.

e) ***No Impact.*** The Project would not result in an increase in demand for parking in the vicinity of the Project.

Mitigation Measures: None required.

5.19 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	☐	☐	☒	☐
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. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental Setting

The ASR and HPSR studies did not identify any archaeological resources resource within the Project site.

The Native American Heritage Commission (NAHC) was contacted to request sacred lands file search and contact list. On April 11, 2019, the NAHC returned a negative result for sacred lands within the Project's Area of Potential Effects (APE). Additionally, the NAHC listed five Native American Tribes who may have knowledge of sites or traditionally cultural properties that may be affected by Project-related activities. All tribes listed, and including those Tribes requesting notification in Yolo County, were delivered a letter via email on September 27, 2019, giving formal notice and invitation by Yolo County to initiate SB 18/AB 52 consultation on the proposed Project and to request participation of interested parties.

See Section 2 (Environmental Checklist) above for a summary of Project related consultation and coordination with Native American tribes.

Potential Environmental Effects

a) ***i- Less Than Significant Impact.*** Based on the results of the ASR and HPSR documents prepared for the Project and the AB 52 consultation there are no sites, features, places, or cultural landscapes that are 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 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) in the Project site. Therefore, impacts are considered less than significant.

ii- Less Than Significant Impact with Mitigation. The County sent AB 52 consultation letters to five Native American Tribes who may have knowledge of sites or traditionally cultural properties that may be affected by Project-related activities. All tribes listed by the NAHC, including those Tribes requesting notification in Yolo County, were contacted via email that included a letter on September 27, 2019, informing them of the proposed Project and to request participation of interested parties. The Yocha Dehe Wintun Nation responded via letter dated October 7, 2019, indicating a cultural interest and authority in the proposed Project area. The Yocha Dehe Wintun Nation indicated they were not aware of any known cultural resources near the Project site but recommends cultural sensitivity training for any pre-project personnel. Implementation of MM TCR-1: Cultural Sensitivity Training will reduce potential impacts to inadvertent discoveries of Tribal Cultural Resources to a less than significant level through educating project personnel on the importance and value of Tribal Cultural Resources. Impacts are considered less than significant with mitigation incorporated.

Mitigation Measures

MM TCR-1: (Sensitivity Training)

Prior to the start of the Project, Project personnel will attend cultural sensitivity training from the Yocha Dehe Wintun Nation. Contact Yocha Dehe Wintun Nation Tribal Monitor Supervisor, Office: (530) 215-6180.

5.20 Utilities/ Service Systems

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

Environmental Setting

There are several utilities in the Project area. AT&T, PG&E (Electric and Gas), high-speed internet (Wave), and gas (Slawson) utilities will be relocated as a result of the proposed Project. New utility services will not be required to serve the proposed Project after completion.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The Project involves the development of bicycle and pedestrian facilities along an existing roadway and will not require new water or expanded waste water treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities to serve the Project. Utility relocation and realignment will be required, none of which, on their own, would involve environmental impacts. Implementation of the Project will require the relocation of drainage ditches and above-ground utilities outside the clear recovery zone, which will include extension, replacement, and/or relocation of existing drainage structures to accommodate the widened road. This will also include relocation and/or abandonment of underground utilities, where they are in conflict with the Project. The Project may include the installation of high-speed internet as well as relocation of AT&T, PG&E (electric & gas), Wave, UC Davis facilities, and Slawson gas facilities. The installation and relocation of these utilities and infrastructure will occur within the footprint of the disturbance roadway disturbance area and will no cause significant environmental effects. This is considered a less than significant impact.

b) ***Less Than Significant Impact.*** The Project would not involve any actions that would require a new water supply or generate wastewater. There may be the need for minor landscaping irrigation to establish vegetation and replanting along the proposed facilities, however this water need is not expected to be in perpetuity, nor is it expected to impact existing service levels regarding water use. No new water or wastewater facilities would be constructed or needed as part of the Project.

c) ***No Impact.*** The Project would not produce wastewater.

d) ***Less Than Significant Impact.*** Solid waste generated by the Project would be limited to construction debris. Solid waste disposal would occur in accordance with federal, state, and local regulations. Disposal would occur at permitted landfills; likely the Yolo County Central Landfill located approximately 8 miles east of the Project. The Project would not generate solid waste in amounts that would substantially affect the existing capacity of the Yolo County Central Landfill and impacts would be less than significant.

e) ***No Impact.*** The Project would conform to all applicable state and federal solid waste regulations.

Mitigation Measures: None required

5.21 **Wildfire**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Environmental Setting

In accordance with California Public Resource Code Section 4201-4204 and Government Code Section 51175-51189, the CalFire has mapped areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), represent the risks associated with wildland fires.

In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). The State of California has determined that non-federal lands in unincorporated areas with watershed value are of Statewide interest and have classified those lands as State Responsibility Areas (SRA), which are managed by CalFire. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRA). Most of the western third of Yolo County has been classified as SRA, with FRA near the northwest and west County boundaries (Figure IV.M-2).

The Project is not located in any Fire Hazard Severity Zone per the 2018 CalFire Fire Hazard Severity Zones map (CalFire 2020).

Under State regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas.

Potential Environmental Effects

a) ***No Impact.*** The Project is being implemented to improve safety along CR 98. During construction traffic would be routed through the Project site, maintaining traffic flow in the area and providing adequate access for emergency responders. The Project would not impair an adopted emergency response plan or emergency evacuation plan.

b) ***No Impact.*** The proposed Project would not exacerbate wildfire risks or expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) ***Less than Significant Impact.*** The Project involves improvement of existing roadway infrastructure. The completed Project would not exacerbate fire risk. The completed Project will improve public safety/fire prevention by better facilitating transportation of fire-fighting equipment. Project impacts are less than significant.

d) ***No Impact.*** The Project does not include activities that would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Mitigation Measures None required.

5.22 Mandatory Findings of Significance

To be filled out by Lead Agency if required	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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)?	☐	☐	☒	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) ***Less Than Significant with Mitigation Incorporated.*** The proposed Project does not have the potential to significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Based on the preceding environmental analysis, the application of existing regulations and the incorporation of , BMPs, Yolo HCP/ NCCP AMMs, and mitigation measures all potentially significant impacts associated with the Project, including those related to air quality, biological resources, cultural resources, Tribal cultural resources, noise, geology and soils would be avoided, minimized or mitigated to maintain a level that is considered less than significant with mitigation incorporated.

b) ***Less Than Significant Impact.*** The Project is consistent with the General Plan and would not result in individually limited but collectively significant impacts; therefore, the Project would not cause any additional environmental effects or significantly contribute to a cumulative impact.

c) ***Less Than Significant Impact.*** The Project would not result in substantial direct or indirect adverse effects from noise, either during Project construction or operation, nor would it result in impacts to air quality, water quality or utilities and public services; additionally, measures have been identified to maintain the Project's effects to air quality, water quality, and noise levels at less than significant levels. Therefore, the Project would not cause substantial adverse effects on human beings.

6. Summary of Mitigation Measures

The following mitigation measures were identified to reduce impacts to less than significant:

BIOLOGICAL RESOURCES

MM BIO-1: Valley Elderberry Longhorn Beetle

(Yolo HCP/NCCP AMM12: Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle)

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on VELB to the maximum extent possible:

- The elderberry shrub will be transplanted to a USFWS- and Conservancy-approved beetle conservation bank in accordance with the guidelines set forth in AMM12.
- Impacts to 0.71 acres of Great Valley Oak Riparian habitat, which is designated as VELB habitat, will be mitigated for in accordance with the Yolo HCP/NCCP. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-2: Western Pond Turtle (Yolo HCP/NCCP AMMs 4 and 14: Cover Trenches and Holes during Construction and Maintenance; Minimize Take and Adverse Effects on Habitat of Western Pond Turtle)

The following measures will reduce potential impacts to western pond turtles:

- A pre-construction survey for western pond turtle shall be conducted by a qualified biologist. If a western pond turtle nest is identified during the survey, the biologist shall flag the site and determine if construction activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the construction impact zone by a qualified biologist. The County will inform CDFW if the nest cannot be avoided and such an activity must occur.
- If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground-disturbing activity for nests that may be unearthed during the disturbance, and will move out of harm's way any turtles or hatchlings found.
- To prevent injury and mortality of western pond turtle, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

MM BIO-3: Swainson's Hawk and White-Tailed Kite (Yolo HCP/NCCP AMM16: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite)

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on Swainson's hawk and white-tailed kite to the maximum extent possible:

- The Project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 1 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If Project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the Project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

MM BIO-4: Tricolored Blackbird (Yolo HCP/NCCP AMM21: Minimize Take and Adverse Effects on Habitat of Tricolored Blackbird)

The following avoidance and minimization measures will be implemented to minimize the potential for adverse impacts on tricolored blackbird to the maximum extent possible:

- The qualified biologist will conduct visual surveys to determine if an active colony is present, during the period from March 1 to July 30, consistent with protocol described by Kelsey (2008).
- If active colony is present or has been present within the last 5 years, implement a species protection buffer within 1,300 feet of the colony site(s) from March 1 to July 30, unless a shorter distance is approved, based on site-specific conditions, by the Conservancy and CDFW.
- Per the Yolo HCP/NCCP, there is 12.95 acres of Cultivated Land and Grassland Alliance land cover types that could potentially serve as tricolored blackbird nesting and foraging habitat. Impacts to tricolored blackbird suitable habitat land cover types will be mitigated for in accordance with the Yolo HCP/NCCP. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-5: Special-Status Bird Species, Migratory Birds, and Raptors

The following measures will be implemented to further reduce the potential for impacts on special-status and migratory birds and raptors that may nest in or near the Project area, including northern harrier:

- Project activities and vegetation removal within the Project area shall be initiated outside of the bird nesting season (February 1 – August 31).

- If Project activities and vegetation removal cannot be initiated outside of the bird nesting season than the following will occur:

    - A qualified biologist will conduct a pre-construction survey within 7 days prior to the initiation of Project activities.

    - If an active avian nest (i.e., with egg[s] or young) is observed within 250 feet of the Project area during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week and a report submitted to the lead agency weekly.

MM BIO-6: Wetlands and Waters (Yolo HCP/NCCP AMMs 1, 2, 3, 8, 9, and 10: Establish Buffers around Sensitive Natural Communities; Confine and Delineate Work Area to Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas; Avoid and Minimize Effects on Wetlands and Waters)

The following measures shall be implemented to avoid or minimize the potential for Project-related impacts on wetlands and waters:

- The County will comply with the terms of a Clean Water Act Section 404 permit issued by the Corps and Section 401 water quality certification issued by the RWQCB for activities involving the discharge of fill material into jurisdictional drainages. The County will also comply with terms of a Streambed Alteration Agreement with the CDFW (if determined necessary by the CDFW). Prior to any discharge into drainages, the required permits and authorizations will be obtained from the respective agencies. All terms and conditions of the required permits and authorizations will be implemented.
- The County will designate all wetlands outside the area of permanent impact as Environmentally Sensitive Areas (refer to MM BIO-8). These areas will be identified on construction drawings and demarcated in the field with flagging and/or signs identifying the area as off limits to all personnel, equipment, and ground-disturbing activities. In addition, water quality BMPs will be installed around the wetlands (outside the wetland boundaries) in a manner that prevents water, sediment, and chemicals from draining into the features, and all staging, storage, stockpile areas, and off-road travel routes will be located as far as practicable away from the wetlands.
- Mitigation for in 0.27 acres (1,483 linear feet) of permanent impacts to jurisdictional WOTUS will be addressed through the purchase of credits at a Corps-approved mitigation bank or payment to a Corps-approved in-lieu fund.
- Impacts to Lacustrine and Riverine and Fresh Emergent Wetland Sensitive Natural Communities will be mitigated for through the Yolo HCP/NCCP Natural Community and Land Cover Impacts Mitigation Fees. The specific acreage of compensatory mitigation credits are subject to change depending on consultation with the USFWS and the Conservancy.

MM BIO-7: Sensitive Natural Communities (Yolo HCP/NCCP AMM9, Establish Buffers around Sensitive Natural Communities)

Environmentally Sensitive Area (ESA) fencing will be established around the following Sensitive Natural Communities where they occur within or adjacent to the Project area, when feasible. These areas will be identified on construction drawings and demarcated in the field with flagging and/or signs identifying the area as off limits to all personnel, equipment, and ground-disturbing activities.

Per Yolo HCP/NCCP AMM9, the buffers for each Sensitive Natural Community are as follows:

- Valley foothill riparian: 100 feet from canopy drip-line. If avoidance is infeasible, a lesser buffer than is stipulated in the AMMs may be approved by the Conservancy, USFWS, and CDFW if they determine that the sensitive natural community or covered species is avoided to an extent that is consistent with the Project purpose (e.g., if the purpose of the Project is to provide a stream crossing or replace a bridge, the Project may encroach into the buffer and the natural community or species habitat to the extent that is necessary to fulfill the Project purpose). Transportation or utility crossings may encroach into this sensitive natural community provided effects are minimized and all other applicable AMMs are followed.
- Lacustrine and riverine: Outside urban planning units, 100 feet from the top of banks. Within urban planning units, 25 feet from the top of the banks.
- Fresh emergent wetland: 50 feet from the edge of the natural community.

MM BIO-8: Worker Environmental Training Program (Yolo HCP/NCCP AMM6: Conduct Worker Training)

- All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

MM BIO-9 – Tree Removal Documentation and Replacement

The following measures shall be implemented to compensate for the removal of protected trees and to avoid or minimize the potential for Project-related impacts on tree resources.

- Final plans will identify the number, size and species of protected trees to be removed and include a planting plan, to ensure replacement of trees in a manner consistent with County and Resource Agencies policies. If replanting cannot completely compensate for the number of trees removed within the project site or on County managed land, purchase of compensatory mitigation credits will be required for the remainder of trees. The replanting plan must be approved by the County and any compensatory mitigation credits for tree resources must be purchased prior to vegetation clearing activities.
- A plan for avoidance and minimization of trees that are in the area of direct impact, but not removed shall be developed by an International Society of Arboriculture (ISA) Arborist and implemented by the County prior to vegetation clearing activities and throughout the construction of the Project.

MM BIO-10 Control Nighttime Lighting

Implements Yolo HCP/NCCP AMM7: (Control Nighttime Lighting of Project Construction Sites)

- Workers will direct all lights for nighttime lighting of project construction sites into the project construction area and minimize the lighting of natural habitat areas adjacent to the project construction area.

MM TCR-1: Sensitivity Training

- Prior to the start of the Project, Project personnel will attend cultural sensitivity training from the Yocha Dehe Wintun Nation. Contact Yocha Dehe Wintun Nation Tribal Monitor Supervisor, Office: (530) 215-6180.

7. Supporting Information Sources

7.1 Report Preparation

Yolo County Department of Community Services, CEQA Lead Agency

Stephanie Cormier	Principal Planner
Lilia Razo	Project Engineer, Senior Civil Engineer

Gallaway Enterprises

Kevin Sevier	Senior Planner
Brittany Reaves	Biologist

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Appendix A

Natural Environment Study

Appendix B

Farmland Study Report

Appendix C

Road Construction Emissions Model Output

Appendix D

Draft Delineation of Waters of the U.S. Map

Appendix E

Hydraulics Report