Crabtree Road over Dry Creek Bridge (38C-0009) Replacement Project
Initial Study/ Mitigated Negative Declaration

July 2020

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Stanislaus County, California

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Prepared by:
Stanislaus County Public Works Department
1716 Morgan Road
Modesto, CA 95358

EXECUTIVE SUMMARY

The County of Stanislaus Department of Public Works (County) and the California Department of Transportation (Caltrans) Division of Local Assistance propose to replace the Crabtree Road Bridge (38C-0009) over Dry Creek (Project). The Project is located in the Sierra Nevada foothills in eastern Stanislaus County, approximately 13.6 miles east-southeast of the City of Oakdale in unincorporated Stanislaus County. Land uses within 5 miles of the Project include undeveloped grazing land, orchards, agricultural facilities, and a few rural residences.

The purpose of the Project is to replace the existing bridge with a bridge that is consistent with County standards and the Association of State Highway and Transportation Officials (AASHTO) guidelines. The bridge needs to be replaced because the existing structural deficiencies cannot be fixed with rehabilitation. The bridge cannot be widened due to the structure type. The non-standard curve on the north side of the bridge would be corrected by placing the new bridge on a skewed angle with the creek.

This IS/MND was prepared for the Project to assess the potential effects on the environment and the significance of those effects. Based on the analysis conducted in the IS/MND, the Project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

- The Project would have no impacts to the following resource categories: aesthetics, tribal cultural resources, land use and planning, mineral resources, population and housing, public services, and recreation.
- The Project would have a less-than-significant impact to the following resource categories: air quality, cultural resources, energy, greenhouse gas emissions, hydrology and water quality, noise, transportation, utilities and service systems, and wildfire.
- The project would have a less-than-significant impact, once mitigation measures are implemented, for the following resource categories: agricultural resources, biological resources, geology and soils, and hazards and hazardous materials.
- No substantial evidence exists that the Project would have a significant negative or adverse effect on the environment.
- The Project incorporates standard construction measures, as described in the IS/MND, and all applicable mitigation measures as listed below and described in the IS.

In addition to standard construction measures required by Caltrans Standard Specifications or as defined by the construction contract documents, and other applicable laws, regulations, and policies, the following mitigation measures will be implemented as part of the Project to reduce potential environmental impacts. Implementation of these mitigation measures would reduce the potentially significant environmental impacts of the proposed Project to a less than significant level.

Table of Proposed Mitigation Measures

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
Agricultural and Forestry Resources				
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	***Measure AG-1 (Williamson Act Parcels)*** • *Acquisition of ROW from any parcel enrolled in an active Williamson Act Contract will comply with the noticing requirements of the 2014 (amended 2016) California Department of Conservation Public Acquisition Notification Procedures 'A Step by Step Guide'.*	Prior to ROW Phase	Stanislaus County	Less than Significant
Biological Resources				
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	***Measure BIO-1 (Special Status Plants)*** • *If project construction starts and more than three years have elapsed since the 2019 survey, a qualified botanist will conduct an appropriately timed pre-construction botanical survey for the federal listed Hartweg's golden sunburst and the following CNPS-ranked special-status plants identified as having potential to occur in the Project area: Hoover's calycadenia, beaked clarkia, dwarf downingia, Jepson's coyote thistle, spiny-sepaled button-celery, and forked hare-leaf. The survey will cover the entire Project area. Survey results will be provided in an email memo to Caltrans District 10.* • *If any non-federal-listed special-status plants are found, the location of the plants will be designated as an Environmentally Sensitive Area (ESA). ESAs containing these plants will be avoided by all construction personnel and equipment to the maximum extent practicable. If rare plant populations cannot be protected in place, the County will prepare a transplantation/ propagation plan for the relocation of the rare plant(s). Rare plant relocation will occur in a*	Prior to Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
California Department of Fish and Game or U.S. Fish and Wildlife Service?	*suitable area of the Project site or other appropriate County designated area. The transplantation/ propagation plan will be sent to CDFW.* • *If the federal-listed Hartweg's golden sunburst is found in the Project area, Caltrans will reinitiate consultation with USFWS. Construction within 50 ft of the Hartweg's golden sunburst plant(s) will not proceed until the consultation with USFWS is complete. The County and its contractors will adhere to all conditions and requirements of the USFWS consultation.*			
	Measure BIO-2 (California Tiger Salamander – Central California DPS (CTS)) • *Prior to the start of construction activities, a USFWS-approved biologist will provide education and training sessions for all individuals that will be involved with site preparation or construction. The training will focus on habitat sensitivity and identification of California tiger salamander (CTS). The training will include species description and behavior, general measures that will be taken to protect these species as they relate to the proposed project, the penalties for non-compliance, and the boundaries of the proposed project site. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.* • *A USFWS-approved biologist will conduct a pre-construction survey no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance or other general construction activities that*	Prior to and During Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	could affect the salamander. The survey will pay particular attention to detecting any burrows that could be used as refugia by salamanders. If potential refugia burrows are discovered, they will be flagged or otherwise marked and avoided by at least 50 feet. If the potential refugia burrows cannot be avoided, County/Caltrans will contact the Service to discuss additional measures that may be needed and obtain an Incidental Take Statement if needed. • *The contractor will confine all equipment to designated work zones (including access roads and material/ equipment storage and staging area).* • *Construction activities in CTS dispersal habitat (the grassland south of Dry Creek and east of Crabtree Road) will be timed to occur during the dry season (1 May – 5 October) between 30 minutes after sunrise to 30 minutes before sunset to minimize potential effects to salamander dispersal. Work will not be conducted if raining. The Resident Engineer will check the National Weather Service prior to each scheduled work day. No construction activities will be conducted in upland habitat areas where salamanders may occur if it is raining, if there is a greater than 70% chance of rain based on the National Oceanic and Atmospheric Administration's National Weather Service forecast on that work day, or within 48 hours following a rain event greater than 0.25 inch.* • *The Resident Engineer will ensure that any open trenches or excavation pits are properly ramped or covered (if needed). Excavated areas 6 inches deep or more will be covered in a manner that excludes salamanders or will be provided with escape ramps at a*			

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	3:1 slope. No gaps greater than 1 inch will be allowed within cover materials. Each covered excavation in CTS habitat (the grassland south of Dry Creek and east of Crabtree Road) should be checked daily until the excavation is filled. • *All trash (food related items such as wrappers, bottles, cans, food scraps, etc.) will be placed in closed containers and removed from the proposed project site on a daily basis.* • *Pipes laid underground or stored on the ground will be capped or covered in a manner that excludes salamanders from entering the pipe. Long-term storage of pipes and other construction material should be placed on asphalt and raised above the ground by no less than 1.5 inches.* • *All fencing, flagging, debris, trash, and materials from work areas will be removed following completion of construction and habitat restoration activities.* • *The USFWS will be immediately notified verbally, and with a written notification within 5 days, if any worker inadvertently kills or injures a salamander, finds one injured, or trapped, on the proposed project site or during work. Work will stop immediately if an incident occurs until corrective actions are provided by the Service.* • *Areas temporarily disturbed by construction will be restored with native grassland species as described in Appendix F of the approved Project Natural Environment Study (NES).*			

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	Measure BIO-3 (Western Pond Turtle, WPT) • *Within 48 hours prior to the start of work within or along Dry Creek, a qualified biologist will conduct a preconstruction survey for western pond turtle. The survey area will include the construction area and publicly accessible areas 250 feet upstream and downstream of the construction area. If the biologist discovers any life stage of special-status amphibians or reptiles, a biological monitor experienced with the identification and biology of the species will monitor construction activities within Dry Creek to verify that no special-status amphibians or reptiles are harmed.* • *Prior to the start of construction, a biologist will conduct a training session for all construction personnel that includes a description of special-status species with potential to occur in the construction area. The training will explain who to contact and how to proceed if a special-status species is encountered. The training will describe the specific measures to be implemented to avoid impacts to these species.* • *If any life stage of western pond turtle is encountered during construction, activities will cease until a qualified biologist verifies that the individuals have left on their own, that work activities will not affect the individuals, or if no other options are available, the biologist moves the individual(s) to a suitable and safe location downstream of the project.*	Prior to and During Construction	Stanislaus County/ Contractor	Less than Significant
	Measure BIO-4 (Nesting birds and MBTA) *Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by*	Prior to Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	migratory birds and birds-of-prey is anticipated from 1 February to 30 September. Measures to prevent swallow nest establishment will also prevent nest establishment of other birds that may nest underneath the bridge. *Swallows and Other Bridge/Structure Nesters: In California, bridge/ structure-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Black phoebes, another bridge/ structure -nesting species, nest from March to August with peak activity in May. Measures should be taken to prevent establishment of nests on the bridges, culverts, headwalls, and other suitable structures prior to construction. Effective techniques to prevent nest establishment include using exclusion devices and removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation. This can be done by:* • *On a weekly or more frequent basis, remove all partially completed nests using either hand tools or high-pressure water; and/or* • *Hang netting from the bridge/structure before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.* *Birds of Prey and Birds Protected by the Migratory Bird Treaty Act* • *If construction begins outside the 1 February to 30 September breeding season, there will be no need to conduct a preconstruction survey for active nests.*			

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	• *If applicable, trees scheduled for removal should be removed during the non-breeding season from 1 October to 31 January.* • *If construction is scheduled to begin between 1 February and 30 September, a biologist shall conduct a survey for active bird of prey nests within 300 ft and active MTBA bird nests within 100 ft of the Project area from publicly accessible areas within one week prior to construction. The measures listed below shall be implemented based on the survey results.* *No Active Nests Found:* • *If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary.* *Active Nests Found:* • *If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:* 1. *Stop all work within a 300-ft radius of the discovery* 2. *Notify the Engineer* 3. *Do not resume work within the specified radius of the discovery until authorized.* • *The biologist shall establish a minimum 600-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a Swainson's*			

<table>
<tr><th>Potential Impact</th><th>Mitigation Measure</th><th>Timing</th><th>Responsible Party</th><th>Level of Significance After Mitigation</th></tr>
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hawk, a minimum 300-foot ESA if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey..

Bird Species Protection Areas
<table>
<tr><th>Identification</th><th>Location</th></tr>
<tr><td>Swainson’s hawk</td><td>600 ft no-disturbance buffer</td></tr>
<tr><td>Bird of Prey</td><td>500 ft no-disturbance buffer</td></tr>
<tr><td>MBTA protected bird (not bird of prey)</td><td>100 ft no-disturbance buffer</td></tr>
</table>

Activity in the ESA will be restricted as follows:

Do not enter the ESA unless authorized
If the ESA is breached, immediately:

Secure the area and stop all operations within 60 ft of the ESA boundary
Notify the Engineer

If the ESA is damaged, the County determines what efforts are necessary to remedy the damage and who performs the remedy.

No construction activity will be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.
The size of an ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active

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Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	nest is occurring. Reduction of ESA size depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific factors. • *Between 1 February and 30 September, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.* • *If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.*			
	Measure BIO-5 (Burrowing Owl) • *A qualified biologist will conduct Take Avoidance Surveys in accordance with Appendix D of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. An initial Take Avoidance Survey will be conducted no less than 14 days prior to initiating ground disturbance activities and a final survey will be conducted within 24 hours prior to ground disturbance.* • *The preconstruction survey for burrowing owls will include all potential burrowing owl habitat within 500 feet of the project. Portions of the survey area located on private land will be surveyed from all publicly accessible areas.* • *If active burrowing owl burrows are found, the following measures will be implemented:*	Prior to Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	• *During the non-breeding season (1 September through 31 January), the biologist shall establish a 160-foot ESA around the burrow. During the breeding season (1 February through 31 August), the biologist shall establish a 300-foot ESA around the burrow in consultation with CDFW.* • *The size of the ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the burrowing owl is occurring. Reduction of ESA size depends on the location of the burrow relative to the project, project activities during the time the burrow is active, and other project-specific factors.* • *If the burrow is located within the construction zone and it is during the non-breeding season, the burrowing owl can be passively excluded from the burrow using one-way doors, as described in the Exclusion Plan of Appendix E of the 2012 CDFW Staff Report on Burrowing Owl Mitigation.* • *If the burrow is located within the construction zone and it is during the breeding season, the burrowing owl can only be passively excluded if it has been confirmed that the owl has not begun egg laying and incubation, the clutch was unsuccessful, or juveniles from the occupied burrows are foraging independently and are capable of independent survival.*			
	Measure BIO-6 (Special-Status Bats)	Prior to Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	The maternity season for bats in California is generally considered to be from 15 May through 15 August and the hibernation season from 15 November through February. • *A qualified biologist will conduct a preconstruction survey for roosting bats within 2 weeks prior to the start of construction. Surveys can also be performed earlier than 2 weeks prior to the start of construction.* • *If no bats or sign of their use is observed during the survey no further measures are required.* • *If sign of or direct observation of a maternity or hibernation roost is recorded during the survey, no project related disturbance will occur to the structure containing the roosting bats until a qualified biologist determines, by observation, that the bats using the maternity or hibernation roost have departed for the season.* • *If it is determined during the preconstruction survey that bats are using the bridge outside maternity and hibernation seasons listed in this measure exclusion devices will be installed. Exclusion devices can be installed anytime outside of the maternity and hibernation season of roosting bats listed above.* • *Exclusion devices shall remain in place until demolition of the bridge.* • *Removal or trimming of trees or relocation of any structure that contains an active roost will be avoided between 15 May and 15 August (the maternity period) to avoid impacts on reproductively active females and dependent young.*			

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	• *The qualified biologist shall coordinate with CDFW regarding proposed exclusion methods prior to implementation. If construction is proposed while roosting bats are present, then the County shall coordinate with CDFW for additional guidance on bat avoidance and impact minimization during construction activities.*			
	Measure BIO-7 (American Badger) • *A qualified biologist will conduct a preconstruction survey for American badgers within 48 hours prior to the onset of ground disturbance in the Project area. If an occupied den is detected within the work area, the den will be avoided until the qualified biologist determines that the den is no longer occupied. If there are occupied dens in the Project area, the County shall coordinate with CDFW for additional guidance on den avoidance and impact minimization during construction activities.*	Prior to Construction	Stanislaus County/ Contractor	Less than Significant
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through	***Measure BIO-8 (Waters)*** • *During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks (http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm) to minimize the potential for siltation and downstream sedimentation of Dry Creek.* • *The limits of construction will be marked with temporary fencing or flagging.*	Prior to and During Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
direct removal, filling, hydrological interruption, or other means?	• *Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located away from channels to prevent transport of materials into the adjacent Dry Creek. The preferred distance is a minimum 100 feet from riparian habitat or water bodies. Construction vehicles and equipment will be maintained to prevent contamination of soil and water from external grease and oil and from leaking hydraulic fluid, fuel, oil, and grease.* • *Any temporary diversion structure will be designed so that fish passage is maintained through the Project area. The diversion will not create an impassible barrier to fish passage. The contractor will prepare a creek dewatering plan that complies with any applicable permit conditions. Water diversion in Dry Creek will be conducted in accordance with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004).* • *Diversion and dewatering activities will be restricted to the period of 15 June through 15 October, when creek flows are low, and the creek is often naturally dry. No in-water work will be conducted outside of this period unless the exception is approved by CDFW. All diversion materials will be removed by 15 October unless an extension is approved by CDFW.* • *If pumps are used to temporarily divert or dewater the impoundment on Dry Creek to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish. Potential contact between fish and pump will be minimized and/or avoided by constructing an open basin prior to commencing dewatering. The*			

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	open basin will be inspected for fish, which will be salvaged and placed in the active flow of Dry Creek adjacent to the work zone by a qualified biologist. All temporary diversion structures and materials will be removed from the creek prior to the completion of the Project. • *Areas temporarily disturbed on the banks of Dry Creek will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species prior to October 15 and/or immediately after construction is terminated at the completion of the Project (Appendix F of approved Project NES). Reseeded areas may be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The project engineer will determine the specifications needed for erosion control fabric (e.g., sheer strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species as described in Appendix F of approved Project NES. No seed of nonnative species will be used unless certified to be sterile.* • *The Project will acquire applicable permits from the Corps, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife prior to conducting any work in potential jurisdictional waters including Dry Creek. The Project will abide by the terms of permits acquired, including any limited operating periods restricting the time of year when work in Dry Creek may occur and the purchase of wetland/aquatic resource mitigation credits or by funding in-lieu fee program credits.*			
Geology and Soils				

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	***Measure PALEO-1 (Paleontological Resources)*** • *A qualified paleontologist will prepare a Paleontological Monitoring Plan based on 65% design.* • *The qualified paleontologist would designate a paleontological monitor to be present during qualifying earthmoving activities, as described in the Paleontological Monitoring Plan.* • *The Resident Engineer will notify the qualified paleontologist in advance of the start of construction activity and would attend any safety training programs for the proposed project. The proposed project paleontologist would meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel involved with excavation or drilling activities in paleontologically sensitive areas will receive a paleontological awareness training session prior to commencement of work.* • *If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer. In the event that paleontological resources are discovered, fossil specimens would be properly collected and sufficiently documented to be of scientific value. Collection, documentation, and storage standards will be provided in the Paleontological Monitoring Plan.* • *Upon the completion of excavation and/or drilling activities in paleontologically sensitive areas, the paleontologist will prepare a*	Prior to and During Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	Paleontological Monitoring and Findings Report summarizing the results of the monitoring. The report will provide a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. Full copies of the final Paleontological Monitoring and Findings Report will be deposited with the repository institution.			
Hazards and Hazardous Materials				
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?	***Measure HAZ-1 (Treated Wood Waste (TWW))*** • *Handling and disposal of chemically treated wood removed from the project site will adhere to Caltrans 2015 Standard Specification (SS) 14011.14 and Special Standard Provision (SSP) 14011.14.*	During Construction	Stanislaus County/ Contractor	Less than Significant

Potential Impact	Mitigation Measure	Timing	Responsible Party	Level of Significance After Mitigation
	Measure HAZ-2 (Thermoplastic traffic striping) • *Thermoplastic traffic striping removed by the Project will be disposed of at a Class I disposal facility.*	During Construction	Stanislaus County/ Contractor	Less than Significant
	Measure HAZ-3 (Lead Containing Paint, LCP) • *Paint on the wood guardrails, guardrail posts and curbs will be tested for LCP prior to demolition/removal to determine if they exceed thresholds established by the California Code of Regulations. Material found to exceed the threshold will be disposed of at a Class I disposal facility. If lead is detected, then appropriate procedures will be included in the Construction contract to avoid contact with these materials or generation of dust or vapors.*	Prior to Construction	Stanislaus County/ Contractor	Less than Significant

ACRONYMS AND ABBREVIATIONS

The following is a list of abbreviations used within this document. Each term is defined in full once within the document before the abbreviation is used.

AASHTO: American Association of State Highway and Transportation Officials

AB 52: Assembly Bill 52

ac: Acre

ACCM: (presumed) asbestos-containing material

ADL: Aerially Deposited Lead

APN: Accessor Parcel Number

BMP: best management practices

CAAQS: California Ambient Air Quality Standards

Caltrans: California Department of Transportation

CDFW: California Department of Fish and Wildlife

CDOC: California Department of Conservation

CEQA: California Environmental Quality Act

CNDDB: California Natural Diversity Database

CHL: California Landmarks

CIDH: Cast-In-Drilled Hole

CNPS: California Native Plants Society

CO: carbon monoxide

CRHR: California Register of Historic Places

CTS: California Tiger Salamander

CWA: Clean Water Act

CCV: California Central Valley

CVRWQCB: Central Valley Regional Water Quality Control Board

dB: decibel

DPS: Distinct Population Segment

FEMA: Federal Emergency Management Agency

FHWA: Federal Highway Administration

General Plan: Stanislaus County General Plan 2015

H2S: hydrogen sulfide

IS/MND: Initial Study/Mitigation Negative Declaration

ISA: Initial Site Assessment

LCP: lead-containing paint

Ldn: Day-night average sound level

MBTA: Migratory Bird Treaty Act

MMRP: Mitigation, Monitoring, and Reporting Program

MRZ-1: mineral resources zone (type) 1

MRZ-3: mineral resources zone (type) 3

NAAQS: National Ambient Air Quality Standards

NAHC: Native American Heritage Commission

NO2: nitrogen dioxide

NPDES: National Pollution Discharge Elimination System

NRCS: Natural Resource Conservation Service (USDA)

NRHP: National Register of Historic Places

O3: ozone

PM10: particulate matter less than 10 microns in diameter

PM2.5: particulate matter less than 2.5 microns in diameter

REC: recognized environmental conditions

ROG: reactive organic gas

ROW: Right of Way

RSP: Rock Slope Protection

RWQCB: Regional Water Quality Control Board

SJV: San Joaquin Valley

SJVAB: San Joaquin Valley Air Basin

SJVAPCD: San Joaquin Valley Air Pollution Control District

SO2: sulfur dioxide

SWRCB: State Water Resources Control Board

SWMP: Stormwater Management Plan

SWPPP: Stormwater Pollution Prevention Plan

TMP: Transportation Management Plan

TWW: Treated Wood Waste

Corps: U.S. Army Corps of Engineers

U.S. EPA: U.S. Environmental Protection Agency

UCMP: University of California Museum of Paleontology

USDA: U.S. Department of Agriculture

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The noticing requirement per the 2014 (amended 2016) California Department of Conservation Public Acquisition Notification Procedures A Step by Step Guide are listed below.

First Notice: The first notice, must occur ***before*** the public agency makes a decision to acquire a property located in an agricultural preserve. The first notice needs to include the following information:

1) The public agency's explanation of its preliminary considerations of the findings of Government Code §51292 (a) and (b):
   a) *"The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve (§51292(a))."*
   b) *"There is no other land within or outside of the preserve on which it is reasonably feasible to locate the public improvement (§51292(b))."*
2) A description of the agricultural preserve land it intends to acquire;
3) A copy of the Land Conservation Act contract on property that pertains to any land subject to the restrictions of such a contract between the local governing body, city or county, responsible for the administration of the agricultural preserve where the property to be acquired is located.

Second Notice: A second notice is required within 10 working days after acquisition (escrow has closed). The second notice shall include the following, if not previously provided due to some exemption in Government Code §51290 – §51295 (state the applicable exemption in second notice):

1) The notice shall include a general explanation of the decision and the findings made pursuant to Government Code §51292.
2) A general description, in text or by diagram, of the agricultural preserve land acquired (a vicinity map is good); and
3) A copy of the applicable Land Conservation Act contract(s).

Note: If the information and documents, noted above, were provided to the Department in the first notice then the second notice need only list the documents as having been previously provided

Third Notice: A third notice is required if there is a significant change in the public improvement that the public agency intends to locate on land that is acquired in an agricultural preserve for such a purpose. The public agency must provide notice to the Department and the local jurisdiction (city/county) regarding increases or decreases in the amount of land acquired; **OR**

Third / Fourth Notice: A third/fourth notice is required if the public agency does not acquire the land it notified the Department it intended to acquire in the first notice and/or the public agency determines not to use the property it acquired for the purpose identified in the first notice. The land must be reenrolled under a contract that is as restrictive as the one it was under before the acquisition occurred (Government Code §51295).

Acquisition of land from these two Williamson Act Contract parcels is required because there is no other land within or outside of the preserve on which it is reasonably feasible to locate the Project and attain the Project goals. The Project/ bridge location is already established and is not based on

Figures

Tables

Appendices

1. Initial Study

1. Project Title:	Crabtree Road over Dry Creek Bridge (38C-0009) Replacement Project
2. Lead Agency Name and Address:	Stanislaus County
3. Contact Person and Phone Number:	Earl Seaberg, Project Manager (209) 525-4138
4. Project Location:	The Project is located in the Sierra Nevada foothills in eastern Stanislaus County, approximately 13.6 miles east-southeast of City of Oakdale in unincorporated Stanislaus County.
5. Project Sponsor's Name and Address:	Stanislaus County Department of Public Works 1716 Morgan Road Modesto, CA 95358
6. General Plan Designation(s):	Agriculture
7. Zoning Designation(s):	Agriculture 40 Acre (A-2-40)

2. Introduction

The County of Stanislaus Department of Public Works (County) and the California Department of Transportation (Caltrans) Division of Local Assistance propose to replace the Crabtree Road Bridge (38C-0009) over Dry Creek. The new bridge will improve roadway safety and be consistent with Stanislaus County's standards, policies and procedures, the American Association of State Highway and Transportation Officials (AASHTO) guidelines, and Caltrans guidelines.

The County of Stanislaus is the local lead agency and prepared this Initial Study to consider the significance of potential project impacts pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Section 21000, et seq.). This Initial Study was prepared in accordance with the State CEQA Guidelines (14 California Administrative Code, Section 14000 et seq.).

Based on the results of this Initial Study, the County has determined that the Project would have less-than-significant impacts on the environment with the incorporation of mitigation measures. The County may approve the Project with the certification of a Mitigated Negative Declaration (MND).

The remainder of this document is organized into the following sections:

- **Section 3, Project Description:** Provides a detailed description of the proposed Project;
- **Section 4, Determination, Environmental Factors Potentially Affected:** Provides a determination of the County's CEQA findings;
- **Section 4, Initial Study Checklist and Supporting Documentation:** Provides CEQA Initial Study Resource impact checklists and supporting documentation. Identifies the thresholds of significance, evaluates potential impacts, and describes mitigation necessary to reduce impact significance;
- **Section 6, Supporting Information Sources:** Identifies the personnel responsible for the preparation of this document and provides a list of the references cited throughout the document.
- **Appendix A, Mitigation Monitoring and Reporting Plan**: Contains the Mitigation Monitoring and Reporting Plan prepared for the proposed project. The Mitigation Monitoring and Reporting Plan includes a list of required mitigation measures and includes information regarding the County's policies and procedures for implementation and monitoring of the mitigation measures.

3. Project Description

3.1 Location

The Project is located in the Sierra Nevada foothills in eastern Stanislaus County, approximately 5 miles north of State Route (SR) 132 and 13.6 miles east-southeast of City of Oakdale in unincorporated Stanislaus County (Figures 1 and 2). Crabtree Road is a two-lane local rural road that runs north-south serving agricultural and residential properties between SR 132 and SR 120. The majority of the adjacent agricultural properties are used for almond orchards and cattle grazing. Dry Creek flows west through the Project area and is a tributary of the Tuolumne River.

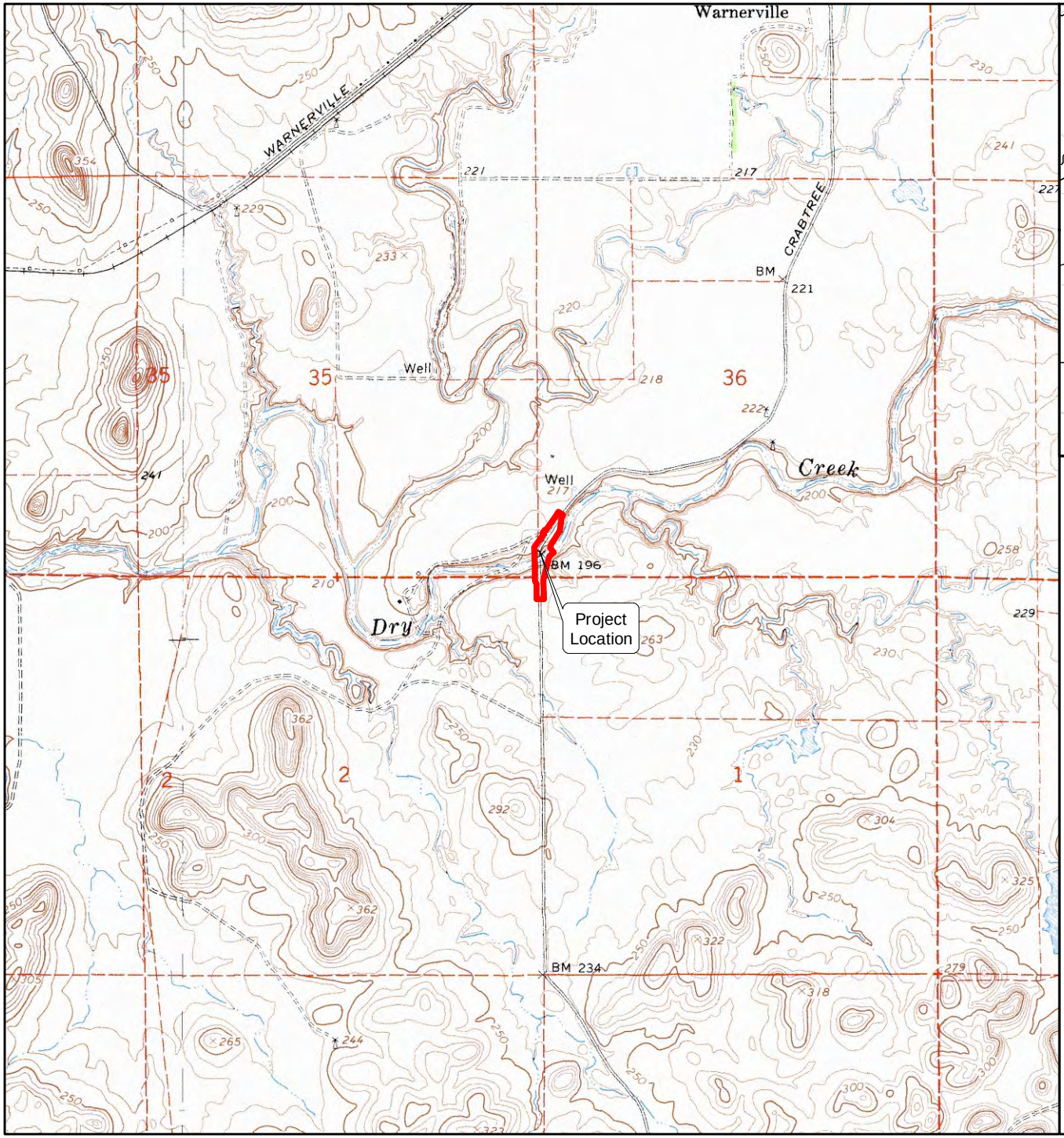
The Project occurs on the Cooperstown quad (T3S, R12E, Sect. 1 & 2 and T2S, R12E, Sect. 35 & 36, Mt. Diablo Base and Meridian) and is in the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). The centroid of the Project area is located at 37.711448° North, 120.609485° West (WGS84), and its Universal Transverse Mercator (UTM) coordinates are 710,716 m East, 4,176,490 m North (Zone 10S, WGS84). Elevation in the Project area ranges from approximately 175 to 225 feet above sea level.

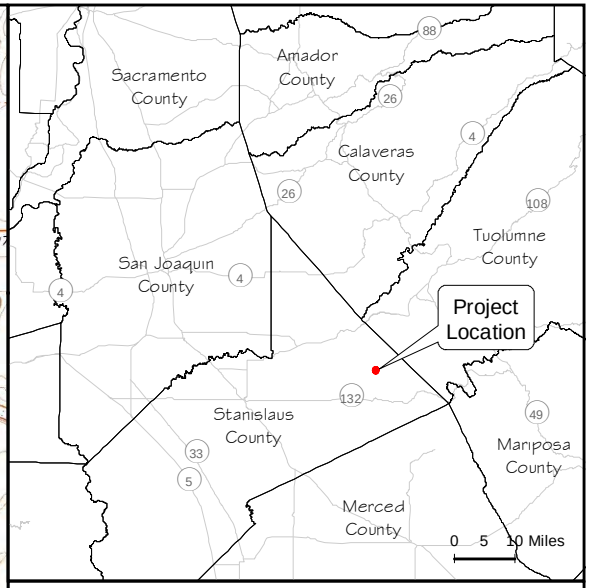
Land uses occurring within 5 miles of the Project consist of undeveloped grazing land, orchards, agricultural facilities, and a few rural residences. The Project area includes approximately 1,175 linear feet of Crabtree Road, a portion of Dry Creek, and portions of four adjacent privately-owned parcels listed in Table 1.

Table 1. Parcels in the Project Area.

Stanislaus County Assessor's Parcel Number (APN)*	**General Plan Land Use Designation***	**Zoning Designation***	**Williamson Act Contract Status & Contract No. ***
011-006-019	Agriculture	Agriculture 40 Acre (A-2-40)	Active, 1971-0470
011-006-029	Agriculture	Agriculture 40 Acre (A-2-40)	Active, 1970-0032
008-002-002	Agriculture	Agriculture 40 Acre (A-2-40)	Active, 1971-0470
008-002-003	Agriculture	Agriculture 40 Acre (A-2-40)	Active, 1970-0032
County Road ROW (no APN)	NA	NA	NA

* Per Stanislaus County Public Inquiry Map (https://sc-giscentral.maps.arcgis.com/apps/webappviewer/index.html?id=457a86a9cbc244e09a783d272e5a33dd)





Crabtree Road over Dry Creek Bridge
(38C-0009) Replacement Project
Stanislaus County, CA
9 January 2019

Figure 1. Location Map

Project Location

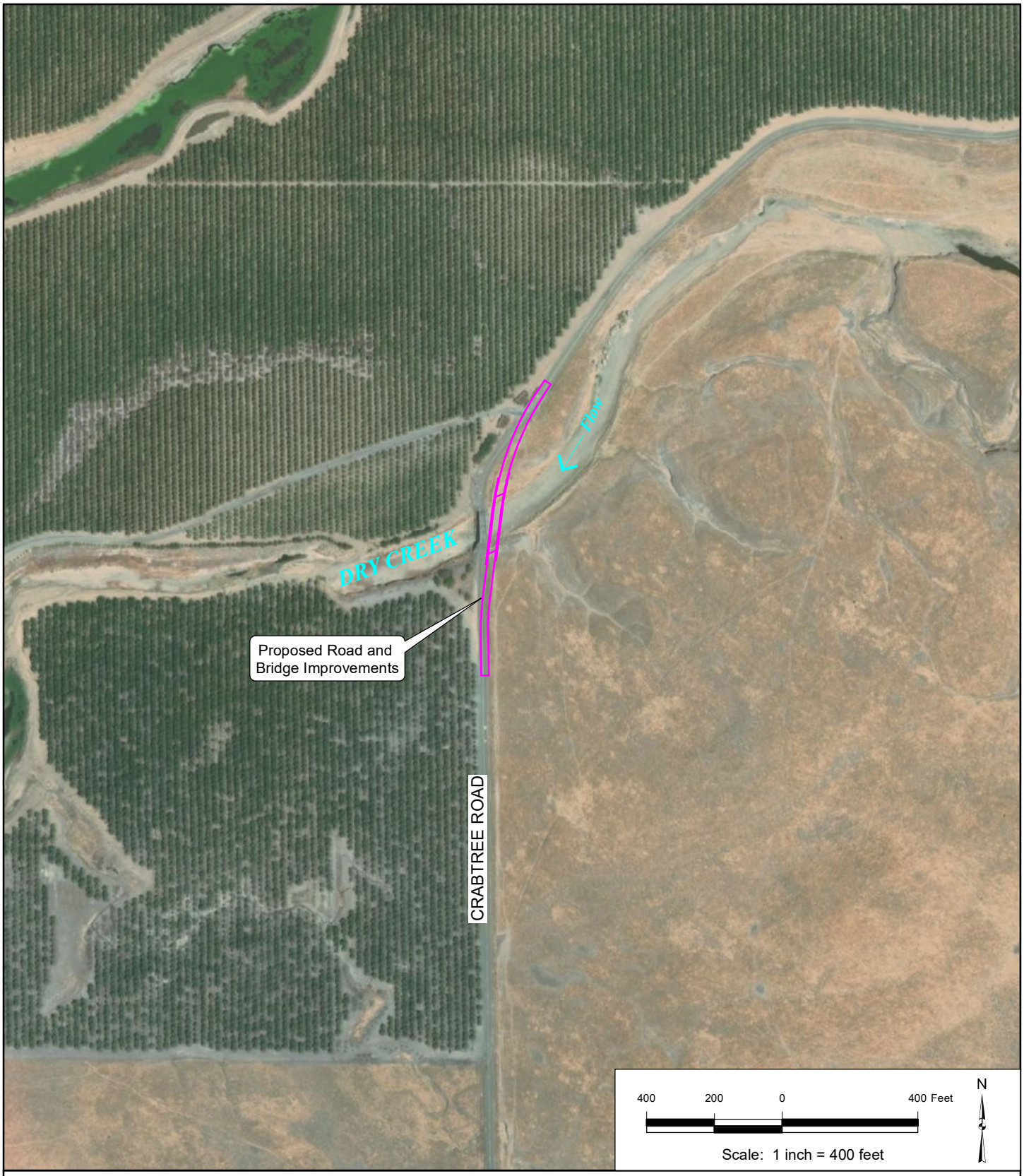
2,000 1,000 0 2,000 Feet

N

Scale: 1 inch = 2,000 feet

Cooperstown, CA (1968)
7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID),
CASIL California USGS Digital Raster Graphics (DRG)
o_sw0101.sid

14104CrabtreeRdoverDryCreek_Fig1LocationMap_v2.mxd



Crabtree Road over Dry Creek Bridge
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29 July 2020

Proposed Road and Bridge Improvements

Aerial Photograph:
29 August 2018
WV02 Vivid Maxar Imagery
ESRI Arcmap Basemap layer

Figure 2. Aerial Photograph

14104CrabtreeRdoverDryCreek_Fig2AerialPhoto_v2.mxd

3.1 History

Constructed in 1920, the existing Crabtree Road Bridge over Dry Creek is a riveted steel through Pratt truss with a corrugated metal deck and timber stringers on reinforced concrete seat abutments. The bridge has a posted operational weight limit due to various structural deficiencies and has a sufficiency rating of 42.2 in the Caltrans' 2016 Local Agency Bridge List. Crabtree Road in the Project area has a posted speed limit of 45 mph and is approximately 22 feet wide with no paved shoulders. The existing bridge deck clear width is 17.38 feet. The bridge is striped as a single lane bridge because the clear width is too narrow to provide standard lane and shoulder widths for two-way traffic. Stop signs occur at either end of the bridge to accommodate the one travel lane. The vertical clearance on the steel truss is 13 feet. The bridge cannot be widened due to the structure type.

The current bridge approach roadway profile and alignment have substandard sight distances. The poor sight distance is a result of a bluff south of the creek being higher in elevation than the bridge. At the crest of the bluff there is a sharp vertical curve leading down to the bridge on the south side of the creek. On the north side of the bridge, the approach roadway has a sharp horizontal curve leading to the bridge. The existing bridge crosses Dry Creek perpendicular to the flow, which allowed the single-span bridge to be as short as possible.

3.1 Project Purpose and Need

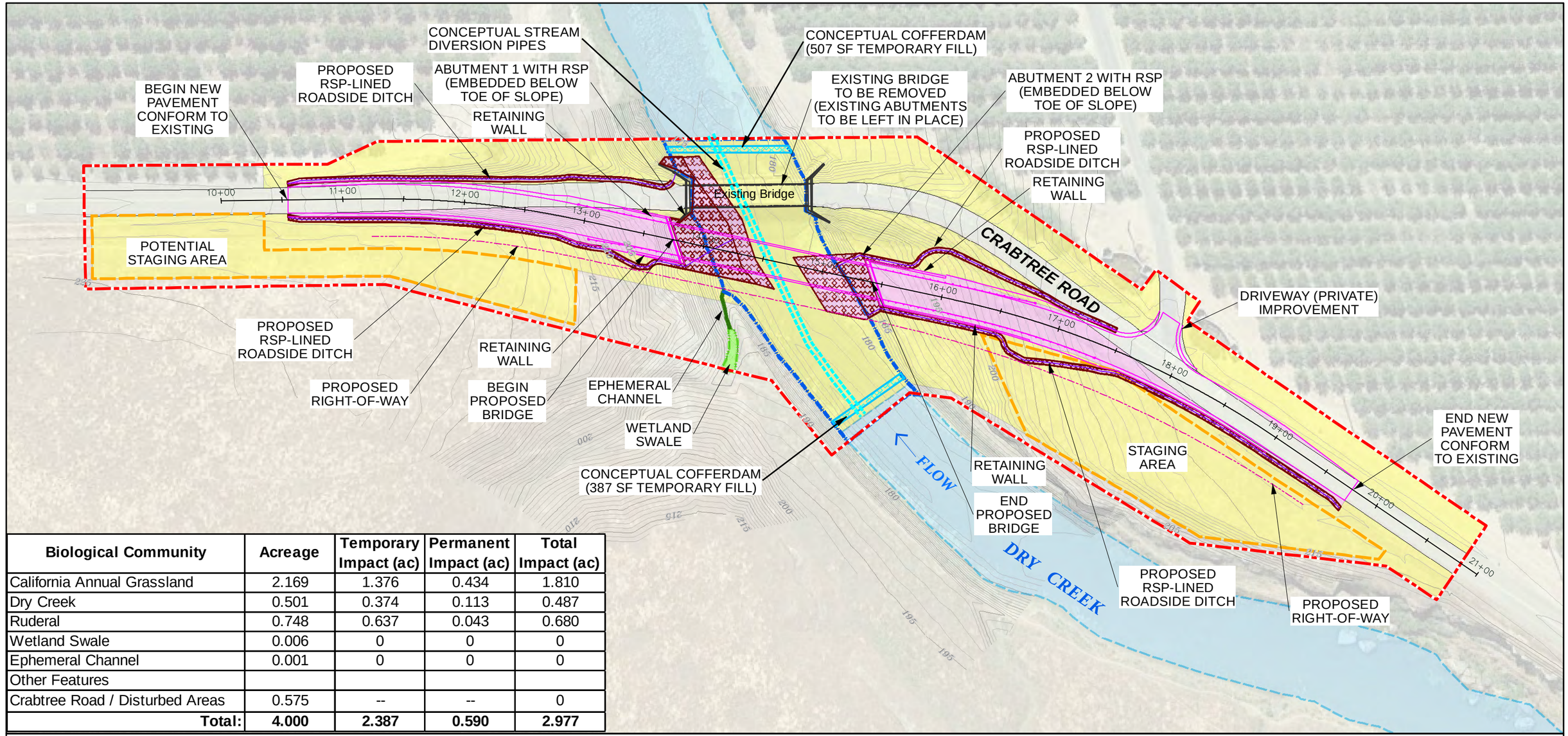
The purpose of the Project is to replace the existing bridge with a bridge that is consistent with County standards and the Association of State Highway and Transportation Officials (AASHTO) guidelines. The Project is needed to correct the following deficiencies:

- The bridge deck width does not meet the minimum AASHTO width of 20 feet (18-foot travel way plus 2-foot shoulders on each side) for average daily traffic (ADT) less than 400 vehicles.
- The bridge is height-restricted at 13 feet.
- The bridge load capacity inventory rating is 11.1 metric tons. The bridge operating rating is 19.0 metric tons. The bridge has established, posted weight limits. No permit loads are allowed.
- The bridge wood barrier does not meet current AASHTO crash-tested barrier capacity requirements.
- The steel truss structure limits the size and type of agricultural equipment that can use the bridge.
- If the bridge is closed or inaccessible, the detour length is 22 miles.

3.2 Project Description

3.2.1 General Construction Details

Stanislaus County would construct a replacement bridge on a new, upstream alignment that would span Dry Creek and correct roadway geometry issues within the project area (Figure 3). The new alignment ties into the existing roadway alignment through a slight curve in the approach roadway from the south. The alignment ties in with the existing approach roadway on the north bank with a second curve. The new alignment eliminates the non-standard curve on the north side of the bridge. The skewed angle of the proposed alignment in relation to Dry Creek will result in a longer bridge structure compared to current conditions.



Biological Community	Acreage	Temporary Impact (ac)	Permanent Impact (ac)	Total Impact (ac)
California Annual Grassland	2.169	1.376	0.434	1.810
Dry Creek	0.501	0.374	0.113	0.487
Ruderal	0.748	0.637	0.043	0.680
Wetland Swale	0.006	0	0	0
Ephemeral Channel	0.001	0	0	0
Other Features				
Crabtree Road / Disturbed Areas	0.575	--	--	0
Total:	**4.000**	**2.387**	**0.590**	**2.977**

Crabtree Road over Dry Creek Bridge
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Figure 3.
Project Impact Map

- Biological Study Area (BSA; 4.00 ac)
- Dry Creek OHWM
- Ephemeral Channel
- Wetland Swale
- Proposed Road and Bridge Improvements
- Proposed Ditch
- Proposed Right-of-way
- Proposed Rock Slope Protection (RSP)
- Contractor Staging Area
- Permanent Impact
- Temporary Impact
- Conceptual Stream Diversion
- Conceptual Cofferdam

80 40 0 80 Feet

Scale: 1 inch = 80 feet

Basemap, Road and Bridge Layout/Improvements based on:
30% Plans Project Plans for Crabtree Bridge Replacement (Feb 2018)
CAD: 187240-C-RD-180908.dwg (Recv'd 9 August 2018) &
J15-1608 Topo.dwg (Recv'd 14 April 2016)

Aerial Photograph:
17 May 2017, Google Earth Imagery
Note: Aerial is not orthorectified.

14104CrabtreeRdoverDryCreek_Fig3ProjectImpactMap(11x17)_v4.mxd

The proposed shift in alignment allows the existing roadway and bridge to remain open to traffic during most phases of the replacement bridge construction (see Detour section below). Once the replacement bridge is open to traffic, the existing bridge would be removed. All or portions of the existing abutments may be left in place to provide bank stability and avoid impacts to existing utilities. The new bridge abutments would be located far enough behind (landward) and to the east of the existing abutments so as to not be in conflict with any existing footings.

The vertical profile of the realigned road raises the bridge approximately 12 feet compared to existing conditions. This change maintains the approach roadway elevation on the north and south banks of the bridge. It allows for continuous access to the private driveway on the west side of the road north of the bridge. The approximate approach roadway reconstruction lengths are 300 feet south of the new bridge and 400 feet north of the bridge. A combination of fill slopes and retaining walls are proposed along the approach roadways to minimize fill slopes and right-of-way acquisition needs.

The proposed single span bridge will be approximately 170 feet long and approximately 24 feet wide and would accommodate two 10-foot traffic lanes, 2-foot shoulders and Type 736 concrete barrier railing with tubular bicycle railing. A cast-in-place reinforced concrete deck on precast prestressed concrete wide flange girders is proposed. Girders will be supported at each end by cantilevered reinforced concrete seat abutments on pile caps founded on cast-in-drilled hole (CIDH) pile foundations.

Retaining walls are proposed along both sides of the north and south approach roadways leading to the bridge abutments. Two retaining walls are anticipated for the south bridge abutment. One is approximately 35 feet long; the other is approximately 45 feet long. The north bridge abutment would also have two retaining walls. The west side retaining wall would extend approximately 65 feet north; the east side retaining wall, which is on the inside of the curve, would extend approximately 123 feet north. At the bridge abutments, the retaining walls are approximately 26 feet tall. Retaining walls are anticipated to be concrete cantilever walls on spread footings or pile caps with CIDH piles.

Construction will require clearing and grubbing to accommodate the construction of the bridge. Construction will include excavation for the new bridge abutments and pile cap foundations; and placing embankment fill on both approaches. The maximum depth of the bridge piles will be determined by the geotechnical report, and is expected to range from 30 to 60 feet.

Rock slope protection (RSP) is proposed around the new north and south abutments, and around the retained existing southern abutment to provide scour protection from high flows in Dry Creek. RSP would be installed from face of the proposed abutments to the bottom of the channel, with some embedded below the bed of the channel.

At the intersection of the bank and bed, a trench would be excavated parallel to the flow of Dry Creek (one on each side of the creek). The trench would extend approximately 6 feet below the toe of the south bank. Along the north bank, a separate trench would extend approximately 13 feet below the toe of bank. Trench depths may be adjusted based on additional planned borings to verify the maximum depth of scour. RSP will then be placed in the trench. The approximate anticipated total thickness of the RSP layer to be installed in each trench is 4 feet. After placement of the RSP, the trenches will be backfilled with native channel material and returned to the approximate original grade. Table 2 provides a summary of the anticipated volume, length, and location of proposed RSP.

Table 2. Proposed Rock Slope Protection

	RSP Depth Below Toe of Bank	Length of Bank with RSP	RSP Thickness	RSP Above OHWM	RSP Between OHWM and Toe [1]	RSP Embedded Below Toe [1]	Total RSP
Abutment on South Bank of Dry Creek	6 ft	110 ft	4 ft	0.026 ac	0.032 ac	0.044 ac	0.102 ac
Abutment on North Bank of Dry Creek	13 ft	60 ft	4 ft	0.022 ac	N/A. OHWM elevation = Toe elevation	0.037 ac	0.059 ac
			TOTAL	0.048 ac	0.032 ac	0.081 ac	0.161 ac

[1] RSP embedded below the toe of bank will be backfilled with native soil to original grade.

Construction of the new bridge foundations as well as erection of the bridge superstructure and removal of the existing bridge may require construction equipment to access the bed of Dry Creek. Construction may require the partial diversion of Dry Creek within project limits. Dry Creek, at the bridge, is an intermittent stream. While flows in Dry Creek often cease in the summer months (typical construction season), there is often ponded water under the bridge through late summer. An open channel or pipe diversion would allow Dry Creek to pass through the construction site. Diversion methods may include the use of water pillows, rock, sandbags, pipes, or other structural methods approved by the Project Engineer and California Department of Fish and Wildlife (CDFW). An open channel diversion could use k-rails, water pillows, silt fencing, gravel, sandbags, visqueen sheeting, steel sheet piles, or similar materials to create a cofferdam. Once the cofferdam is installed, the area between the cofferdam and the creek bank would be dewatered with pumps. Any potential diversion and dewatering activities will be limited to the period of 15 June through 15 October, when creek flows are low, and the creek is often naturally dry. All diversion materials will be removed by 15 October.

Groundwater and seepage may be encountered during construction, especially in the excavations for the foundations and footings. For dewatering operations, the project will develop a dewatering plan in accordance with the Caltrans Construction Site Best Management Practices Manual's NS-02 Dewatering Operations. NS-02 requires that a dewatering plan will be included as part of the Stormwater Pollution Prevention Plan (SWPPP). The dewatering plan will detail the location of dewatering activities, equipment, and discharge point(s). Sediment controls and other Best Management Practices (BMPs) will be identified in the plan to ensure that discharges are consistent with the terms of the National Pollutant Discharge Elimination System (NPDES) permit. Construction of the CIDH piles will require special installation measures, including temporary casing and/or slurry drilling methods to prevent caving of the holes.

Permits and authorizations required for the Project include a Clean Water Act (CWA) Section 404 permit from the U.S. Army Corps of Engineers (NWP #14 for Linear Transportation Projects or NWP #23 for Approved Categorical Exclusions), a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), coverage under the National Pollutant Discharge Elimination System (NPDES) through the State Water Resources Control Board (SWRCB) Construction General Permit (Order

2009-0009-DWQ), and a Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW.

BMPs will be implemented during construction to prevent concrete or other materials from entering Dry Creek. General bridge construction equipment expected to be used includes, but is not limited to: haul trucks, cranes, excavators, drill rigs, backhoes, dump delivery trucks, concrete boom pump and service vehicles.

3.2.2 Right of Way

The existing County right-of-way (ROW) is 66 feet wide. Improvements are anticipated to be completed with a small amount of right-of-way acquired from APNs 008-002-003 and 011-006-029 totaling approximately 0.50 acre.

3.2.3 Staging Areas

Staging areas would be located within existing and proposed right-of-way along the proposed approach roadways as well as on the bench between the north side of the creek and road, east of the bridge. The County would obtain a temporary construction easement on APN 011-006-029 for use of the bench. A potential staging area occurs on the south side of the creek, east of Crabtree Road (Figure 3).

3.2.4 Detour

The roadway may need to be closed for a period of 4 to 5 days during construction of the approach roadway conforms with the existing roadway. The County will require the construction contractor to submit a traffic management plan that maintains access to the private driveway on the north approach roadway. Offsite detours would be provided on existing roads.

3.2.5 Utilities

Existing overhead and underground telephone and electric lines run along the west side of Crabtree Road and will not be impacted or require relocation. There is an existing stream gauge on the east side of the existing north bridge abutment. All or portions of the existing abutments may be left in place to help with bank stabilization and allow the existing stream gauge to remain in place.

3.2.6 Borrow and Disposal Sites

Approach roadway construction requires imported borrow. Imported borrow will be required to meet the engineer's specification and be free of organic matter or other unsatisfactory material. Fill would be obtained from commercial sources with environmentally approved sites on the Department of Mine Reclamation's AB 3098 list.

3.2.7 Construction Contract

Stanislaus County would retain a construction contractor to construct the proposed improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with proposed Project activities and for implementing construction-related mitigation measures. Stanislaus County would provide the construction contractor oversight and management and would be responsible for verifying the implementation of the mitigation measures. The contractor would construct the proposed Project in accordance with the Public Contract Code of the State of California, Project Plans, and any Special Provisions issued by Stanislaus County. The following are a combination of standard and project-specific procedures/requirements applicable to Project construction:

- Contract provisions will require compliance with the San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII construction measures as outlined in the SJVAPCD PM10 Maintenance Plan to minimize fugitive dust emissions;
- Contract provisions will require notification of the County and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains should any be discovered during project construction;
- Contract provisions will require implementation of BMPs consistent with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004) and/or Caltrans Stormwater Quality Handbooks to protect water quality and minimize the potential for siltation and downstream sedimentation.
- The County or its construction contractors will conduct early coordination with utility service providers, law enforcement and emergency service providers to ensure minimal disruption to service during construction;
- The County or its construction contractors will prepare a Transportation Management Plan (TMP). A TMP is a program of activities for alleviating or minimizing work-related traffic delays by applying traditional traffic handling practices and innovative strategies including public awareness campaigns, motorist information, demand management, incident management, system management, construction methods and staging, and alternate route planning.

3.2.8 Construction Sequencing and Schedule

Construction of the proposed bridge is planned to commence in 2021 or later. The Project is expected to be completed in one season but could extend to two seasons due to regulatory limitations on work periods.

3.2.9 Permits and Approvals Needed

The following permits, reviews, and approvals are required for Project construction:

- Caltrans - National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Army Corps of Engineers — Section 404 Clean Water Act Nationwide Permit (NWP #14 for Linear Transportation Projects or NWP #23 for Approved Categorical Exclusions)
- 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 — Streambed Alteration Agreement

4. Initial Study Findings (Determination)

4.1 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

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: Earl R. Seaberg Jr **Date:** 7-27-20

Name and Title: Earl Seaberg, Project Manager

5. Initial Study Checklist and Supporting Documentation

5.1 Initial Study Checklist

This section of the Initial Study incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines. Each resource topic section provides a determination of potential impact and an explanation for the checklist impact questions. The following 21 environmental categories are addressed in this section:

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

Each of the above listed environmental categories was fully evaluated and one of the following four determinations was made for each checklist question:

- **"No Impact"** means that no impact to the environment would occur as a result of implementing the Project.
- **"Less than Significant Impact"** means that implementation of the Project would not result in a substantial and/or adverse change to the environment and no mitigation is required.
- **"Potentially Significant Unless Mitigation is Incorporated"** means that the incorporation of one or more mitigation measures would reduce the impact from potentially significant to less than significant.
- **"Potentially Significant Impact"** means that there is either substantial evidence that a project-related effect would be significant or, due to a lack of existing information, could have the potential to be significant.

5.2 Setting, Impacts, and Mitigation Measures

5.2.1 Aesthetics

Except as provided in Public Resources Code Section 21099 would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

Visual character is a description (not evaluation) of a site and includes attributes such as form, line, color, and texture. Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape, and this analysis rates visual quality as high, moderate, or low. Visual sensitivity is the level of interest or concern that the public has for maintaining the visual quality of a particular aesthetic resource, is a measure of how noticeable proposed changes might be in a particular scene, and is based on the overall clarity, distance, and relative dominance of the proposed changes in the view, as well as the duration that a particular view could be seen.

The existing visual character of the Project site can be described as rural agricultural. Land uses within and adjacent to the Project include agricultural uses. Foreground and background views from the Project area are similar to many other areas in the County. The Project area does not provide particularly unique views that are not common on other nearby County roads. Viewer groups include roadway users, farmers, and residents within the vicinity of the Project site.

The 2015 Stanislaus County General Plan includes policies and associated programs that are intended to protect the County's aesthetic resources from the impacts of future development.

Land Use Element: The Land Use Element contains policies that require development plan review in order to minimize land use conflict. This requirement indirectly protects aesthetic resources by ensuring visual compatibility between land uses (e.g., Goals Two and Five). There are also policies that require county-wide voter approval prior to allowing open space and agricultural land uses to be rezoned to residential uses (Goal Six). This limits the potential for changes that would have aesthetic impacts. Many land use policies pertain indirectly to aesthetic resources, such as protecting riparian habitat and preserving and encouraging enhancement of existing communities. However, the following directly pertains to aesthetic resources within the County.

- **Goal One:** Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic and social concerns of the residents of Stanislaus County.
    - **Policy Two:** Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.
    - **Implementation Measure 1:** Agricultural areas should generally be zoned for 40- to 160-acre minimum parcel sizes. Exceptions include land in a ranchette area so identified because of significant existing parcelization of property, poor soils, location, and other factors which limit the agricultural productivity of the area.

Conservation/Open Space Element: The Conservation/Open Space Element contains many goals and policies that indirectly protect aesthetic resources, such as preserving natural resources in parks and open spaces, ensuring zoning regulations pertaining to development ensure compatibility with natural areas, restricting development in sensitive habitat areas, protecting and enhancing oak woodlands, preserving water quality, improving air quality, conserving agricultural lands, and preserving historical sites. In addition, there are policies and measures that promote increased visual access and aesthetic enjoyment through the creation of parks and trail systems.

- **Goal One**: Encourage the protection and preservation of natural and scenic areas throughout the County.
    - **Policy One:** Maintain the natural environment in areas dedicated as parks and open space.
    - **Policy Two:** Assure compatibility between natural areas and development.
    - **Policy Three:** Areas of sensitive wildlife habitat and plant life (for example, vernal pools, riparian habitats, flyways, and other waterfowl habitats), including those habitats and plant species listed in the General Plan Support Document or by state or federal agencies, shall be protected from development and/or disturbance.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The term 'vista' generally implies an expansive view, usually from an elevated point or open area. A scenic vista is a view that possesses visual and aesthetic qualities of high value to the community. Scenic vistas can provide views of natural features or significant structures and buildings. The County has not designated any scenic corridors or vistas (Stanislaus County 2016 a & b). No designated federal or State Scenic Highways occur in the Project area (Caltrans 2020a and b).

Project activities could temporally affect views for some members of the public during construction. Upon completion of the Project some improvements may be visible but will blend with and be consistent with the existing views. The proposed improvements are visually consistent with the existing land use and aesthetic of the area. Project impacts are less than significant.

b) ***No Impact.*** See response to item a above.

c) ***Less Than Significant Impact.*** The County completed the Caltrans "*Questionnaire to Determine Visual Impact Level*" form to assist in the determination of potential impacts to aesthetic/ visual resources. The questionnaire provides assistance in estimating the probable visual impacts of a proposed project on the environment and in understanding the degree and breadth of the possible visual issues. Points are assigned based on the answers to the questions on the form. A total score is then provided and matched to one of the five groups of scores at the end of the questionnaire that include recommended levels of analysis based on the potential impact to aesthetic resources. The five potential outcomes are briefly listed below:

Score 6-9: No noticeable visual changes to the environment are proposed and no further analysis is required.

Score 10-14: Negligible visual changes to the environment are proposed.

Score 15-19: Noticeable visual changes to the environment are proposed. Visual simulations would be optional.

Score 20-24: Noticeable visual changes to the environment are proposed. A fully developed visual assessment is appropriate.

Score 25-30: Noticeable visual changes to the environment are proposed. A fully developed visual assessment with simulations is appropriate.

The total score for the Proposed Project is 9. According to Caltrans a score of 9 indicates "*No noticeable visual changes to the environment are proposed and no further analysis is required.*" Caltrans concurred with the County's evaluation of the Project's impacts to visual resources. Project impacts are less than significant.

d) ***No Impact***. The Project does not include new or additional outdoor lighting. No impact will occur.

5.2.2 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*	*Potentially Significant Unless 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

Agriculture is the leading industry in Stanislaus County, generating an annual gross value of more than a billion dollars in the local economy. Stanislaus County consistently ranks among the top ten agricultural counties in the state and plays a major role in agriculture at the national level, based on market value of agricultural product sold (Stanislaus County 2016a). Agricultural land use in Stanislaus County includes approximately 249,967 ac of Prime Farmland, 33,172 ac of Farmland of Statewide Importance, 116,210 ac of Unique Farmland, and 26,029 ac of Farmland of Local Importance (CDOC 2020b). Agricultural land uses include livestock grazing; hay production; dairies; walnut, almond, and various fruit orchards; row crops; and nurseries.

Stanislaus County conducted a farmland conversion evaluation for the Project, as required by Caltrans to comply with the Farmland Protection Policy Act. The evaluation consisted of review of the States Farmland Mapping and Monitoring Program maps for Stanislaus County (California Department of Conservation 2020b), completion of the USDA Natural Resource Conservation Service (NRCS)-CPA-106 form, and coordination with the NRCS.

Table 3 lists the APNs in the Project area, there designation per the States Farmland Mapping and Monitoring Program, and their Williamson Act contract status. APN's 008-002-002 and 011-006-019 located immediately west of the existing Crabtree Road ROW are both mapped as containing prime farmland, farmland of sitewide importance, and unique farmland. APN's 008-002-003 and 011-006-029 located east of Crabtree Road are mapped as grazing land (CDOC 2020b). All four parcels adjacent to the Crabtree Road ROW are currently enrolled with active Williamson Act contracts.

Table 3. Project APNs Farmland Mapping and Monitoring Program Designation and Williamson Act Status

Stanislaus County Assessor's Parcel Number (APN)	CA Farmland Mapping and Monitoring Program Maps	Williamson Act Contract Status & Contract No.
011-006-019	Prime Farmland, Farmland of Statewide Importance, Unique Farmland	Active, 1971-0470
011-006-029	Grazing Land	Active, 1970-0032

Stanislaus County Assessor's Parcel Number (APN)	CA Farmland Mapping and Monitoring Program Maps	Williamson Act Contract Status & Contract No.
008-002-002	Prime Farmland, Farmland of Statewide Importance, Unique Farmland	Active, 1971-0470
008-002-003	Grazing Land	Active, 1970-0032
County Road ROW (no APN)	NA	NA

NRCS determined that the Project will not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project will convert approximately 0.512 ac of grazing land on APNs 008-002-003 and 011-006-029 located east of the existing bridge alignment.

Potential Environmental Effects

a) ***No Impact.*** Prime farmland, unique farmland, and farmland of statewide importance occur west of the County ROW. The Project will not acquire ROW west of the existing road. The Project will not convert prime farmland, unique farmland, or farmland of statewide importance to another use. The Project will convert approximately 0.512 ac of grazing land on APNs 008-002-003 and 011-006-029 located east of the existing bridge alignment to a transportation use.

b) ***Potentially Significant Unless Mitigation Incorporate***. The proposed Project requires purchase of approximately 0.512 ac of grazing land from APNs 008-002-003 and 011-006-029 for the proposed improvements. APNs 008-002-003 and 011-006-029 are both under active Williamson Act contracts. The acquisition and use of 0.512 ac of grazing land for a transportation use is not inconsistent with the existing zoning.

The California Land Conservation Act of 1965 [Cal. Govt. Code §51200-51295], commonly known as the Williamson Act, provides incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. Farmland need not be considered "prime" in order to be placed under provisions of the Williamson Act. All lands defined by the State as "prime farmland," "other than prime farmland," and "open space land" are eligible for coverage by a Williamson Act contract. The Williamson Act prohibits a public agency from acquiring prime farmland covered under the Act for the location of a public improvement if there is other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

When there is a need for a public agency or other eligible entity to acquire land enrolled in a Williamson Act contract, or located in an agricultural preserve, the Department of Conservation must be notified. The requirement to notice occurs four times in the Land Conservation Act of 1965 statute:

1. Notice is required before making a decision to acquire property located in an agricultural preserve (GC §51290(b));
2. Notice is required within 10 days of acquisition of the property (GC §51291(c));
3. Notice is required if the public entity proposes any significant changes to the acquisition; and
4. Notice is required after acquisition if the acquiring public agency decides not to acquire the property for the intended purpose (GC §51291(d)).

any consideration of the lower cost of acquiring land in an agricultural preserve (§51292(a)). A design that required ROW from the APNs west of Crabtree Road would result in an overall greater impact to farmland because these parcels are designated as containing prime farmland, unique farmland, and farmland of statewide importance. This document serves as the 'first notice', a copy of the Land Conservation Act contract for APNs 008-002-003 and 011-006-029 is included in Attachment B. The Project will comply with the remaining noticing requirements of the Land Conservation Act of the 1965.With implementation of measure AG-1 this impact is less than significant.

Measure AG-1 (Williamson Act Parcels)

- *Acquisition of ROW from any parcel enrolled in an active Williamson Act Contract will comply with the noticing requirements of the 2014 (amended 2016) California Department of Conservation Public Acquisition Notification Procedures 'A Step by Step Guide'.*

c) ***No Impact.*** No forest land (as defined in Public Resources Code section 12220(g)) or timberlands (as defined by Public Resources Code section 4526) occur in the Project area.

d) ***No Impact.*** See response to item 'c' above.

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

5.2.3 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*	*Potentially Significant Unless 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 San Joaquin Valley (SJV) has an "inland Mediterranean" climate, characterized by hot, dry summers and cool winters. On average, the valley experiences more than 260 sunny days per year. Summer high temperatures often exceed 100 degrees Fahrenheit, averaging in the low 90s in the northern valley and high 90s in the south. The daily summer temperature can vary as much as 30 degrees. Winters are mild and humid with average high temperatures in the 50s, but highs in the 30s and 40s can occur on days with persistent fog and low clouds. The average daily low temperature is 45 degrees Fahrenheit.

Air pollution is influenced by a region's topographic features. The San Joaquin Valley Air Basin (SJVAB) is defined by the Sierra Nevada mountains in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi mountains in the south (6,000 to 8,000 feet in elevation). The valley opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay.

Wind speed and direction play an important role in dispersion and transport of air pollutants. The SJVAB experiences differing wind regimes in the summer and winter. During the summer, winds usually originate at the north end of the SJV and flow in a south- southeasterly direction through the SJV, through Tehachapi pass, and into the Southeast Desert Air Basin. During the winter, winds occasionally originate from the south end of the SJV and flow in a north-northwesterly direction. Also, during the winter months, the SJV experiences light, variable winds less than 10 mph. Low wind speeds, combined with low inversion layers in the winter, create a climate conducive to high carbon monoxide (CO) and fine particulate matter (PM10) concentrations.

The vertical dispersion of air pollutants in the SJVAB is limited by the presence of persistent temperature inversions. Because of expansional cooling of the atmosphere, air temperature usually decreases with altitude. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. Inversions can exist at the surface, or at any height above the ground. Air above and below the inversion base does not mix because of differences in air density. Inversion layers are significant in determining ozone (O3) formation and CO and PM10 concentrations.

Precipitation and fog tend to reduce or limit some pollutant concentrations. Ozone needs sunlight for its formation, and clouds and fog block the required radiation. CO is slightly water-soluble, so precipitation and fog tend to reduce atmospheric CO concentrations. PM10 is also somewhat "washed" from the atmosphere by precipitation.

Precipitation in the SJV is strongly influenced by the position of the semi-permanent subtropical high-pressure belt located off the Pacific coast referred to as the Pacific High. In the winter Pacific storms move through the SJV. The majority of the precipitation falling in the SJV is produced by those storms during the winter. Precipitation during the summer months is in the form of convective rain showers and is rare. Average annual rainfall for the entire SJV is 9.25 inches on the SJV floor. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJV floor. This creates strong low-level temperature inversions and very stable air conditions. This situation leads to the SJV's famous "Tule Fog."

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 4 lists the SJVAB attainment status for federal and state criteria pollutants.

Table 4. State and Federal Attainment Status.

Pollutant	Federal	State
8-hour Ozone (O3)	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	Attainment (Maintenance)	Unclassified/Attainment
Particulate Matter (PM10)	Attainment (Maintenance)[a]	Non-Attainment
Particulate Matter (PM2.5)	Non-Attainment[b]	Non-Attainment
Sulfur Dioxide (SO2)	Attainment	Attainment
Nitrogen Dioxide (NO2)	Attainment	Attainment
Hydrogen Sulfide (H2S)	No Federal Standard	Unclassified
Lead (Pb)	No Federal Standard	Attainment
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] On September 25, 2008, EPA redesignated the San Joaquin Valley to 'attainment' for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.

[b] The Valley is designated 'non-attainment' for the 1997 PM2.5 NAAQS. EPA designated the Valley as 'Non-attainment' for the 2006 PM2.5 NAAQS on November 13, 2009 (effective December 14, 2009).

Stanislaus County is currently in non-attainment status for the 8-hour ozone and PM2.5 NAAQS. The County is in non-attainment status for the 8-hour ozone, PM2.5 and PM10 CAAQS.

The SJVAPCD requires projects within its boundaries to undergo an evaluation assessing potential air quality impacts. The SJVAPCD provides a guidance document, "*Guidance for Assessing and Mitigating Air Quality Impacts*" (GAMAQI 2015), that outlines procedures for assessing potential air quality impacts of proposed projects and for preparing the air quality section of environmental documents. A project would have a potentially significant impact if it exceeds the established threshold levels shown in Table 5.

Table 5. Thresholds of Significance for Criteria Pollutants

Pollutant/Precursor	Construction Emissions (tons/yr)	Operational Emissions (tons/yr)	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

The SJVAPCD's Indirect Source Rule (ISR) 9510 is intended to reduce a project's impact on air quality through project design elements or mitigation by payment of applicable off-site mitigation fees. ISR 9510 section 4.0 (Exemptions) lists several project types that are exempt from its requirements. Per sections 4.4.2 of ISR 9510 below, the Crabtree Road Project is an existing road and is exempt from ISR 9510.

> *"4.4.2 Transportation development projects that consist solely of:*
>
> *4.4.2.1 A modification of existing roads subject to District Rule 8061 that is not intended to increase single occupancy vehicle capacity"*

The SJVAPCD has instituted fugitive dust requirements under Regulation VIII (includes Rules 8011, 8021, 8031, 8341, 8051, 8061,8071, and 8081) that require projects to take actions to reduce ambient concentrations of fine particulate matter (PM10). Regulation VIII requires property owners, contractors, developers, equipment operators, farmers and public agencies to control fugitive dust emissions from specified outdoor fugitive dust sources. Regulation VIII specifies the following measures to control fugitive dust:

- Apply water to unpaved surfaces and areas.
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas.
- Limit or reduce vehicle speed on unpaved roads and traffic areas.
- Maintain areas in a stabilized condition by restricting vehicle access.

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 Project is the replacement of the existing sub-standard bridge with a new bridge on a similar alignment. The proposed Project does not increase the capacity of Crabtree Road and would not result in increased traffic volumes on Crabtree Road.

The proposed Project is included in the StanCOG financially constrained 2019 Federal Transportation Improvement Program (project identification number HBP-ID 3610 and Project # 5938(227)), and the fiscally constrained 2018 Regional Transportation Plan/Sustainable Communities Strategy (project identification number S72). Only projects included in with the Regional Transportation Plan (RTP) may be incorporated into the FTIP. The FTIP derives all its projects either directly from the RTP or indirectly from the policies and lump sums within it. The RTP is the long range policy and planning document while the FTIP is the short range implementing document that enables those planned project to begin work.

The StanCOG 2019 FTIP and 2018 RTP were found to conform to the applicable state implementation plan by StanCOG on August 15, 2018. The design concept and scope of the proposed project is consistent with the project description in the 2018 RTP, 2019 FTIP, and the "open to traffic" assumptions of the StanCOG Air Quality Conformity Analysis approved by FHWA on December 3, 2018.

b) ***Less Than Significant Impact.*** Stanislaus County is currently in non-attainment status for the 8-hour ozone and PM2.5 NAAQS. The County is in non-attainment status for the 8-hour ozone, PM2.5 and PM10 CAAQS.

Project Operations: The proposed Project does not increase the capacity of Crabtree Road and would not result in increased traffic volumes on Crabtree Road. The Crabtree Road Project was included in the regional emissions analysis conducted by StanCOG for the conforming 2018 Regional Transportation Plan (StanCOG 2018a). The plan is in conformity, and therefore, the individual projects contained in the plan are conforming projects and will have air quality impacts consistent with those identified in the state implementation plans (SIPs) for achieving the Ambient Air Quality Standards (AAQS). The Project will not 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. Operational emissions are considered to be below established threshold levels for transportation projects, if the project is included as part of the StanCOG RTP.

Project Construction: 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. The RCEM was developed to estimate emissions from linear project 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 County road and bridge projects, the assumptions presented in Table 6 regarding type of construction equipment and use duration were used in the RCEM. Other Project assumptions used in the RCEM include a total 12-month construction schedule starting in 2021 and the use of water trucks. Results of the RCEM based on the Project assumptions are in Table 7.

Table 6. Construction Equipment Assumptions

	Equipment	
Construction Period	**Quantity (Running Hrs Per Day)**	**Type**
Grubbing/ Land Clearing	2(6)	Excavator
	1(6)	Bulldozer
	2(8)	Signal Board
Grading/Excavation	1(6)	Crane
	1(6)	Bulldozer
	2(6)	Excavator
	1(6)	Grader
	2(8)	Roller
	2(8)	Loaders
	1(6)	Scraper
	2(8)	Signal Board
	2(8)	Backhoe

Construction Period	Equipment	
	Quantity (Running Hrs Per Day)	**Type**
Drainage/Utilities/Sub-Grade	1(8)	Air Compressor
	1(8)	Generator Set
	1(6)	Grader
	1(8)	Plate Compactor
	1(8)	Pump
	1(8)	Rough Terrain Forklift
	1(6)	Scraper
	2(8)	Signal Board
	2(8)	Backhoe
Paving	1(8)	Paver
	1(8)	Paving Equipment
	1(8)	Roller
	2(8)	Signal Board
	2(8)	Backhoe

Table 7. Estimated Construction Emissions

Project Phases	**ROG lbs/day**	**CO lbs/day**	**NOx lbs/day**	**PM10 Total lbs/day**	**PM2.5 Total lbs/day**	**SOx lbs/day**
Grubbing/land clearing	0.91	7.92	9.53	10.41	0.41	0.02
Grading/excavation	4.47	34.27	49.37	12.12	2.12	0.08
Drainage/utilities/sub-grade	3.79	31.52	39.27	11.73	1.73	0.07
Paving	1.09	12.32	11.04	0.60	0.60	0.02
Maximum lbs/day	4.47	34.27	49.37	12.12	2.12	0.08
Significance Threshold (tons/year)	*10*	*100*	*10*	*15*	*15*	*27*
Significance Threshold converted to lbs/day	*54.8*	*547.9*	*54.8*	*82.2*	*82.2*	*148.9*
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Data entered to emissions model: Project Start Year: 2021; Project Length (months): 6; Total Project Area (acres): 4 ac; Total Soil Imported (yd^3/day): 100. Total PM2.5 and total PM10 emissions are the sum of *exhaust* and *fugitive dust* emissions.

Project construction would create short-term increases in ROG, NOx, and PM10 emissions from vehicle and equipment operation. All estimated construction emissions are below the SJVAPCD CEQA thresholds for construction.

c) ***Less Than Significant Impact.*** Sensitive air quality receptors include receptors such as residences, schools, daycare centers, nursing homes, and hospitals. No schools, daycare centers, nursing homes,

or hospitals occur within on 0.75 mile of the Project area. Based on a review of aerial images one potential residence occurs approximately 0.6-mile northeast of the project limits. Land use surrounding the Project is agriculture.

The Project is not located within an area known to contain naturally occurring asbestos (NOA) or an area "more likely to contain naturally occurring asbestos" (California Department of Conservation 2000).

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 odor causing compounds.

5.2.4 Biological Resources

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

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 (Sycamore Environmental 2019a).
- **Aquatic Resource Delineation Report (ARDR)**: This report evaluates and delineates wetland and other waters of the U.S. in the project area (Sycamore Environmental 2019b).
- **Biological Assessment (BA):** The BA is prepared to support Endangered Species Act consultations with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) (Sycamore Environmental 2020).

The documents conclude the following regarding biological resources:

- The Project may affect, but is not likely to adversely affect the state and federal threatened Central California Distinct Population Segment (DPS) of California tiger salamander (CTS). No CTS breeding habitat occurs in the Project area. There is potential breeding habitat for CTS within dispersal distance (1.24 miles) of the Project area. There are no known populations within dispersal distance.
- The Project will have no effect on other federal listed species and designated critical habitat.
- The Project area provides suitable habitat for federal-listed Hartweg's golden sunburst (*Pseudobahia bahiifolia*). Hartweg's golden sunburst was not observed in the Project area during multiple protocol botanical surveys conducted during the evident and identifiable period.
- The Project area is within the range of the California Central Valley (CCV) Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss*). There is no suitable habitat for CCV steelhead in or near the Project area.
- The Project area is outside the range of the San Joaquin kit fox.
- The Project area provides suitable habitat for the following state-listed and other special-status species: western spadefoot (*Spea hammondii*), western pond turtle (*Emys marmorata*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsedii*), western mastiff bat (*Eumops perotis californicus*), American badger (*Taxidea taxus*), and six special-status plants ranked by the California Native Plant Society (CNPS). No special-status plants were observed during protocol botanical surveys conducted during the evident and identifiable periods.
- The Project will result in impacts to Dry Creek and a small ephemeral tributary to Dry Creek, both of which are potential jurisdictional features under Section 404 of the Clean Water Act (CWA). Permits and authorizations required for the Project include a Section 404 CWA Nationwide Permit (NWP #14 for Linear Transportation Projects or NWP #23 for Approved Categorical Exclusions) from the U.S. Army Corps of Engineers (Corps), a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), coverage under the National Pollutant Discharge Elimination System (NPDES) through the State Water Resources Control Board

(SWRCB) Construction General Permit (Order 2009-0009-DWQ), and a Fish and Game Code Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW).

Natural communities present in the Project area are shown in Table 8 (Sycamore Environmental 2019a). Special-status natural communities evaluated in the Project NES are waters, wetlands, riparian communities, and any natural community ranked S1, S2, or S3 by CDFW. Dry Creek and the ephemeral channel are special-status natural communities in the Project area.

Table 8. Natural Communities in the Project area

Natural Community	Vegetation Alliance(s) Present[1]	Alliance CDFW Code & Rarity Rank[2]	Acreage
California Annual Grassland	*Avena* spp. – *Bromus* spp. semi-natural stands	CDFW 42.027.00 No rarity rank	2.169
Ruderal	None recognized	--	0.748
Dry Creek	None recognized	--	0.501
Wetland Swale	*Lolium perenne* (=*Festuca perennis*) semi-natural stands	CDFW 41.321.00 No rarity rank	0.006
Ephemeral Channel	None recognized	--	0.001
Other/ Developed Features			
Crabtree Road/ Disturbed Areas	No vegetation present	--	0.575
		Total:	**4.000**

[1] Vegetation alliances are based on descriptions and classification methods in Sawyer et al. (2009).

[2] Alliance codes and rarity ranks are from CDFW (2018). Rarity ranks indicate degree of imperilment. State (S) ranks of 1-3 are of conservation concern. Nonnative vegetation alliances are not ranked.

Potential Environmental Effects

a) ***Potentially Significant Unless Mitigation Incorporated.***

Special-Status Plant Species: Potential habitat for special-status plant species listed below is present in the Project area.

- Hoover's Calycadenia (*Calycadenia hooveri*)
- Beaked Clarkia (*Clarkia rostrata*)
- Dwarf Downingia (*Downingia pusilla*)
- Jepson's Coyote Thistle (*Eryngium jepsonii*)
- Spiny-sepaled Button-celery (*Eryngium spinosepalum*)
- Forked Hare-leaf (*Lagophylla dichotoma*)
- Hartweg's Golden Sunburst (*Pseudobahia bahiifolia*)

The species listed above were not observed in the Project area during botanical surveys conducted during the evident and identifiable period in 2016 and 2019. Implementation of BIO-1 will reduce potential impacts to less than significant.

Designated critical habitat for the four federal-listed vernal pool endemic plant species listed below occurs within the Project area:

- Fleshy owl's-clover (*Castilleja campestris* ssp. *succulenta*; federal threatened)
- Hoover's spurge (*Chamaesyce hooveri*; federal threatened)
- Colusa grass (*Neostapfia colusana*; federal threatened)
- Greene's tuctoria (*Tuctoria greenei*; federal endangered)

There are no vernal pools in or near the Project area, and these vernal pool endemic plants do not have potential to occur in the Project area. None of the primary constituent elements (PCEs) of their critical habitat are present in the Project area. None of the PCEs of their critical habitat will be directly or indirectly affected. The Project will have no effect on federal designated critical habitat.

Measure BIO-1 (Special Status Plants)

- *If project construction starts and more than three years have elapsed since the 2019 survey, a qualified botanist will conduct an appropriately timed pre-construction botanical survey for the federal listed Hartweg's golden sunburst and the following CNPS-ranked special-status plants identified as having potential to occur in the Project area: Hoover's calycadenia, beaked clarkia, dwarf downingia, Jepson's coyote thistle, spiny-sepaled button-celery, and forked hare-leaf. The survey will cover the entire Project area. Survey results will be provided in an email memo to Caltrans District 10.*
- *If any non-federal-listed special-status plants are found, the location of the plants will be designated as an Environmentally Sensitive Area (ESA). ESAs containing these plants will be avoided by all construction personnel and equipment to the maximum extent practicable. If rare plant populations cannot be protected in place, the County will prepare a transplantation/ propagation plan for the relocation of the rare plant(s). Rare plant relocation will occur in a suitable area of the Project site or other appropriate County designated area. The transplantation/ propagation plan will be sent to CDFW.*
- *If the federal-listed Hartweg's golden sunburst is found in the Project area, Caltrans will reinitiate consultation with USFWS. Construction within 50 ft of the Hartweg's golden sunburst plant(s) will not proceed until the consultation with USFWS is complete. The County and its contractors will adhere to all conditions and requirements of the USFWS consultation.*

Special-Status Wildlife Species:

Steelhead – California Central Valley DPS (CCV, *Oncorhynchus mykiss*): CCV steelhead were not observed in Dry Creek during biological surveys of the Project area. There are no known records of CCV steelhead in Dry Creek. The portion of Dry Creek in the Project area is low-gradient and consists of slow-moving water, muddy pools with a bed of silty to sandy sediments. No suitable spawning gravel is present. The portion of Dry Creek in the Project area does not provide suitable spawning habitat.

Aerial photographs dated 23 March 2014 and 29 March 2015 show a dry creek bed at the low water crossing downstream of the bridge and at numerous other locations upstream and downstream of the

Project area (Google Earth 2018). Dry Creek does not appear to flow continuously in the spring, which would isolate any fish present in stagnant pools. During the winter and spring, Dry Creek appears to flow only after large precipitation events. During the summer and fall, pools in Dry Creek slowly dry until no water remains. There are no complete barriers to fish migration in Dry Creek downstream of the Project area noted in the California fish passage assessment database (CDFW 2017c). There are numerous low water crossings located upstream and downstream of the Project area that act as partial barriers to fish passage. One crossing located approximately 1 mile downstream of the bridge utilizes two ± 25-foot-long pipe culverts (Google Earth 2018). The crossing appears to be a barrier to upstream migration during high flows due to its height (visible in 14 March 2016 aerial).

Juvenile steelhead would not be expected to survive in Dry Creek. Based on the closest gauge station data at Wellsford Road temperatures in Dry Creek are stressful or lethal to juveniles and adults for three to six months of the year. Dry Creek within the Project area is further up in the watershed than the Wellsford Road station, with less flow and no riparian vegetation to provide shading and temperature mediation. Within the Project area, Dry Creek is likely warmer than it is at Wellsford Road, and does not provide suitable holding temperatures for juveniles. The limited natural flow, altered hydrology, irrigation runoff (likely with fertilizers and pesticides), fish passage barriers, and warm temperatures make Dry Creek unsuitable for steelhead. The Project area is not in designated critical habitat for CCV steelhead. The proposed project will have no impact on CCV steelhead or CCV steelhead critical habitat.

California Tiger Salamander – Central California DPS (CTS, *Ambystoma californiense*): No CTS of any life stage were observed in the Project area during fieldwork. The Project site and surrounding area were evaluated for potential CTS presence in accordance with USFWS and CDFW guidance for CTS site assessments. An analyses of known CTS populations nearby, potential breeding habitat (within 1.24 miles), dispersal barriers between the Project area and potential breeding habitat, upland habitat in Project area, and other information important for evaluating CTS habitat and potential presence was conducted.

There is no potential breeding habitat in the Project area. Uplands within 1.24 miles may provide suitable upland habitat for CTS so long as they are within dispersal distance of suitable breeding habitat and contain upland refugia such as small mammal burrows. The small tract of grassland on the north side of Dry Creek is isolated from potential CTS breeding habitat by Dry Creek, development, orchards, and disked agriculture. The uplands on the north side of Dry Creek therefore do not provide suitable habitat for CTS.

Uplands on the south side of Dry Creek are within dispersal distance of potential breeding habitat in Impoundment 3 (0.70 mile to southwest) and a swale and pool complex (0.50 mile to southeast). Uplands on the south side of Dry Creek are situated on a high terrace above the creek. These uplands are bordered to the west by Crabtree Road and extensive tracts of orchard. Some small mammal burrows were observed on the south bank of Dry Creek during biological and botanical surveys.

CTS are not known or expected to occur in the Project area. There are no known populations within dispersal distance. Known records to the north from 1994 are at the limit of dispersal capability and are separated from the Project area by dispersal barriers including continuous areas of agricultural fields, orchards, and roads. There are no known CTS records to the south of the Project area between Dry Creek and the Tuolumne River. No potentially suitable breeding habitat occurs within a half mile of the Project area. There are only two potentially suitable, accessible aquatic habitat features within 1.24 miles. These features (a perennial impoundment and stream/pool complex) are not habitats typically used by CTS for breeding. CTS in these features would need to travel at least 0.70 mile to reach the Project area. Most dispersing CTS settle in suitable burrows near breeding habitat. CTS do not have potential to occur in the uplands on the north side of Dry Creek due to dispersal barriers that block access.

The Project will not impact CTS breeding habitat. Impacts to potential CTS upland habitat consist of 0.545 acres of temporary disturbance and 0.174 acre of permanent disturbance to the annual grassland on the south side of Dry Creek, east of Crabtree Road. Implementation of measure BIO-2 will reduce potential CTS upland habitat impacts to less than significant.

Measure BIO-2 (California Tiger Salamander – Central California DPS (CTS))

- *Prior to the start of construction activities, a USFWS-approved biologist will provide education and training sessions for all individuals that will be involved with site preparation or construction. The training will focus on habitat sensitivity and identification of California tiger salamander (CTS). The training will include species description and behavior, general measures that will be taken to protect these species as they relate to the proposed project, the penalties for non-compliance, and the boundaries of the proposed project site. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.*
- *A USFWS-approved biologist will conduct a pre-construction survey no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance or other general construction activities that could affect the salamander. The survey will pay particular attention to detecting any burrows that could be used as refugia by salamanders. If potential refugia burrows are discovered, they will be flagged or otherwise marked and avoided by at least 50 feet. If the potential refugia burrows cannot be avoided, County/Caltrans will contact the Service to discuss additional measures that may be needed and obtain an Incidental Take Statement if needed.*
- *The contractor will confine all equipment to designated work zones (including access roads and material/ equipment storage and staging area).*
- *Construction activities in CTS dispersal habitat (the grassland south of Dry Creek and east of Crabtree Road) will be timed to occur during the dry season (1 May – 5 October) between 30 minutes after sunrise to 30 minutes before sunset to minimize potential effects to salamander dispersal. Work will not be conducted if raining. The Resident Engineer will check the National Weather Service prior to each scheduled work day. No construction activities will be conducted in upland habitat areas where salamanders may occur if it is raining, if there is a greater than 70% chance of rain based on the National Oceanic and Atmospheric Administration's National*

Weather Service forecast on that work day, or within 48 hours following a rain event greater than 0.25 inch.

- *The Resident Engineer will ensure that any open trenches or excavation pits are properly ramped or covered (if needed). Excavated areas 6 inches deep or more will be covered in a manner that excludes salamanders or will be provided with escape ramps at a 3:1 slope. No gaps greater than 1 inch will be allowed within cover materials. Each covered excavation in CTS habitat (the grassland south of Dry Creek and east of Crabtree Road) should be checked daily until the excavation is filled.*
- *All trash (food related items such as wrappers, bottles, cans, food scraps, etc.) will be placed in closed containers and removed from the proposed project site on a daily basis.*
- *Pipes laid underground or stored on the ground will be capped or covered in a manner that excludes salamanders from entering the pipe. Long-term storage of pipes and other construction material should be placed on asphalt and raised above the ground by no less than 1.5 inches.*
- *All fencing, flagging, debris, trash, and materials from work areas will be removed following completion of construction and habitat restoration activities.*
- *The USFWS will be immediately notified verbally, and with a written notification within 5 days, if any worker inadvertently kills or injures a salamander, finds one injured, or trapped, on the proposed project site or during work. Work will stop immediately if an incident occurs until corrective actions are provided by the Service.*
- *Areas temporarily disturbed by construction will be restored with native grassland species as described in Appendix F of the approved Project Natural Environment Study (NES).*

Western spadefoot (*Spea hammondii*): No western spadefoot toads of any life stage were observed in the Project area during fieldwork. Dry Creek does not provide suitable breeding habitat. The creek is large (80 feet average width in Project area), subject to high flows during precipitation events, and nonnative predators including at least bullfrog (numerous adults observed along Dry Creek in May 2016) are present. Nonnative fish that prey on amphibian eggs and larvae are also expected to be present in the creek. Western spadefoot toads are not expected to occur in the Project area due to lack of suitable breeding habitat.

The nearest potential breeding habitat occurs approximately 0.20 mile south of the Project area in several small, shallow seasonal wetlands just east of Crabtree Road, each approximately 0.02 acre in size. The pools may remain inundated for more than 30 continuous days in some years. Any western spadefoot toads utilizing these pools for breeding would not be expected to migrate far from these features. The Project will not impact this species, no mitigation is needed.

Western Pond Turtle (WPT; *Emys marmorata*): WPT were not observed in the Project area during the general biological fieldwork. Dry Creek in the Project area provides habitat for WPT. If WPT were present during construction, the Project could impact WPT. Implementation of measure BIO-3 will reduce potential impacts to less than significant.

Measure BIO-3 (Western Pond Turtle, WPT)

- *Within 48 hours prior to the start of work within or along Dry Creek, a qualified biologist will conduct a preconstruction survey for western pond turtle. The survey area will include the construction area and publicly accessible areas 250 feet upstream and downstream of the construction area. If the biologist discovers any life stage of special-status amphibians or reptiles, a biological monitor experienced with the identification and biology of the species will monitor construction activities within Dry Creek to verify that no special-status amphibians or reptiles are harmed.*
- *Prior to the start of construction, a biologist will conduct a training session for all construction personnel that includes a description of special-status species with potential to occur in the construction area. The training will explain who to contact and how to proceed if a special-status species is encountered. The training will describe the specific measures to be implemented to avoid impacts to these species.*
- *If any life stage of western pond turtle is encountered during construction, activities will cease until a qualified biologist verifies that the individuals have left on their own, that work activities will not affect the individuals, or if no other options are available, the biologist moves the individual(s) to a suitable and safe location downstream of the project.*

Nesting Birds Listed Under the Migratory Bird Treaty Act (MBTA) of 1918 or Regulated by CA Fish and Game Code: The Project area provides potential nesting habitat for birds of prey and birds protected under MBTA. No active nests were observed within the Project area during the surveys. Inactive stick nests approximately 4 inches in diameter were observed on the underside of the bridge deck and in metal supports above the bridge deck. A mud nest, likely that of a barn swallow (*Hirundo rustica*) or black phoebe (*Sayornis nigricans*), was observed on the vertical north bank of Dry Creek at the eastern edge of the Project area. The remains of abandoned mud cliff swallow (*Hirundo pyrrhonota*) nests occur beneath the bridge. Ground nesting birds such as killdeer (*Charadrius vociferus*) are protected under MBTA and have potential to nest in the Project area. Migratory birds could nest in the Project area and on parts of the existing bridge during the nesting season. Implementation of measure BIO-4 will reduce potential impacts to less than significant.

Measure BIO-4 (Nesting birds and MBTA)

Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 1 February to 30 September. Measures to prevent swallow nest establishment will also prevent nest establishment of other birds that may nest underneath the bridge.

<u>Swallows and Other Bridge/Structure Nesters</u>: In California, bridge/ structure-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Black phoebes, another bridge/ structure -nesting species, nest from March to August with peak activity in May. Measures should be taken to prevent establishment of nests on the bridges, culverts, headwalls, and other suitable structures prior to construction. Effective techniques to prevent nest establishment include using

exclusion devices and removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation. This can be done by:

- *On a weekly or more frequent basis, remove all partially completed nests using either hand tools or high-pressure water; and/or*
- *Hang netting from the bridge/structure before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.*

Birds of Prey and Birds Protected by the Migratory Bird Treaty Act

- *If construction begins outside the 1 February to 30 September breeding season, there will be no need to conduct a preconstruction survey for active nests.*
- *If applicable, trees scheduled for removal should be removed during the non-breeding season from 1 October to 31 January.*
- *If construction is scheduled to begin between 1 February and 30 September, a biologist shall conduct a survey for active bird of prey nests within 300 ft and active MTBA bird nests within 100 ft of the Project area from publicly accessible areas within one week prior to construction. The measures listed below shall be implemented based on the survey results.*

No Active Nests Found:

- *If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary.*

Active Nests Found:

- *If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:*
    1. *Stop all work within a 300-ft radius of the discovery*
    2. *Notify the Engineer*
    3. *Do not resume work within the specified radius of the discovery until authorized.*
- *The biologist shall establish a minimum 600-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a Swainson's hawk, a minimum 300-foot ESA if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey..*

Bird Species Protection Areas

Identification	***Location***
Swainson's hawk	*600 ft, no-disturbance buffer*
Bird of Prey	*500 ft no-disturbance buffer*
MBTA protected bird (not bird of prey)	*100 ft no-disturbance buffer*

- *Activity in the ESA will be restricted as follows:*

1. *Do not enter the ESA unless authorized*
2. *If the ESA is breached, immediately:*
    a. *Secure the area and stop all operations within 60 ft of the ESA boundary*
    b. *Notify the Engineer*
3. *If the ESA is damaged, the County determines what efforts are necessary to remedy the damage and who performs the remedy.*

- *No construction activity will be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.*
- *The size of an ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of ESA size depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific factors.*
- *Between 1 February and 30 September, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.*
- *If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.*

Burrowing Owl (*Athene cunicularia*): The Project area provides potential habitat for burrowing owls. Burrowing owls were not observed during the biological surveys in the Project area. No sign of occupied burrows was observed. Potentially suitable burrows, likely excavated by California ground squirrels, occur along Crabtree Road north of the bridge and along the north bank of Dry Creek east of the bridge. Burrows could become occupied by burrowing owl at any time of year. Implementation of measure BIO-5 impacts to burrowing owl are less than significant.

Measure BIO-5 (*Burrowing Owl*)

- *A qualified biologist will conduct Take Avoidance Surveys in accordance with Appendix D of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. An initial Take Avoidance Survey will be conducted no less than 14 days prior to initiating ground disturbance activities and a final survey will be conducted within 24 hours prior to ground disturbance.*

  The preconstruction survey for burrowing owls will include all potential burrowing owl habitat within 500 feet of the project. Portions of the survey area located on private land will be surveyed from all publicly accessible areas.
- *If active burrowing owl burrows are found, the following measures will be implemented:*

- *During the non-breeding season (1 September through 31 January), the biologist shall establish a 160-foot ESA around the burrow. During the breeding season (1 February through 31 August), the biologist shall establish a 300-foot ESA around the burrow in consultation with CDFW.*
- *The size of the ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the burrowing owl is occurring. Reduction of ESA size depends on the location of the burrow relative to the project, project activities during the time the burrow is active, and other project-specific factors.*
- *If the burrow is located within the construction zone and it is during the non-breeding season, the burrowing owl can be passively excluded from the burrow using one-way doors, as described in the Exclusion Plan of Appendix E of the 2012 CDFW Staff Report on Burrowing Owl Mitigation.*
- *If the burrow is located within the construction zone and it is during the breeding season, the burrowing owl can only be passively excluded if it has been confirmed that the owl has not begun egg laying and incubation, the clutch was unsuccessful, or juveniles from the occupied burrows are foraging independently and are capable of independent survival.*

Swainson's Hawk (*Buteo swainsoni*): No Swainson's hawks were observed in the Project area during the surveys. No trees suitable for nesting occur in or near the Project area. The nearest potentially suitable trees occur just over 1 mile north of the Project area in a row of horticultural trees associated with rural residences west of Crabtree Road. Impacts to Swainson's hawk are not anticipated. Implementation of measure BIO-5 will further reduce the potential for impacts.

Pallid Bat (*Antrozous pallidus*), Townsend's big-eared Bat (*Corynorhinus townsendii*), and Western Mastiff Bat (*Eumops perotis californicus*): The underside of the existing bridge was inspected for sign of roosting bats and potential roosting opportunities. An unidentified bat was observed under the bridge in May 2019. Some fecal staining occurs on the abutment faces, but it is most likely that of birds and not bats. The bridge provides only marginal opportunities for roosting. Implementation of measure BIO-7 will reduce potential impacts to bats.

Measure BIO-6 (Special-Status Bats)

The maternity season for bats in California is generally considered to be from 15 May through 15 August and the hibernation season from 15 November through February.

- *A qualified biologist will conduct a preconstruction survey for roosting bats within 2 weeks prior to the start of construction. Surveys can also be performed earlier than 2 weeks prior to the start of construction.*
- *If no bats or sign of their use is observed during the survey no further measures are required.*

- *If sign of or direct observation of a maternity or hibernation roost is recorded during the survey, no project related disturbance will occur to the structure containing the roosting bats until a qualified biologist determines, by observation, that the bats using the maternity or hibernation roost have departed for the season.*
- *If it is determined during the preconstruction survey that bats are using the bridge outside maternity and hibernation seasons listed in this measure exclusion devices will be installed. Exclusion devices can be installed anytime outside of the maternity and hibernation season of roosting bats listed above.*
- *Exclusion devices shall remain in place until demolition of the bridge.*
- *Removal or trimming of trees or relocation of any structure that contains an active roost will be avoided between 15 May and 15 August (the maternity period) to avoid impacts on reproductively active females and dependent young.*
- *The qualified biologist shall coordinate with CDFW regarding proposed exclusion methods prior to implementation. If construction is proposed while roosting bats are present, then the County shall coordinate with CDFW for additional guidance on bat avoidance and impact minimization during construction activities.*

American Badger (*Taxidea taxus*): The grasslands within the Project area provide suitable habitat for American badger. No badgers, potential badger dens, or signs of badger activity were observed within the Project area. Implementation of measure BIO-8 will reduce potential impacts to less than significant.

Measure BIO-7 (*American Badger*)

- *A qualified biologist will conduct a preconstruction survey for American badgers within 48 hours prior to the onset of ground disturbance in the Project area. If an occupied den is detected within the work area, the den will be avoided until the qualified biologist determines that the den is no longer occupied. If there are occupied dens in the Project area, the County shall coordinate with CDFW for additional guidance on den avoidance and impact minimization during construction activities.*

b) ***Less than Significant.*** Potential jurisdictional waters of the U.S. and state are sensitive natural communities in the Project area. Impacts to potential waters of the U.S. and state are discussed under Item c below. No other sensitive natural communities occur in the Project area.

c) ***Potentially Significant Unless Mitigation Incorporated.*** Dry Creek, an ephemeral channel, and a wetland swale are potential jurisdictional waters of the U.S. and state in the Project area.

Dry Creek: Dry Creek is an approximately 80-foot-wide intermittent stream that flows west through the Project area. Dry Creek originates in Tuolumne County, east of the Project area and is tributary to the Tuolumne River approximately 39.0 river miles (or 21.3 air miles) west-southwest of the Project area. An elevated low water crossing occurs approximately 420 feet west (downstream) of the existing bridge, outside the Project area. The crossing acts as an impoundment, increasing the depth and duration of inundation in the portion of Dry Creek in the Project area. No riparian

vegetation occurs along Dry Creek in or near the Project area. The Project will result in 0.374 acre of temporary impact and 0.113 acre of permanent impact to Dry Creek. Temporary impacts consist of potential diversion/dewatering activities and construction access to install RSP, remove the existing bridge deck, and work on the new bridge falsework. The permanent impacts consist of the installation of RSP at the new abutments and around the adjacent south abutment. The RSP is needed to stabilize and protect the abutments from scour. Implementation of BIO-8 will reduce potential impacts to less than significant.

Measure BIO-8 (Waters)

- *During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks (http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm) to minimize the potential for siltation and downstream sedimentation of Dry Creek.*
- *The limits of construction will be marked with temporary fencing or flagging.*
- *Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located away from channels to prevent transport of materials into the adjacent Dry Creek. The preferred distance is a minimum 100 feet from riparian habitat or water bodies. Construction vehicles and equipment will be maintained to prevent contamination of soil and water from external grease and oil and from leaking hydraulic fluid, fuel, oil, and grease.*
- *Any temporary diversion structure will be designed so that fish passage is maintained through the Project area. The diversion will not create an impassible barrier to fish passage. The contractor will prepare a creek dewatering plan that complies with any applicable permit conditions. Water diversion in Dry Creek will be conducted in accordance with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004).*
- *Diversion and dewatering activities will be restricted to the period of 15 June through 15 October, when creek flows are low, and the creek is often naturally dry. No in-water work will be conducted outside of this period unless the exception is approved by CDFW. All diversion materials will be removed by 15 October unless an extension is approved by CDFW.*
- *If pumps are used to temporarily divert or dewater the impoundment on Dry Creek to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish. Potential contact between fish and pump will be minimized and/or avoided by constructing an open basin prior to commencing dewatering. The open basin will be inspected for fish, which will be salvaged and placed in the active flow of Dry Creek adjacent to the work zone by a qualified biologist. All temporary diversion structures and materials will be removed from the creek prior to the completion of the Project.*

- *Areas temporarily disturbed on the banks of Dry Creek will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species prior to October 15 and/or immediately after construction is terminated at the completion of the Project (Appendix F of approved Project NES). Reseeded areas may be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The project engineer will determine the specifications needed for erosion control fabric (e.g., sheer strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species as described in Appendix F of approved Project NES. No seed of nonnative species will be used unless certified to be sterile.*
- *The Project will acquire applicable permits from the Corps, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife prior to conducting any work in potential jurisdictional waters including Dry Creek. The Project will abide by the terms of permits acquired, including any limited operating periods restricting the time of year when work in Dry Creek may occur and the purchase of wetland/aquatic resource mitigation credits or by funding in-lieu fee program credits.*

Ephemeral Channel: An ephemeral channel occurs upstream from the existing bridge on the south side of Dry Creek near the eastern edge of the Project area. The channel is approximately 1 foot wide, 32 feet long, and 32 square feet (< 0.001 acre) in area. No standing water or pools were observed in the channel during any of the site visits or in aerial photos. The channel delivers surface water runoff from the hills immediately south of the Project area into Dry Creek. The channel bed and banks are mostly unvegetated. No riparian vegetation occurs along the channel. Cattle walk down the channel to access Dry Creek. The ephemeral channel is a potential Waters of the U.S. regulated under the CWA and potential stream regulated under Section 1600 of the Fish and Game Code. The Project design avoids the majority of the ephemeral channel. Implementation of BIO-8 will also reduce potential impacts to less than significant for the ephemeral channel.

Wetland swale: An approximately 261 ft^2 (0.006-acre) portion a wetland swale occurs at the eastern edge of the Project area. The wetland swale is a potential Waters of the U.S. regulated under the CWA. The swale is part of a minor drainage that delivers runoff from the uplands southeast of the Project area to Dry Creek. The swale is grazed by cattle. The Project design avoids the wetland swale. Implementation of BIO-8 will also further reduce potential impacts to the wetland swale.

d) ***Less Than Significant Impact.*** Construction of the project could temporarily disrupt movement of native wildlife species that occur in or adjacent to the Project area. Daytime construction activities will result in minimal disruption of nocturnal wildlife movement. Although construction disturbance may temporarily hinder wildlife movements within the project area, the impact is less than significant due to its short-term nature.

e) ***No Impact.*** The Stanislaus County Code does not contain specific ordinances protecting biological resources, such as a tree preservation ordinance. The Open Space and Conservation Element of the County General Plan calls for all discretionary projects with potential impacts to oak woodlands and native hardwood habitat to have an Oak Woodland Management Plan. There are no native oaks, oak woodlands, or native hardwood habitats in the Project site. The Open Space and Conservation Element also provide policy guidance to address the conservation and long-range management and

preservation of open-space lands and support plant and animal species, including wetland resources and special-status species.

The potential impacts to special-status plant and animal species are discussed in this document. Mitigation measures are provided to reduce potential impacts to less than significant. The Project does not conflict with any local policies or ordinances protecting biological resources.

f) ***No Impact.*** The Project is not located in an area covered by a habitat or natural community conservation plan.

5.2.5 Cultural Resources

I. CULTURAL RESOURCES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as 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

The following cultural resource documents were prepared for the proposed Project:

- *Archaeological Survey Report (ASR, Francis Heritage 2019):* The ASR included a records search and literature review, an intensive pedestrian survey, and consultation with the Native American community and local preservation societies. The ASR documents both positive and negative archaeological survey results. Based on the results contained in the ASR, Caltrans required that a combined *Extended Phase I Investigation/ Phase II/ Archaeological Evaluation process* be performed.
- *Extended Phase I Investigation (XPI)/ Phase II/ Archaeological Evaluation Process(Far Western 2019 and 2020)*: The XPI study is an extension of the identification phase, meeting the requirements of 36 CFR 800.4(b) and Section 106 PA Stipulation VIII B "to identify historic properties within the area of potential effects" and similar requirements under CEQA. The goal of the XPI study is to define part or all of the boundaries (horizontal or vertical) of an archaeological site. The results of a Phase II study are presented in an Archaeological Evaluation Report (AER). The Phase II study generally consists of fieldwork, analyses of the recovered material, and preparation of an AER. The AER documents the following:
    - The study activities;
    - Study results and their interpretation to professional standards; and
    - Justification for a determination that the site is eligible–or is not eligible– for inclusion in the NRHP (or is a historical resource for the purposes of CEQA, if appropriate)

- *Historic Resources Evaluation Report (HRER, Foothill Resources, Ltd. 2019)*: The HRER was prepared to evaluate National Register of Historic Places (NRHP) eligibility for the existing bridge and to identify any historical resources within the Project area.

To qualify for listing in the California Register of Historic Resources (CRHR) and to be considered a historical resource for the purposes of CEQA, a resource must meet one or more of the criteria set forth in PRC 5024.1 and the California Code of Regulations (CCR Title 14, Chapter 11.5, § 4850 et seq). Criteria include:

- **Criteria 1:** Association with events that have made a significant contribution to broad patterns of local or regional history;
- **Criteria 2:** Association with the lives of persons important to local, California, or national history;
- **Criteria 3:** Embodies the distinctive characteristics of a type, period, or region, has high artistic value, or is the work of a master;
- **Criteria 4:** Has potential to yield information important to prehistory or history

The criteria for the National Register (Criteria A, B, C, and D) are nearly identical to the California Register. If Project construction were to cause a substantial adverse change in the significance of an archaeological resource eligible for listing on the National or State Register, then the Project would be considered to have a significant effect on the environment.

The Dry Creek Bridge on Crabtree Road (No. 38C0009) was previously evaluated in the California Department of Transportation (Caltrans) Historic Bridge Inventory and determined to be ineligible for the NRHP, CRHR, and California Landmarks (CHL). The 2019 HRER for the proposed Project confirmed the earlier findings that the bridge is ineligible for the NRHP, CRHR, and CHL (Foothill Resources, Ltd. 2019).

Francis Heritage completed a record search (File # 9720N) of the Central California Information Center (CCaIC) on 18 April 2016 at California State University, Stanislaus. The record search included a one quarter mile radius which was chosen based on the long-term grazing use and absence of water resource development of the immediate and surrounding area. The record search returned one record for an architectural survey covering the existing bridge (P-50-1919) as part of a larger statewide study that addressed metal truss, movable, and steel arch bridges. No other archaeological surveys or resources are on record.

The Native American Heritage Commission (NAHC) was contacted on April 14, 2016, to which a response was received on 18 April 2016. The NAHC Sacred Lands File search did not identify the presence of Native American cultural resources, but provided the names and addresses of three tribes which had expressed interest in Stanislaus County resources. Initial consultation letters signed by Stanislaus County Department of Public Works were sent to those tribes, listed below, on February 2, 2018.

- Neil Peyron, Chairperson, Tule River Indian Tribe, letter, February 2, 2018
- Katherine Erolinda Perez, Chairperson, North Valley Yokuts Tribe, letter, February 2, 2018
- Lois Martin, Chairperson, Southern Sierra Miwuk Nation, letter, February 2, 2018

William Leonard responded on behalf of the Southern Sierra Miwuk Nation to inform the County and Francis Heritage that he is the new Chairperson of the Southern Sierra Miwuk. He advised that he was not

sure of the Project location but stated that if it is north of the Tuolumne River, he would defer to the Tuolumne Band of Me-Wuk. Charla Francis returned his call on February 19, 2018 and left a message to confirm that the Project is north of the Tuolumne.

Follow-up consultation, consisting of a detailed letter prepared by Francis Heritage, was sent to all three tribes and the Tuolumne Band of Me-Wuk, Kevin Day, Chairperson, on March 19, 2018. The Tuolumne Band of Me-Wuk letter was copied to R. Stanley Cox, Cultural Resources Director for the Tribe. Director Cox replied by letter dated March 29, 2018 and additional information was provided to the Tribe in early April.

While no reply was received from Chairpersons Peyron and Perez, William Leonard, Southern Sierra Miwuk Nation Chairperson replied as discussed above. The Tuolumne Band requested to be contacted in the event of inadvertent discoveries and were made aware of the planned archaeological testing phase. No other concerns, comments, or issues were provided.

The Project ASR recorded one prehistoric archaeological site (CA-STA-444; P-50-002306) in the Project area during the archaeological survey. Based on the results of the ASR, Caltrans required a combined *Extended Phase I Investigation (XPI) / Phase II Archaeological Evaluation* process. Following the preparation and Caltrans approval of the Archaeological Evaluation Proposal, Far Western Anthropological Research Group, Inc., (Far Western) carried out the testing. The goal of the testing was to determine whether impacts to portions of the site within the Project area constitute an adverse effect to the assumed historic property.

Potential Environmental Effects

a) ***No Impact.*** The Dry Creek Bridge on Crabtree Road (No. 38C0009) was previously evaluated in the California Department of Transportation (Caltrans) Historic Bridge Inventory and determined to be ineligible for the NRHP, CRHR, and California Landmarks (CHL). The 2019 HRER for the proposed Project confirmed the earlier findings that the bridge is ineligible for the NRHP, CRHR, and CHL (Foothill Resources, Ltd. 2019). No other potential historic resources were observed in the Project area. No impact will occur.

b) ***No Impact.*** Testing conducted by Far Western between 14 and 18 October 2019 included the excavation of one control unit and 20 surface transect units, across the Project area, within the recorded boundary of (CA-STA-444; P-50-002306). Hand excavation totaling 1.66 cubic meters resulted in the recovery of a very sparse artifact assemblage. The site assemblage lacked dietary remains or chronometric data.

Far Western recommended the site is not eligible for listing in the National Register under Criteria A, B, or C as it lacks association with people or events important to history, nor does it embody distinctive characteristics. However, prehistoric deposits are generally evaluated under Criterion D (has yielded, or may be likely to yield, information important in prehistory or history). While portions of the site remain unevaluated under Criterion D (because the site extends outside of the Project area) the sparse assemblage within the Project area, and lack of other features are insufficient to meet data requirements under Criterion D. As a result, project impacts will not result in the loss of data under National Register criteria and the proposed project will not have an adverse effect on character defining traits of a historic property. The criteria for the NRHP are nearly identical to the

CRHR. Because the site is ineligible for the NRHP it is also ineligible for the CRHR. No impact will occur.

c) ***Less Than Significant Impact.*** The Project ASR (Francis Heritage 2019) documents that no known cemeteries or burials occur within the Project area. Should human remains be discovered during the excavation portion of the Project, the project description includes contract provisions that will require notification of the County and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.9 et seq.

5.2.6 Tribal Cultural Resources

II. Tribal Cultural Resources:	*Potentially Significant Impact*	*Potentially Significant Unless 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

Stanislaus County has not received any requests in writing from California Native American tribes to be notified under Public Resources Code Section 21074 of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Potential Environmental Effects

a) ***No Impact (applies to items i and ii).*** Section 5.2.5 (Cultural Resources) discusses the County's Section 106 coordination efforts with Native American individuals/organizations. The 'Invitation to Consultation' sent to those tribes listed on the NAHC list as part of the Section 106 compliance process also stated this: "*Please consider this letter and preliminary project information as the initiation of Section 106 consultation pursuant to the National Historic Preservation Act and formal notification of a proposed project as required under the California Environmental Quality Act, specifically Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.*" No documentation regarding tribal cultural resources was identified or received that would facilitate an eligibility determination pursuant to PRC Section 21074, 5020.1(k) or 5024.1.

5.2.7 Energy

III. ENERGY	*Potentially Significant Impact*	*Potentially Significant Unless 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.*** Project construction would result in short-term increased energy requirements through the use of gasoline and diesel fuels for operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of project-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this document.

The use of heavy-duty trucks and construction equipment would result in a temporary increase in fuel consumption in the study area relative to the existing condition. As discussed in the Air Quality section, construction emissions do not exceed the County's significance thresholds for criteria pollutants. The Project construction emissions resulting from the use of gasoline and diesel fuels for operation of heavy-duty construction equipment are below the significance thresholds. Further, the proposed Project does not include unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites. Therefore, the fuel used to generate construction emissions is not considered excessive or wasteful.

Operation of the new bridge would not result in a long-term continuous use of electricity because bridge lighting is not part of the design. Operation of the new bridge would have a minimal effect on local or regional energy supplies. There would be no effect on peak- or base-period demands for electricity or other forms of energy.

b) ***Less Than Significant:*** The energy use associated with construction and operation of the proposed Project would not conflict with applicable state or local energy legislation, policies or standards and would not be considered wasteful, inefficient, or unnecessary. The impact on energy use would be less than significant.

5.2.8 Geology and Soils

IV. GEOLOGY AND SOILS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

Stanislaus County spans three geomorphic provinces; the Great Valley, the Coast Ranges, and the Sierra Nevada geomorphic provinces. The largest area of the county is in the San Joaquin Valley portion of the Great Valley geomorphic province, which is in the flat, lowland center of the county; a narrow band on the eastern edge of the county is the Sierra Nevada foothills of the Sierra Nevada geomorphic province; and a broad band on the west side of the county is the steeper Coast Ranges geomorphic province (Stanislaus County 2016b).

The Project is located on the western edge of the Sierra Nevada Geomorphic province and is bounded by the Basin and Range geomorphic province on the east and the Great Valley geomorphic province on the west. Published geologic mapping shows the southern portion of the site is generally underlain by Mehrten Formation, which consists of gray andesitic sandstone, brown to pink claystone, and gray sandy to gravelly andesitic mudstone. The northern portion of the site is generally underlain by Lower Member Modesto

Formation, which consists of alluvial silt, sand and gravel locally derived from the Sierra Nevada Foothills, and by Mehrten Formation. The channel of Dry Creek transverses east and west through the Project area and generally consists of Post-Modesto Deposits, which consists of undifferentiated alluvium locally derived from the Sierra Nevada Foothills (Crawford & Associates Inc. 2017a).

Seismicity is defined as the geographic and historical distribution of earthquake activity. Seismic activity may result in geologic and seismic hazards including seismically induced fault displacement and rupture, ground shaking, liquefaction, lateral spreading, landslides and avalanches, and structural hazards.

The Ortigalita Fault crosses the southwest corner of Stanislaus County, over 40 miles southwest of the Project. The portion of the County is in the Coast Ranges and is a seismically active region. Alquist-Priolo earthquake fault zone maps have been prepared for two quadrangles: the Crevison Peak quadrangle and Mustang Peak quadrangle. The Ortigalita Fault, which is a complex zone of reverse, lateral, and strike-slip faults, is classified as an active fault for much of its length, including in Stanislaus County where it crosses the Crevison Peak and Mustang Peak quadrangles. A designation of active means the fault has shown movement in the last 11,700 years (during the Holocene) and is sufficiently well defined (Stanislaus County 2016b). There are no other active faults in the County (Stanislaus County 2016b).

The ground-shaking hazard in the county ranges from moderate to low. The ground-shaking hazard is highest in the western portion of the county in the Diablo Range of the Coast Ranges and becomes progressively less eastward across the County.

The potential for landsliding in the county varies greatly. The greatest risk of landslides is in the western portion of the county in the steep Diablo Range (Stanislaus County 2016b). There is a moderate risk of landsliding on the far east side of the county in the Sierra Nevada foothills (California Geological Survey and U.S. Geological Survey 2011); however, for most of the county, which is in the flat land of the San Joaquin Valley, there is a low risk or no risk of landsliding (Stanislaus County 2016b).

There is potential for liquefaction in the County. The portion of the county most susceptible to liquefaction is likely the western margin of the valley because of the combination of young geologic units (Quaternary fan deposits and Dos Palos Alluvium) and potential for strong ground shaking. Other parts of the valley also have young geologic units and shallow groundwater conditions, but the ground-shaking hazard is lower. The geologic units in the Coast Ranges and Sierra Nevada foothills are likely not susceptible to liquefaction because they are older and more consolidated or because they are igneous. In addition, shallow groundwater is not likely to be present in the steeper terrain.

Paleontological resources are the fossilized remains of organisms that are preserved in the geologic record. Fossils are protected by federal, state, and local environmental laws and regulations. The Society of Vertebrate Paleontology standards and guidelines indicate that sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present. The potential paleontological importance of the Project area can be assessed by identifying the rock units that are over 10,000 years old within the underlying landform.

The locations of ultramafic rocks have been mapped by the Division of Mines and Geology in an effort to generally identify areas likely to contain Naturally Occurring Asbestos (NOA). No ultramafic rock occurrences are mapped as occurring in Stanislaus County (California Department of Conservation 2000).

Potential Environmental Effects

a) ***a-i) Less Than Significant Impact.*** The Project does not occur in or adjacent to an Alquist-Priolo Earthquake Fault Zone. Surface fault rupture is associated with being located on or within close proximity of an active fault. Because the Project and the majority of the County is not within, and does not cross, an Alquist-Priolo Earthquake Fault Zone, the risk of surface fault rupture within the Project is considered low (Crawford & Associates Inc. 2017a)). Therefore, the Project is not subject to a surface rupture fault mapped on the most recent Alquist-Priolo Earthquake Fault Zoning Map.

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 (CDOC 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. CGS Map Sheet 48 (revised 2016) shows potential seismic shaking based on National Seismic Hazard Map calculations plus amplification of seismic shaking due to the near surface soils. The Project area is located in a region identified as '*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.

a-iii) Less Than Significant Impact. Given the expected dense nature of onsite soils, the potential for detrimental settlement due to liquefaction and seismically induced settlement in the Project area is very low to none (Crawford & Associates Inc. 2017a).

a-iv) Less Than Significant Impact. Based on visible rock outcrops along the Dry Creek channel banks and the expected dense nature of onsite soils the potential for detrimental seismic slope instability at the site is expected to be very low to none (Crawford & Associates Inc. 2017a).

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 portions of 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 obtain 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 BMPs to be implemented and maintained on the site in order to comply with the applicable effluent standards.

Compliance with the various requirements of the SWRCB statewide general permit for construction will ensure that water quality impacts during the construction phase of the proposed project would be minimized. Construction activities will include implementation of stormwater runoff BMPs. Application of these requirements and measures would prevent substantial erosion or topsoil loss.

c) ***Less Than Significant Impact.*** The Project is located in a region '*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.*' (CDOC 2020a). Because the Project area and the majority of the County is not within, and does not cross, an Alquist-Priolo Earthquake Fault Zone, the risk of surface fault rupture within the Project area and most of the County is considered low. 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.

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).

AASHTO group classification is a system that classifies soils specifically for geotechnical engineering purposes that are related to highway and airfield construction. It is based on particle-size distribution and Atterberg limits, such as liquid limit and plasticity index.

AASHTO and USCS classification for the soils in the Project area are listed in Table 9 (NRCS 2020). The NRCS Web Soil Survey indicates the maximum plasticity index of soils in the Project area is 23.6 (NRCS 2020). Soils in the Project area may have a moderate expansion potential.

Table 9. AASHTO and USCS soil classes for Project area

Soil Units In Project Area	**Classification**	
	AASHTO	**USCS**
Psammentic Haploxerolls-Mollic Fluvaquents-Riverwash-complex, 0 to 8 percent slopes	A-2-4	SC: Clayey sands, sand-clay mixtures SM: Silty sands, sand-silt mixtures
Anderson gravelly fine sandy loam, 0 to 3 percent slopes	A-2	GM: Silty gravels, gravel-sand-silt mixtures
Keyes cobbly clay loam, 0 to 8 percent slopes	A-6	CL: Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
Pentz loam, 8 to 30 percent slopes	A-4	ML: Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
Ryer clay loam, 0 to 1 percent slopes	A-6	CL: Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays

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.

f) ***Potentially Significant Unless Mitigation Incorporated.*** The Society of Vertebrate Paleontology (SVP) standards and guidelines indicate that sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present (SVP 2010).

Published geologic mapping shows the southern portion of the site is generally underlain by Mehrten Formation which consists of gray andesitic sandstone, brown to pink claystone, and gray sandy to gravelly andesitic mudstone. The northern portion of the site is generally underlain by Lower Member Modesto Formation, which consists of alluvial silt, sand and gravel locally derived from the Sierra Nevada Foothills, and by Mehrten Formation. The channel of Dry Creek transverses east and west through the Project area and generally consists of Post-Modesto Deposits, which consists of undifferentiated alluvium locally derived from the Sierra Nevada Foothills (Crawford & Associates Inc. 2017).

Table 3.6-2 (Paleontological Resources by Geologic Unit) of the County General Plan Draft Environmental Impact Report (DEIR) provides the paleontological sensitivity rating for the rock units in the County (Stanislaus County 2016b). Table 10 below lists the geologic units underlaying the Project area and includes data from County General Plan Draft Table 3.6-2 (Paleontological Resources by Geologic Unit).

Table 10. Paleontological Sensitivity of Geologic Units in the Project Area

Geologic Unit	Age	Fossils	UCMP[1] Vertebrate Records in County	Paleontological Sensitivity
Modesto Formation	Pleistocene	Includes horse, mammoth camel, pocket gopher, bison, and ground sloth	10	High
Mehrten Formation	Tertiary	Includes extinct horse, primitive rhinoceros, camel, and tortoise	232	High

[1] University of Californian Museum of Paleontology

Figure 3.6-5 (Paleontological Sensitivity) of the County General Plan DEIR identifies the Project area as having high paleontological sensitivity (Stanislaus County 2016b). A significant impact would occur if the Project were to directly or indirectly destroy a unique paleontological resource or site. With implementation of PALEO-1 the Projects potential impact to paleontological resources would be considered less than significant.

Measure PALEO-1 (Paleontological Resources)

- *A qualified paleontologist will prepare a Paleontological Monitoring Plan based on 65% design.*

- *The qualified paleontologist would designate a paleontological monitor to be present during qualifying earthmoving activities, as described in the Paleontological Monitoring Plan.*
- *The Resident Engineer will notify the qualified paleontologist in advance of the start of construction activity and would attend any safety training programs for the proposed project. The proposed project paleontologist would meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel involved with excavation or drilling activities in paleontologically sensitive areas will receive a paleontological awareness training session prior to commencement of work.*
- *If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer. In the event that paleontological resources are discovered, fossil specimens would be properly collected and sufficiently documented to be of scientific value. Collection, documentation, and storage standards will be provided in the Paleontological Monitoring Plan.*
- *Upon the completion of excavation and/or drilling activities in paleontologically sensitive areas, the paleontologist will prepare a Paleontological Monitoring and Findings Report summarizing the results of the monitoring. The report will provide a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. Full copies of the final Paleontological Monitoring and Findings Report will be deposited with the repository institution.*

5.2.9 Greenhouse Gas Emissions

V. GREENHOUSE GAS EMISSIONS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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 (OPR 2008). 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 Crabtree Road and would not increase operational GHG levels. The discussion below therefore focuses on construction related GHG emissions of the Project.

Potential Environmental Effects

a) ***Less Than Significant Impact.*** The proposed Project does not increase the capacity of Crabtree Road and would not increase operational GHG levels. Construction of the proposed Project would generate short-term emissions of greenhouse gases. The 2015 SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts* document states the following:

> '*In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project-specific GHG emission impacts on global climate change.'*

As stated in the text of the 2015 SJVAPCD Guidance, the policy provides for a tiered approach in assessing significance of project specific GHG emission increases:

> *'Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions.'*

The proposed Project is identified as project identification number S72 in StanCOG's 2018 Regional Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (StanCOG 2018a). The 2018 MTP/SCS is the applicable GHG emissions reduction plan for the Project. The Project will not conflict with the applicable GHG reduction plan as it was included in the 2018 MTP/SCS analysis.

Potential impacts resulting from GHG emissions during project construction and operation are less than significant due to the following:

- The Project does not increase the capacity of Crabtree Road
- The Project is included as project S72 in the StanCOG 2018 RTP/SCS.
- GHG emissions from construction would likely be offset by improvements related to the lifetime and maintenance intervals of the bridge and approach roadway.

b) ***Less Than Significant Impact.*** See response to item 'a' above.

5.2.10 Hazards and Hazardous Materials

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

An Initial Site Assessment (ISA) was completed for the bridge site (Crawford Inc. 2017b). Site visits were conducted by Crawford Inc. in April 2017 and November 2014. The ISA provides information regarding whether the proposed Project could be significantly affected by potential recorded or readily visible ASTM Recognized Environmental Conditions (RECs) that may be present in the Project area. Recommendations for further action are provided as applicable.

The ISA included the following findings (Crawford Inc. 2017b):

- A records review of regulatory databases indicates there are no hazardous materials locations that may have potential to impact the site.
- Based on the project location and the lack of hazardous materials sites in the project vicinity the potential to encounter RECs is extremely low.
- Existing structures that will be impacted by project demolition are constructed of materials having the potential to contain asbestos. Asbestos containing construction material (ACCM), as defined in the California Code of Regulations, Title 8, Section 1529 of the Construction Safety Orders, can be present in construction materials such as structural concrete (piers, footings, deck, abutments and wing walls), aggregate containing serpentine, bridge joint seals, bearing pads, shims, caulking or sealant, deck drains or other less obvious materials such as concrete pipe conduits for utilities.
- The steel superstructure, understructure and supports are not painted. The concrete abutments are also unpainted. The wood guardrails, guardrail posts and curbs on the bridge deck are freshly painted. Observations made in 2014 and 2017 indicate the wood guardrails and posts have been replaced with new wood materials and painted and are therefore unlikely to contain lead. Observations made in 2014 indicated the curbs contained a minor amount of residual paint before they were repainted, however it is unknown whether the old paint contains lead.

- The wood guardrails on the bridge deck and their supports are recently constructed and painted. Due to painting, it is unknown whether the lumber has been chemically treated. Also unknown is whether the painted wood curbs on the bridge deck are constructed of treated lumber.
- Crabtree Road is a paved road with yellow thermoplastic traffic striping on the asphalt surfacing at the bridge approaches. There is white striping on the bridge deck.
- Crawford Inc. reviewed the potential for Naturally Occurring Asbestos (NOA) at the project site by performing field reconnaissance and reviewing published geologic mapping. The locations of ultramafic rocks have been mapped by the Division of Mines and Geology in an effort to generally identify areas likely to contain NOA. No ultramafic rock occurrences are mapped as occurring in Stanislaus County (CDOC 2000).
- There are four existing power poles with overhead lines along the west side of Crabtree Road within the project site. There are no transformers.
- The Project area and surrounding property consist of agricultural lands. The existing nut orchards immediately east of the Project site were planted between 2011 and 2013, based on a review of aerial images in Google Earth. Prior to being planted to nut trees the areas immediately east of the Project site were irrigated pasture and or row crops. Crawford Inc. contacted the Stanislaus County Agricultural Commissioner's office and reviewed the California Department of Pesticide Regulation pesticide use database, but did not find any conclusive data regarding pesticide application in the adjacent orchards. There was no evidence of agricultural chemical storage or mixing within the Project area (Crawford Inc. 2017b).
- Generally, aerially deposited lead (ADL) may be an issue on roads that have historically experienced significant traffic, particularly where vehicles would be stopping and idling, i.e., at a stop sign or a high congestion area. The Average Daily Traffic on Crabtree Road over Dry Creek Bridge was reported as 123 in 2017. Due to the low historical traffic at the project site, ADL concentrations are expected to be insignificant and an ADL study is not warranted.
- Crawford Inc. did not observe or find direct or indirect evidence of spills or releases of oil or fuel within the project area. No further action is recommended at this time.

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) ***Potentially Significant Unless Mitigation Incorporated.***

Chemically Treated Wood Waste: Chemically treated wood must be handled as treated wood waste (TWW) and disposed of as hazardous waste. It is not known if the wood guardrails and painted wood curbs on the bridge deck include chemically treated wood. Implementation of HAZ-1 will reduce potential impacts to less than significant.

Measure HAZ-1 (Treated Wood Waste (TWW))

- *Handling and disposal of chemically treated wood removed from the project site will adhere to Caltrans 2015 Standard Specification (SS) 14011.14 and Special Standard Provision (SSP) 14011.14.*

Thermoplastic Traffic Striping: Thermoplastic traffic striping typically contains heavy metals, including lead and chromium, at concentrations in excess of the hazardous waste thresholds established by the California Code of Regulations, and may produce toxic fumes when heated. Thermoplastic traffic striping occurs on the bridge deck. Implementation of HAZ-2 will reduce potential impacts to less than significant.

Measure HAZ-2 (Thermoplastic traffic striping)

- *Thermoplastic traffic striping removed by the Project will be disposed of at a Class I disposal facility.*

Lead Based Paint: The steel superstructure, understructure, supports, and concrete abutments are not painted. The wood guardrails, guardrail posts and curbs on the bridge deck are freshly painted. Observations made in 2014 and 2017 indicate the wood guardrails and posts have been replaced with new wood materials and painted and are therefore unlikely to contain lead. Observations made in 2014 indicated the curbs contained a minor amount of residual paint before they were repainted, however it is unknown whether the old paint contains lead. Without this knowledge, the painted wood curbs are considered to be a potential REC. Implementation of HAZ-3 will reduce potential impacts to less than significant.

Measure HAZ-3 (Lead Containing Paint, LCP)

- *Paint on the wood guardrails, guardrail posts and curbs will be tested for LCP prior to demolition/removal to determine if they exceed thresholds established by the California Code of Regulations. Material found to exceed the threshold will be disposed of at a Class I disposal facility. If lead is detected, then appropriate procedures will be included in the Construction contract to avoid contact with these materials or generation of dust or vapors.*

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

d) ***No Impact.*** A regulatory agency database review for locations included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 ('The Cortese List') was conducted as part of the Project ISA. No listed hazardous materials or waste sites are reported within one mile of the Project site (Crawford Inc. 2017b).

e) ***No Impact.*** The Project is not located within two miles of a public airport or public use airport and no private air strips occur in close proximity to the Project.

f) ***Less Than Significant Impact.*** Project construction activities would be coordinated with local law enforcement and emergency services providers as applicable.

g) ***Less Than Significant 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. See section 5.2.20 for more information.

5.2.11 Hydrology and Water Quality

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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?	☐	☐	☒	☐

Environmental Setting

The Project is located in the Upper Tuolumne Hydrologic Unit (Hydrologic Unit Code 18040009). Section 13240 of the Porter-Cologne Water Quality Control Act requires each Regional Board to formulate and adopt water quality control plans, or basin plans, for all areas within the Region. The Porter-Cologne Act also requires each Regional Board to establish water quality objectives to ensure the reasonable protection of beneficial uses and a program of implementation for achieving water quality objectives within the basin plans. In California, the beneficial uses and water quality objectives are the State's water quality standards. The Project is subject to the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. Per the Basin Plan, "*The beneficial uses of any specifically identified water body generally apply to its tributary streams…"* (California Regional Water Quality Control Board 2018).

Dry Creek is not an individually listed waterbody in the Basin Plan but is tributary to the Tuolumne River approximately 21 air miles west of the Project location. The existing beneficial uses identified in Basin Plan Table 2-1 for the 'New Don Pedro Reservoir to San Joaquin River' area, which includes Dry Creek and the Tuolumne River, are irrigation, stock watering, contact recreation (canoeing and rafting), other non-contact

recreation, warm and cold freshwater habitat, cold migration, warm and cold spawning, and wildlife habitat (California Regional Water Quality Control Board 2018). Unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered suitable or potentially suitable, at a minimum, for municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply (California Regional Water Quality Control Board 2018).

A Project Water Quality Study was prepared for the Project and approved by Caltrans (WRECO 2019). The memorandum discusses the water quality background of the Crabtree Road Bridge Project area, the physical setting, the regulatory framework with respect to water quality, and potential water quality impacts of the proposed Project (WRECO 2019).

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, potential impacts will result primarily from grading and excavation associated with removal of the old bridge and installation of the new bridge and road approaches.

The SWRCB is responsible for implementing portions of 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.

The Construction General Permit requires that construction sites are inspected before and after storm events and every 24 hours during extended storm events. Inspections identify any BMP maintenance requirements and evaluates the effectiveness of the BMPs.

Compliance with the various requirements of the SWRCB statewide general permit for construction would ensure that water quality impacts during the construction phase of the proposed project would be minimized.

Implementation of measures BIO-3 (California tiger salamander) and BIO-9 (Dry Creek) require implementation of BMP's that will also reduce potential impacts to water quality. Project impacts are considered less than significant.

b) ***No Impact.*** The Project would not involve any new withdrawals from an aquifer or groundwater table and would not interfere with groundwater recharge.

c) ***Less Than Significant Impact for items c-i through c-iv***. Project grading and excavation are not anticipated to result in substantial changes in site drainage volume or configuration. Installation of the replacement bridge would result in a total increase in impervious surface area of 0.072 acre when compared to the existing condition (WRECO 2019). On site drainage is more than sufficient to accommodate the minor increase in impervious surface area. The Project will not contribute to a substantial increase in water runoff from the site. The proposed Project does not include other activities that will change the amount of stormwater runoff.

The statewide General Permit (Water Quality Order 2009-0009-DWQ) for construction activities will require preparation and implementation of a SWPPP identifying specific best management practices (BMPs) to be implemented and maintained through the Project to limit potential erosion and siltation on- and off-site.

There would be a local increase in water surface elevation of no more than 0.3 ft from the upstream face of the new bridge to the upstream face of the existing bridge relative to the existing condition for the 100-year storm (WRECO 2019). The proposed bridge would provide sufficient freeboard to meet applicable flood flow criteria. The Project's overall potential impact to the floodplain would be minimal, and project impacts are less than significant.

d) ***No Impact.*** The Project occurs on FEMA/FIRM panel 06099C0425E (effective date: 26 September 2008) for unincorporated Stanislaus County. FEMA/FIRM panel 06099C0425E designates the Project area as Zone X (areas determined to be outside the 0.2% annual chance floodplain). Given the distance from coastal areas and any large bodies of water the Project is not located in a tsunami or seiche hazard zone. Per County General Plan DEIR Figure V-3 (Stanislaus County Dam Inundation Hazards) the Project is not located in a dam inundation area. The Project does not occur in a flood hazard, tsunami, or seiche zones.

e) ***Less Than Significant Impact.*** As per the *Final California 2014/ 2016 Integrated Report (303(d) List/305(b) Report)* (SWRCB 2018b), Dry Creek in the Project area is not a 303(d)-listed waterbody. The lower 34 miles of Dry Creek is a 303(d) List/305(b) water body for chlorpyrifos, diuron, indicator bacteria, dissolved oxygen, and toxicity (WRECO 2019). The listed segment of Dry Creek is approximately 4.25 river miles (2.6 air miles) downstream of the Project location. The proposed Project would not negatively affect any of the designated beneficial uses for surface and groundwater presented in the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins.

5.2.12 Land Use and Planning

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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 2015 Stanislaus County General Plan is the relevant land use plan for the project area. The General Plan designations of the parcels in the Project area are listed in Table 1.

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.

5.2.13 Mineral Resources

VI. MINERAL RESOURCES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

Sand and gravel resources are the primary mineral resources of economic importance in Stanislaus County (Stanislaus County 2016a).

Potential Environmental Effects

a) ***No Impact.*** The Project area is not located in a designated 'Aggregate Resource Area' per Appendix III-A of the County General Plan (Stanislaus County 2016a). An Aggregate Resource Area is an area deemed available for mining based on criteria set by the State Mining and Geology Board.

Map plate 2C of the Mineral Land Classification of Stanislaus County shows the Project located in an area classified as Mineral Resource Zone (MRZ) 3a. Areas classified as MRZ 3a are "Areas

containing known mineral occurrences of undetermined mineral resource significance. Further exploration work within these areas could result in the reclassification of specific localities into MRZ-2a or MRZ-2b categories." The Project would not result in the loss of availability of a known mineral resource of mineral resource recovery site.

b) ***No Impact.*** See response to item a).

5.2.14 Noise

VII. NOISE—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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 Stanislaus County General Plan Noise Element includes policies and implementation measures for noise control within unincorporated areas, as follows (Stanislaus County 2016a).

- Policy 2: It is the policy of Stanislaus County to develop and implement effective measures to abate and avoid excessive noise exposure in the unincorporated areas of the County by requiring that effective noise mitigation measures be incorporated into the design of new noise generating and new noise sensitive land uses.
- Policy 3: It is the objective of Stanislaus County to protect areas of the County where noise sensitive land uses are located.
    - *Implementation Measure:* Require the evaluation of mitigation measures for projects that would cause the Ldn at noise sensitive uses to increase by 3 dBA or more and exceed the "normally acceptable" level, cause the Ldn at noise-sensitive uses to increase 5 dBA or more and remain "normally acceptable," or cause new noise levels to exceed the noise ordinance limits (after adoption).

Stanislaus County (Code 10.46.060) limits construction activity that creates sound levels greater than 75 decibels, on average, from occurring after 7:00 PM and before 7:00 AM (Stanislaus County, 2016a).

Exemptions: Title 10 (Public Peace, Morals, and Welfare), Chapter 10.46 (Noise Controls), Section 10.46.080 (Exemptions) list several activities that are exempt from the provisions of the Nosie Control Ordinance. Section 10.46.080.J states "*Public Entity or Public Utility Activity. This chapter shall not apply*

to construction or maintenance activities performed by or at the direction of any public entity or public utility."

No noise sensitive land uses occur within the Project area or within 0.6 mile of the Project area. The closest potential residential land use is located approximately 0.6 mile northeast of the Project area.

Potential Environmental Effects

a) ***(Construction Noise) Less Than Significant Impact.*** Construction activities could increase noise levels temporarily in the vicinity of the Project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, time of day, and similar factors. These increases would be temporary. Stanislaus County Code Title 10 (Public Peace, Morals, and Welfare), Chapter 10.46 (Noise Controls), Section 10.46.080 (Exemptions) list several activities that are exempt from the provisions of the Nosie Control Ordinance. Section 10.46.080.J states, "*Public Entity or Public Utility Activity. This chapter shall not apply to construction or maintenance activities performed by or at the direction of any public entity or public utility.*" This impact is less than significant.

(Operational Related Noise) Less Than Significant Impact. The post-project noise levels in the Project vicinity will be substantially unchanged from the pre-project condition.

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) ***No Impact.*** The Project is not located within an airport land use plan area or within two miles of a public or public use airport or private air strip.

5.2.15 Population and Housing

VIII.POPULATION AND HOUSING—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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 would replace the existing deficient bridge with a bridge that is consistent with County standards and the AASHTO guidelines. The Project does not increase the capacity of

Crabtree Road. 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.

5.2.16 Public Services

IX. PUBLIC SERVICES—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

The purpose of the Project is to replace the existing bridge with a bridge that is consistent with County standards and the Association of State Highway and Transportation Officials (AASHTO) guidelines. The Project is needed to correct the multiple functional and structural deficiencies including:

- The bridge deck width does not meet the minimum AASHTO width of 20 feet (18-foot travel way plus 2-foot shoulders on each side) for ADT less than 400 vehicles.
- The bridge is height-restricted at 13 feet.
- The bridge load capacity inventory rating is 11.1 metric tons. The bridge operating rating is 19.0 metric tons. The bridge has established, posted weight limits. No permit loads are allowed.
- The bridge wood barrier does not meet current AASHTO crash-tested barrier capacity requirements.
- The steel truss structure limits the size and type of agricultural equipment that can use the bridge.
- If the bridge is closed or inaccessible, the detour length is 22 miles.

Potential Environmental Effects

a) ***No Impact.*** The Project makes improvements to a public facility. The potential environmental impacts of those improvements are evaluated in this document. No other new or physically altered governmental facilities would be needed.

5.2.17 Recreation

X. RECREATION:	*Potentially Significant Impact*	*Potentially Significant Unless 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

No parks or other recreational facilities occur in or immediately adjacent to the Project area. The closest park facility the Modesto Reservoir Regional Park located approximately 3.5 miles southwest of the Project area

Potential Environmental Effects

a) ***No Impact.*** The Project does not include activities that would increase the use of existing parks or recreational facilities.

b) ***No Impact.*** See response to item a above.

5.2.18 Transportation

XI. TRANSPORTATION/TRAFFIC—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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?	☐	☐	☐	☒

Environmental Setting

Crabtree Road is a low volume rural road that is classified by the County General Plan Circulation Element Figure II-1 (Circulation Diagram) as a 'Minor Collector' (Stanislaus County 2016a). Per the General Plan minor collectors "serve a dual function by providing access to abutting properties and movement of light to moderate volumes of people and goods for medium length trips."

Potential Environmental Effects

a) ***Less Than Significant Impact.*** Per the StanCOG Final Non-Motorized Transportation Master Plan (Plan, October 2013), no existing or planned bicycle facilities occur on Crabtree Road. Per Figure 2.13 (Countywide Potential Pedestrian Demand and Priority Pedestrian Areas) of the Plan, the Project area does not have any demand for pedestrian facilities and is not a Priority Pedestrian Area (StanCOG 3013). The Project is consistent with the StanCOG Final Non-Motorized Transportation Master Plan.

b) ***Less Than Significant Impact.*** The purpose of the Project is to replace the existing bridge with a bridge that is consistent with County standards and the AASHTO guidelines. The Project does not increase the capacity of Crabtree Road and is not anticipated to increase operational related vehicle miles travels (VMT). A temporary minor increase in VMT could occur during Project construction as the result of worker trips to the site, materials delivery, and material hauling. Any minor increase in VMT would be temporary. The completed Project would not increase VMT.

c) ***No Impact.*** Consistent with the stated purpose and need, the Project will improve public safety by providing a structure that is consistent with County standards and the AASHTO guidelines.

d) ***Less Than Significant Impact.*** The roadway may need to be closed for a period of 4 to 5 days during construction of the approach roadway conforms with the existing roadway. The County will require the construction contractor to submit a traffic management plan that maintains access to the private driveway on the north approach roadway. Offsite detours would be provided on existing roads. Project construction activities would be coordinated with local law enforcement and emergency services providers as applicable.

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

5.2.19 Utilities/ Service Systems

XII. UTILITIES AND SERVICE SYSTEMS—Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless 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

Existing overhead and underground telephone and electric lines run along the west side of Crabtree Road and will not be impacted or require relocation. There is an existing stream gauge on the east side of the existing north bridge abutment. All or portions of the existing abutments may be left in place to provide bank stability and avoid impacts to existing utilities. It is currently proposed to leave the existing abutments in place. This would help with bank stabilization and allow the existing stream gauge to remain in place.

Potential Environmental Effects

a) ***No Impact.*** The Project is the replacement of the sub-standard bridge and does not require utility relocations, new utilities, or expanded utilities.

b) ***No Impact.*** Operation and maintenance of the replacement bridge following construction would not be expected to use additional water supplies. Future routine maintenance may include pressure washing and other minor water uses.

c) ***No Impact.*** The Project would not produce waste water.

d) ***No 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. The Project would not generate the need for new solid waste facilities.

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

5.2.20 Wildfire

XIII. 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*	*Potentially Significant Unless 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

The Project is located in a 'moderate' Fire Hazard Severity Zone per the 2007 CAL FIRE, Fire Hazard Severity Zones State Responsibility Area (SRA) maps (CAL FIRE 2020).

Potential Environmental Effects

a) ***Less than Significant.*** Project activities would not impair an adopted emergency response plan or emergency evacuation plan. The roadway may need to be closed for a period of 4 to 5 days during construction of the approach roadway conforms with the existing roadway. The County will require the construction contractor to submit a traffic management plan that maintains access to the private driveway on the north approach roadway and requires early coordination with emergency service providers. Offsite detours would be provided on existing roads.

b) ***Less than Significant.*** The Project site is in a rural agricultural area dominated by orchard crops and open range. The closest potential residential land use is located approximately 0.6-mile northeast of the Project area. CAL FIRE has designated all of the Project area as a Moderate Fire Hazard Severity Zone in an SRA (CAL FIRE 2020). No unique geographic and other factors are known in the Project area that would exacerbate wildfire risks.

c) ***Less than Significant.*** The Project replaces the existing bridge with a new one. The Project does not include any other infrastructure. Maintenance of the new structure would not involve any activities that do not currently occur at the existing structure. None of the currently proposed Project activities are expected to exacerbate fire risk. Project impacts are less than significant.

d) ***Less than Significant.*** See response a, b, and c above.

5.2.21 Mandatory Findings of Significance

XIV. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)	*Potentially Significant Impact*	*Potentially Significant Unless 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) ***Potentially Significant Unless Mitigation Incorporated.*** Through the use of Best Management Practices and the mitigation measures noted previously, the Project will not degrade the quality of the environment.

b) ***Less than Significant.*** 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.*** 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. Therefore, the Project would not cause substantial adverse effects on human beings.

6. Document Preparation and Review

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MITIGATION MONITORING AND REPORTING PLAN

CRABTREE ROAD OVER DRY CREEK BRIDGE (38C-0009) REPLACEMENT PROJECT

CEQA LEAD AGENCY:

Stanislaus County

PREPARED:

July 2020

Introduction

The County of Stanislaus Department of Public Works (County propose to replace the Crabtree Road Bridge (38C-0009) over Dry Creek. The Project is located on Crabtree Road approximately 13.6 miles east-southeast of City of Oakdale in unincorporated Stanislaus County.

As described in the IS/MND, the Project itself incorporates a number of measures to minimize adverse effects on the environment. The IS/MND also identified several mitigation measures that are required to reduce potentially significant impacts to levels that are less than significant. This Mitigation Monitoring and Reporting Plan (MMRP) describes a program for ensuring that these mitigation measures are implemented in conjunction with the Project. Stanislaus County, as the lead agency under the California Environmental Quality Act (CEQA), is responsible for overseeing the implementation and administration of this MMRP. The County will designate a staff member to manage the MMRP. Duties of the staff member responsible for program coordination will include conducting routine inspections and reporting activities, coordinating with the Project construction contractor, coordinating with regulatory agencies, and ensuring enforcement measures are taken.

Regulatory Framework

California Public Resources Code Section 21081.6 and California Code of Regulations Title 14, Chapter 3, Section 15097 require public agencies to adopt mitigation monitoring or reporting plans when they approve projects under a MND. The reporting and monitoring plans must be adopted when a public agency makes its findings pursuant to CEQA so that the mitigation requirements can be made conditions of Project approval.

Format of This Plan

Mitigation measures are followed by an implementation description, the criteria used to determine the effectiveness of the mitigation, the timeframe for implementation, and the party responsible for monitoring the implementation of the measure. Implementation of mitigation measures is ultimately the responsibility of the County; during construction, the delegated responsibility is shared by County's contractors.

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
Agricultural and Forestry Resources					
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	***Measure AG-1 (Williamson Act Parcels)*** • *Acquisition of ROW from any parcel enrolled in an active Williamson Act Contract will comply with the noticing requirements of the 2014 (amended 2016) California Department of Conservation Public Acquisition Notification Procedures 'A Step by Step Guide'.*	Prior to ROW Phase	Stanislaus County		
Biological Resources					
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	***Measure BIO-1 (Special Status Plants)*** • *If project construction starts and more than three years have elapsed since the 2019 survey, a qualified botanist will conduct an appropriately timed pre-construction botanical survey for the federal listed Hartweg's golden sunburst and the following CNPS-ranked special-status plants identified as having potential to occur in the Project area: Hoover's calycadenia, beaked clarkia, dwarf downingia, Jepson's coyote thistle, spiny-sepaled button-celery, and forked hare-leaf. The survey will cover the entire Project area. Survey results will be provided in an email memo to Caltrans District 10.* • *If any non-federal-listed special-status plants are found, the location of the plants will be designated as an Environmentally Sensitive Area (ESA). ESAs containing these plants will be avoided by all construction personnel and equipment to the maximum extent practicable. If rare plant populations cannot be protected in place, the County will prepare a transplantation/ propagation plan for the relocation of the rare plant(s). Rare plant relocation will occur in a suitable area of the Project site or other appropriate County designated area. The transplantation/ propagation plan will be sent to CDFW.*	Prior to Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
Department of Fish and Game or U.S. Fish and Wildlife Service?	• *If the federal-listed Hartweg's golden sunburst is found in the Project area, Caltrans will reinitiate consultation with USFWS. Construction within 50 ft of the Hartweg's golden sunburst plant(s) will not proceed until the consultation with USFWS is complete. The County and its contractors will adhere to all conditions and requirements of the USFWS consultation.*				
	Measure BIO-2 (California Tiger Salamander – Central California DPS (CTS)) • *Prior to the start of construction activities, a USFWS-approved biologist will provide education and training sessions for all individuals that will be involved with site preparation or construction. The training will focus on habitat sensitivity and identification of California tiger salamander (CTS). The training will include species description and behavior, general measures that will be taken to protect these species as they relate to the proposed project, the penalties for non-compliance, and the boundaries of the proposed project site. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.* • *A USFWS-approved biologist will conduct a pre-construction survey no fewer than 14 days and no more than 30 days prior to the beginning of ground disturbance or other general construction activities that could affect the salamander. The survey will pay particular attention to detecting any burrows that could be used as refugia by salamanders. If potential refugia burrows are discovered, they will be flagged or otherwise marked and avoided by at least 50 feet. If the potential*	Prior to and During Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	refugia burrows cannot be avoided, County/Caltrans will contact the Service to discuss additional measures that may be needed and obtain an Incidental Take Statement if needed. • *The contractor will confine all equipment to designated work zones (including access roads and material/ equipment storage and staging area).* • *Construction activities in CTS dispersal habitat (the grassland south of Dry Creek and east of Crabtree Road) will be timed to occur during the dry season (1 May – 5 October) between 30 minutes after sunrise to 30 minutes before sunset to minimize potential effects to salamander dispersal. Work will not be conducted if raining. The Resident Engineer will check the National Weather Service prior to each scheduled work day. No construction activities will be conducted in upland habitat areas where salamanders may occur if it is raining, if there is a greater than 70% chance of rain based on the National Oceanic and Atmospheric Administration's National Weather Service forecast on that work day, or within 48 hours following a rain event greater than 0.25 inch.* • *The Resident Engineer will ensure that any open trenches or excavation pits are properly ramped or covered (if needed). Excavated areas 6 inches deep or more will be covered in a manner that excludes salamanders or will be provided with escape ramps at a 3:1 slope. No gaps greater than 1 inch will be allowed within cover materials. Each covered excavation in CTS habitat (the grassland south of Dry Creek and east of Crabtree Road) should be checked daily until the excavation is filled.*				

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	• *All trash (food related items such as wrappers, bottles, cans, food scraps, etc.) will be placed in closed containers and removed from the proposed project site on a daily basis.* • *Pipes laid underground or stored on the ground will be capped or covered in a manner that excludes salamanders from entering the pipe. Long-term storage of pipes and other construction material should be placed on asphalt and raised above the ground by no less than 1.5 inches.* • *All fencing, flagging, debris, trash, and materials from work areas will be removed following completion of construction and habitat restoration activities.* • *The USFWS will be immediately notified verbally, and with a written notification within 5 days, if any worker inadvertently kills or injures a salamander, finds one injured, or trapped, on the proposed project site or during work. Work will stop immediately if an incident occurs until corrective actions are provided by the Service.* • *Areas temporarily disturbed by construction will be restored with native grassland species as described in Appendix F of the approved Project Natural Environment Study (NES).*				
	Measure BIO-3 (Western Pond Turtle, WPT) • *Within 48 hours prior to the start of work within or along Dry Creek, a qualified biologist will conduct a preconstruction survey for western pond turtle. The survey area will include the construction area and publicly accessible areas 250 feet upstream and downstream of the construction area. If the biologist discovers any life stage of special-status amphibians or reptiles, a biological monitor experienced with the*	Prior to and During Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	identification and biology of the species will monitor construction activities within Dry Creek to verify that no special-status amphibians or reptiles are harmed. • *Prior to the start of construction, a biologist will conduct a training session for all construction personnel that includes a description of special-status species with potential to occur in the construction area. The training will explain who to contact and how to proceed if a special-status species is encountered. The training will describe the specific measures to be implemented to avoid impacts to these species.* • *If any life stage of western pond turtle is encountered during construction, activities will cease until a qualified biologist verifies that the individuals have left on their own, that work activities will not affect the individuals, or if no other options are available, the biologist moves the individual(s) to a suitable and safe location downstream of the project.*				
	Measure BIO-4 (Nesting birds and MBTA) *Under the MBTA, nests that contain eggs or unfledged young are not to be disturbed during the breeding season. Nesting or attempted nesting by migratory birds and birds-of-prey is anticipated from 1 February to 30 September. Measures to prevent swallow nest establishment will also prevent nest establishment of other birds that may nest underneath the bridge.* *Swallows and Other Bridge/Structure Nesters: In California, bridge/ structure-nesting swallows typically arrive in mid-February, increase in numbers until late March, and remain until October. Nesting begins in April, peaks in June, and continues into August. Black phoebes, another*	Prior to Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	bridge/ structure -nesting species, nest from March to August with peak activity in May. Measures should be taken to prevent establishment of nests on the bridges, culverts, headwalls, and other suitable structures prior to construction. Effective techniques to prevent nest establishment include using exclusion devices and removing and disposing of partially constructed and unoccupied nests of migratory or nongame birds on a regular basis to prevent their occupation. This can be done by: • *On a weekly or more frequent basis, remove all partially completed nests using either hand tools or high-pressure water; and/or* • *Hang netting from the bridge/structure before nesting begins. If this technique is used, netting should be in place from late February until project construction begins.* *Birds of Prey and Birds Protected by the Migratory Bird Treaty Act* • *If construction begins outside the 1 February to 30 September breeding season, there will be no need to conduct a preconstruction survey for active nests.* • *If applicable, trees scheduled for removal should be removed during the non-breeding season from 1 October to 31 January.* • *If construction is scheduled to begin between 1 February and 30 September, a biologist shall conduct a survey for active bird of prey nests within 300 ft and active MTBA bird nests within 100 ft of the Project area from publicly accessible areas within one week prior to construction. The measures listed below shall be implemented based on the survey results.* *No Active Nests Found:*				

<table>
<tr><th rowspan="2">Potential Impact</th><th rowspan="2">Mitigation Measure</th><th rowspan="2">Timing</th><th rowspan="2">Responsible / Reporting Party</th><th colspan="2">Verification of Compliance</th></tr>
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- *If no active nest of a bird of prey, MBTA bird, or other CDFW protected bird is found, then no further avoidance and minimization measures are necessary.*

Active Nests Found:

- *If an active nest of a bird of prey, MBTA bird, or other CDFW protected bird is discovered that may be adversely affected by construction activities or an injured or killed bird is found, immediately:*
  4. *Stop all work within a 300-ft radius of the discovery*
  5. *Notify the Engineer*
  6. *Do not resume work within the specified radius of the discovery until authorized.*
- *The biologist shall establish a minimum 600-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a Swainson's hawk, a minimum 300-foot ESA if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey..*

Bird Species Protection Areas

Identification	*Location*
Swainson's hawk	*600 ft, no-disturbance buffer*
Bird of Prey	*500 ft no-disturbance buffer*
MBTA protected bird (not bird of prey)	*100 ft no-disturbance buffer*

- *Activity in the ESA will be restricted as follows:*

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Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	4. *Do not enter the ESA unless authorized* 5. *If the ESA is breached, immediately:* o *Secure the area and stop all operations within 60 ft of the ESA boundary* o *Notify the Engineer* 6. *If the ESA is damaged, the County determines what efforts are necessary to remedy the damage and who performs the remedy.* • *No construction activity will be allowed in the ESA until the biologist determines that the nest is no longer active, or unless monitoring determines that a smaller ESA will protect the active nest.* • *The size of an ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the active nest is occurring. Reduction of ESA size depends on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific factors.* • *Between 1 February and 30 September, if additional trees or shrubs need to be trimmed and/or removed after construction has started, a survey will be conducted for active nests in the area to be affected. If an active nest is found, the above measures will be implemented.* • *If an active nest is identified in or adjacent to the construction zone after construction has started, the above measures will be implemented to ensure construction is not causing disturbance to the nest.*				

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	Measure BIO-5 (Burrowing Owl) • *A qualified biologist will conduct Take Avoidance Surveys in accordance with Appendix D of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. An initial Take Avoidance Survey will be conducted no less than 14 days prior to initiating ground disturbance activities and a final survey will be conducted within 24 hours prior to ground disturbance.* • *The preconstruction survey for burrowing owls will include all potential burrowing owl habitat within 500 feet of the project. Portions of the survey area located on private land will be surveyed from all publicly accessible areas.* • *If active burrowing owl burrows are found, the following measures will be implemented:* • *During the non-breeding season (1 September through 31 January), the biologist shall establish a 160-foot ESA around the burrow. During the breeding season (1 February through 31 August), the biologist shall establish a 300-foot ESA around the burrow in consultation with CDFW.* • *The size of the ESA may be reduced if the biologist monitors the construction activities and determines that no disturbance to the burrowing owl is occurring. Reduction of ESA size depends on the location of the burrow relative to the project, project activities during the time the burrow is active, and other project-specific factors.* • *If the burrow is located within the construction zone and it is during the non-breeding season, the burrowing owl can be passively excluded from the burrow using one-way doors, as described in the Exclusion Plan of*	Prior to Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	Appendix E of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. • *If the burrow is located within the construction zone and it is during the breeding season, the burrowing owl can only be passively excluded if it has been confirmed that the owl has not begun egg laying and incubation, the clutch was unsuccessful, or juveniles from the occupied burrows are foraging independently and are capable of independent survival.*				
	Measure BIO-6 (Special-Status Bats) *The maternity season for bats in California is generally considered to be from 15 May through 15 August and the hibernation season from 15 November through February.* • *A qualified biologist will conduct a preconstruction survey for roosting bats within 2 weeks prior to the start of construction. Surveys can also be performed earlier than 2 weeks prior to the start of construction.* • *If no bats or sign of their use is observed during the survey no further measures are required.* • *If sign of or direct observation of a maternity or hibernation roost is recorded during the survey, no project related disturbance will occur to the structure containing the roosting bats until a qualified biologist determines, by observation, that the bats using the maternity or hibernation roost have departed for the season.* • *If it is determined during the preconstruction survey that bats are using the bridge outside maternity and hibernation seasons listed in this measure exclusion devices will be installed. Exclusion devices can be*	Prior to Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	installed anytime outside of the maternity and hibernation season of roosting bats listed above. • *Exclusion devices shall remain in place until demolition of the bridge.* • *Removal or trimming of trees or relocation of any structure that contains an active roost will be avoided between 15 May and 15 August (the maternity period) to avoid impacts on reproductively active females and dependent young.* • *The qualified biologist shall coordinate with CDFW regarding proposed exclusion methods prior to implementation. If construction is proposed while roosting bats are present, then the County shall coordinate with CDFW for additional guidance on bat avoidance and impact minimization during construction activities.*				
	Measure BIO-7 (American Badger) • *A qualified biologist will conduct a preconstruction survey for American badgers within 48 hours prior to the onset of ground disturbance in the Project area. If an occupied den is detected within the work area, the den will be avoided until the qualified biologist determines that the den is no longer occupied. If there are occupied dens in the Project area, the County shall coordinate with CDFW for additional guidance on den avoidance and impact minimization during construction activities.*	Prior to Construction	Stanislaus County/ Contractor		
Have a substantial adverse effect on state or federally	***Measure BIO-8 (Waters)*** • *During construction, water quality will be protected by implementation of BMPs consistent with the current edition of the Caltrans Stormwater Quality Handbooks*	Prior to and During Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	*(http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm) to minimize the potential for siltation and downstream sedimentation of Dry Creek.* • *The limits of construction will be marked with temporary fencing or flagging.* • *Equipment will be refueled and serviced at designated construction staging areas. All construction material will be stored and contained in a designated area that is located away from channels to prevent transport of materials into the adjacent Dry Creek. The preferred distance is a minimum 100 feet from riparian habitat or water bodies. Construction vehicles and equipment will be maintained to prevent contamination of soil and water from external grease and oil and from leaking hydraulic fluid, fuel, oil, and grease.* • *Any temporary diversion structure will be designed so that fish passage is maintained through the Project area. The diversion will not create an impassible barrier to fish passage. The contractor will prepare a creek dewatering plan that complies with any applicable permit conditions. Water diversion in Dry Creek will be conducted in accordance with the Stanislaus County Stormwater Management Plan (SWMP; Revised 18 May 2004).* • *Diversion and dewatering activities will be restricted to the period of 15 June through 15 October, when creek flows are low, and the creek is often naturally dry. No in-water work will be conducted outside of this period unless the exception is approved by CDFW. All diversion materials will be removed by 15 October unless an extension is approved by CDFW.*				

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	• *If pumps are used to temporarily divert or dewater the impoundment on Dry Creek to facilitate construction, an acceptable fish screen must be used to prevent entrainment or impingement of small fish. Potential contact between fish and pump will be minimized and/or avoided by constructing an open basin prior to commencing dewatering. The open basin will be inspected for fish, which will be salvaged and placed in the active flow of Dry Creek adjacent to the work zone by a qualified biologist. All temporary diversion structures and materials will be removed from the creek prior to the completion of the Project.* • *Areas temporarily disturbed on the banks of Dry Creek will be revegetated and reseeded with native grasses and other native herbaceous annual and perennial species prior to October 15 and/or immediately after construction is terminated at the completion of the Project (Appendix F of approved Project NES). Reseeded areas may be covered with a biodegradable erosion control fabric to prevent erosion and downstream sedimentation. The project engineer will determine the specifications needed for erosion control fabric (e.g., sheer strength) based on anticipated maximum flow velocities and soil types. The seed type will consist of commercially available native grass and herbaceous species as described in Appendix F of approved Project NES. No seed of nonnative species will be used unless certified to be sterile.* • *The Project will acquire applicable permits from the Corps, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife prior to conducting any work in potential*				

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	jurisdictional waters including Dry Creek. The Project will abide by the terms of permits acquired, including any limited operating periods restricting the time of year when work in Dry Creek may occur and the purchase of wetland/aquatic resource mitigation credits or by funding in-lieu fee program credits.				
Geology and Soils					
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	***Measure PALEO-1 (Paleontological Resources)*** • *A qualified paleontologist will prepare a Paleontological Monitoring Plan based on 65% design.* • *The qualified paleontologist would designate a paleontological monitor to be present during qualifying earthmoving activities, as described in the Paleontological Monitoring Plan.* • *The Resident Engineer will notify the qualified paleontologist in advance of the start of construction activity and would attend any safety training programs for the proposed project. The proposed project paleontologist would meet with the Resident Engineer and construction contractor at a preconstruction meeting to develop an agreed upon communication plan and provide for worker safety. All project personnel involved with excavation or drilling activities in paleontologically sensitive areas will receive a paleontological awareness training session prior to commencement of work.* • *If paleontological resources are discovered during earthmoving activities, the construction crew would immediately cease work within a 60-foot radius of the find, and immediately notify the Resident Engineer. In the event that paleontological resources are discovered, fossil specimens would be properly collected and sufficiently documented to*	Prior to and During Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
	be of scientific value. Collection, documentation, and storage standards will be provided in the Paleontological Monitoring Plan. • *Upon the completion of excavation and/or drilling activities in paleontologically sensitive areas, the paleontologist will prepare a Paleontological Monitoring and Findings Report summarizing the results of the monitoring. The report will provide a summary of the field and laboratory methods, site geology and stratigraphy, faunal list, and a brief statement of the significance and relationship of the site to similar fossil localities. Full copies of the final Paleontological Monitoring and Findings Report will be deposited with the repository institution.*				
Hazards and Hazardous Materials					
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into	***Measure HAZ-1 (Treated Wood Waste (TWW))*** • *Handling and disposal of chemically treated wood removed from the project site will adhere to Caltrans 2015 Standard Specification (SS) 14011.14 and Special Standard Provision (SSP) 14011.14.*	During Construction	Stanislaus County/ Contractor		

Potential Impact	Mitigation Measure	Timing	Responsible / Reporting Party	Verification of Compliance	
				Initials	Date
the environment?					
	Measure HAZ-2 (Thermoplastic traffic striping) • *Thermoplastic traffic striping removed by the Project will be disposed of at a Class I disposal facility.*	During Construction	Stanislaus County/ Contractor		
	Measure HAZ-3 (Lead Containing Paint, LCP) • *Paint on the wood guardrails, guardrail posts and curbs will be tested for LCP prior to demolition/removal to determine if they exceed thresholds established by the California Code of Regulations. Material found to exceed the threshold will be disposed of at a Class I disposal facility. If lead is detected, then appropriate procedures will be included in the Construction contract to avoid contact with these materials or generation of dust or vapors.*	Prior to Construction	Stanislaus County/ Contractor		

Appendix B

Land Conservation Act Contract 1971-0032

APNs 008-002-003 and 011-006-029

38007 NOV 18 70

16862-3

Previous Contract No. 160

VOL 2357 PAGE 859

APPLICATION NO. 71-32

THIS SPACE FOR RECORDER ONLY

RECORDED AT REQUEST OF:
Stanislaus County
Board of Supervisors

WHEN RECORDED RETURN TO:
Stanislaus County
Planning Department
1CHORD 1926.14 AL.

NOV 17 '70

RECORDED AT 11 BY
Lloyd R. Brouillard
OFFL RECORDS STANISLAUS CO. CALIF.
STEVE R. [illegible]SON,
[illegible]CORDER
BY

NOFEE

CALIFORNIA LAND CONSERVATION CONTRACT NO. 71-32

THIS CALIFORNIA LAND CONSERVATION CONTRACT is made and entered into this 17th day of November, 19 70, by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and the undersigned landowners or the successors thereof, hereinafter referred to as "Owner" as follows:

WHEREAS, Owner is the legal owner of certain real property, herein referred to as the subject property, situate in the County of Stanislaus, State of California; and

WHEREAS, the subject property is presently devoted to agricultural and compatible uses; and

WHEREAS, subject property is located in an agricultural preserve heretofore established by County by Resolution dated October 20, 1970; and

WHEREAS, both Owner and County desire to limit the use of subject property to agricultural and compatible uses in order to discourage premature and unnecessary conversion of such land from agricultural uses, recognizing that such land has definite public value as open space, that the preservation of such land in agricultural production constitutes an important physical, social, esthetic, and economic asset to the County to maintain the agricultural economy of County and the State of California, and that the common interest is served by encouraging and making feasible the orderly expansion of development of the urban and commercial sectors of the County to avoid the disproportionate expense involved in providing municipal services to scattered development; and

WHEREAS, both Owner and County intend that the Contract is and shall continue to be through its initial term and any extension thereof an enforceable restriction within the meaning and for the purposes of Article XXVIII of the California Constitution and thereby qualify as an enforceable restriction as defined in Revenue and Taxation Code Section 422;

38007 NOV 18 70

NOW, THEREFORE, the parties, in consideration of the mutual covenants and conditions set forth herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

(1) The Contract is made and entered into pursuant to the California Land Conservation Act of 1965 (Chapter 7 of Part 1 of Division 1 of Title 5 of the California Government Code, commencing with Section 51200), hereinafter referred to as the Act, as such Act has been amended or may hereafter be

(15) Owner and holders of security interests designate the following person as the Agent for Notice to receive any and all notices and communications from County during the life of the Contract. Owner will notify County in writing of any change of designated person or change of address for him:

DESIGNATED AGENT: ROBERT W. HOWARD

MAILING ADDRESS: 2909 PARKVIEW DR.
MODESTO, CALIF 95350

(16) I desire to place the following parcels of real property under Contract:

ASSESSMENT NO.	ACREAGE	ZONING	SITUS ADDRESS
011-1105-002	2.68	A-2-10	S OF WOODRUFF-CROPPING RD.
011-1171-002	12	A-2-10	S OF " " RD.
008-0203-007	227.98	"	CRABTREE RD E. OF WATERFORD
008-1301-007	60.06	"	BARRETT N. OF WATERFORD
011-0623-002	181.0	"	CRABTREE S.E. OF WARNERVILLE
011-0628-002	11.0	"	" " " " "
011-1111-007	111.0	"	CRABTREE E OF WARNERVILLE
008-0211-002	160.0	"	CRABTREE CHERRY
008-0210-002	109.5	"	CRABTREE WATERFORD
007-0402-007	325.6	"	" "

(List the Assessment Number and Acreage for each parcel of property to be included under the Contract. Also, attach to this application a copy of the Assessor's Map for each parcel.)

IN WITNESS WHEREOF, the parties hereto have executed the within Contract the day and year first above written.

OWNERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)
ROBERT W. HOWARD	[signature]	11-16-70	Modesto
JOYCE I. HOWARD	[signature]	11-16-70	Modesto

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SEAL IMPRESSED

SECURITY HOLDERS:

NAME (print or type)	SIGNATURE (all to be notarized)	DATE	SIGNED AT (city)
THE EQUITABLE LIFE ASSURANCE SOCIETY OF THE UNITED STATES	BY: K. J. Binkley, Assistant Vice President		

COUNTY:

SEAL IMPRESSED

NOV 17 1970
Dated

Chairman, Board of Supervisors

STATE OF NEW YORK)
) ss.
COUNTY OF NEW YORK)

On this 9th day of November, in the year 19 70 before me Elsie S. Coppers, a Notary Public, State of New York, duly commissioned and sworn, personally appeared K. J. Binkley, known to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same.

In Witness Whereof, I have hereunto set my hand and affixed my official seal in the said County of New York the day and year in this certificate first above written.

SEAL IMPRESSED

ELSIE S. COPPERS
Notary Public, State of New York
Qualified in Queens County No. 41-5813345
Cert. Filed in New York County
Commission Expires March 30, 1972

FMD-957
(630)

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STATE OF CALIFORNIA,
County of Stanislaus } ss.

On this 16th day of November in the year one thousand nine hundred and Seventy before me, W.H.Westmoreland, a Notary Public in and for the County of Stanislaus, State of California, duly commissioned and sworn, personally appeared Robert W. Ichord and Joyce Ichord

known to me to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the County of Stanislaus the day and year in this certificate first above written.

SEAL IMPRESSED

Notary Public in and for the County of Stanislaus State of California.

My Commission Expires 2/13/72

Cowdery's Form No. 32—Acknowledgment—General. (C. C. Sec. 1189) 91888

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11 - 11

T2S R13E M.D.B.&

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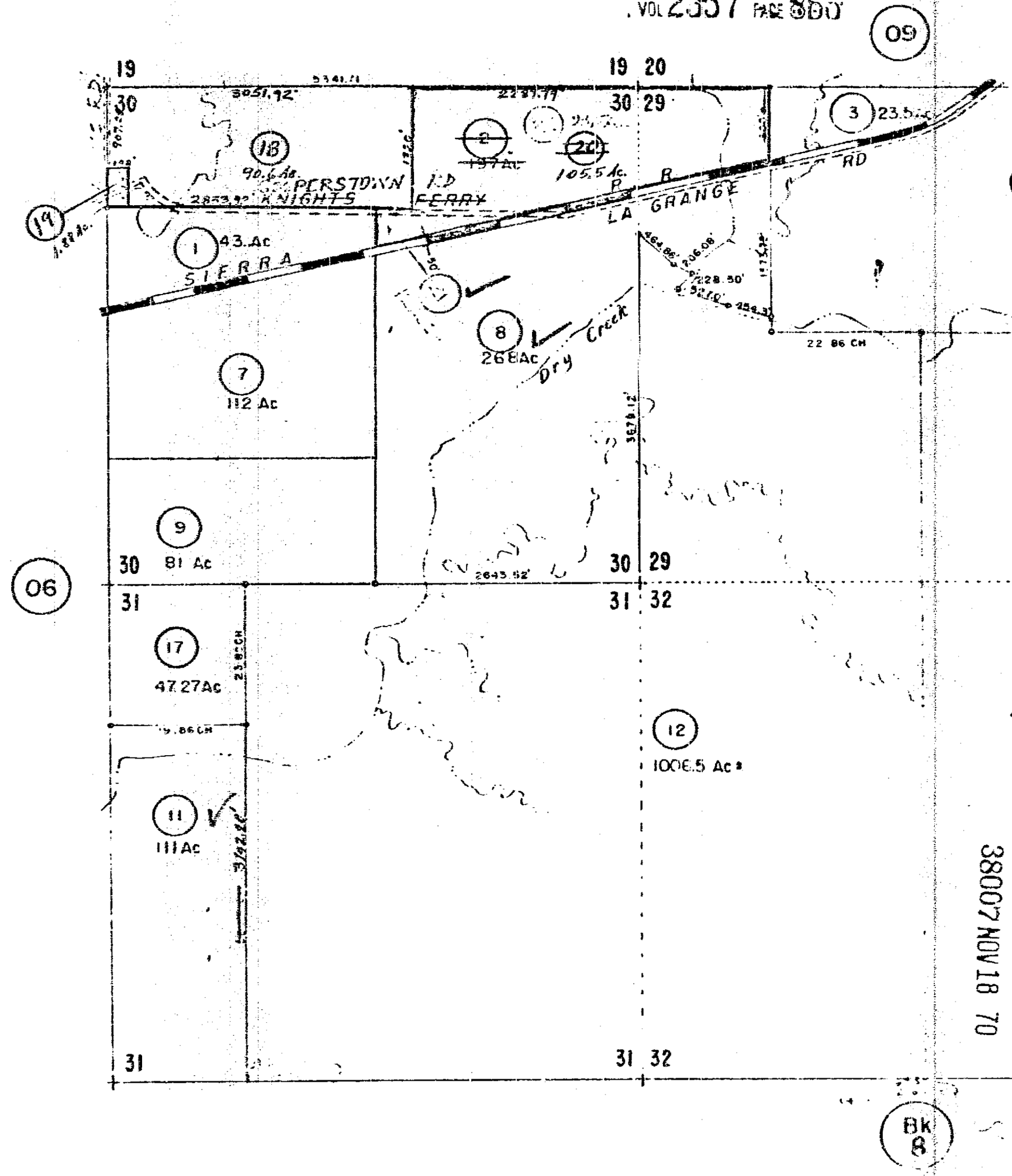

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12 T. 3S. R. 12 E. M. D. B. & M.

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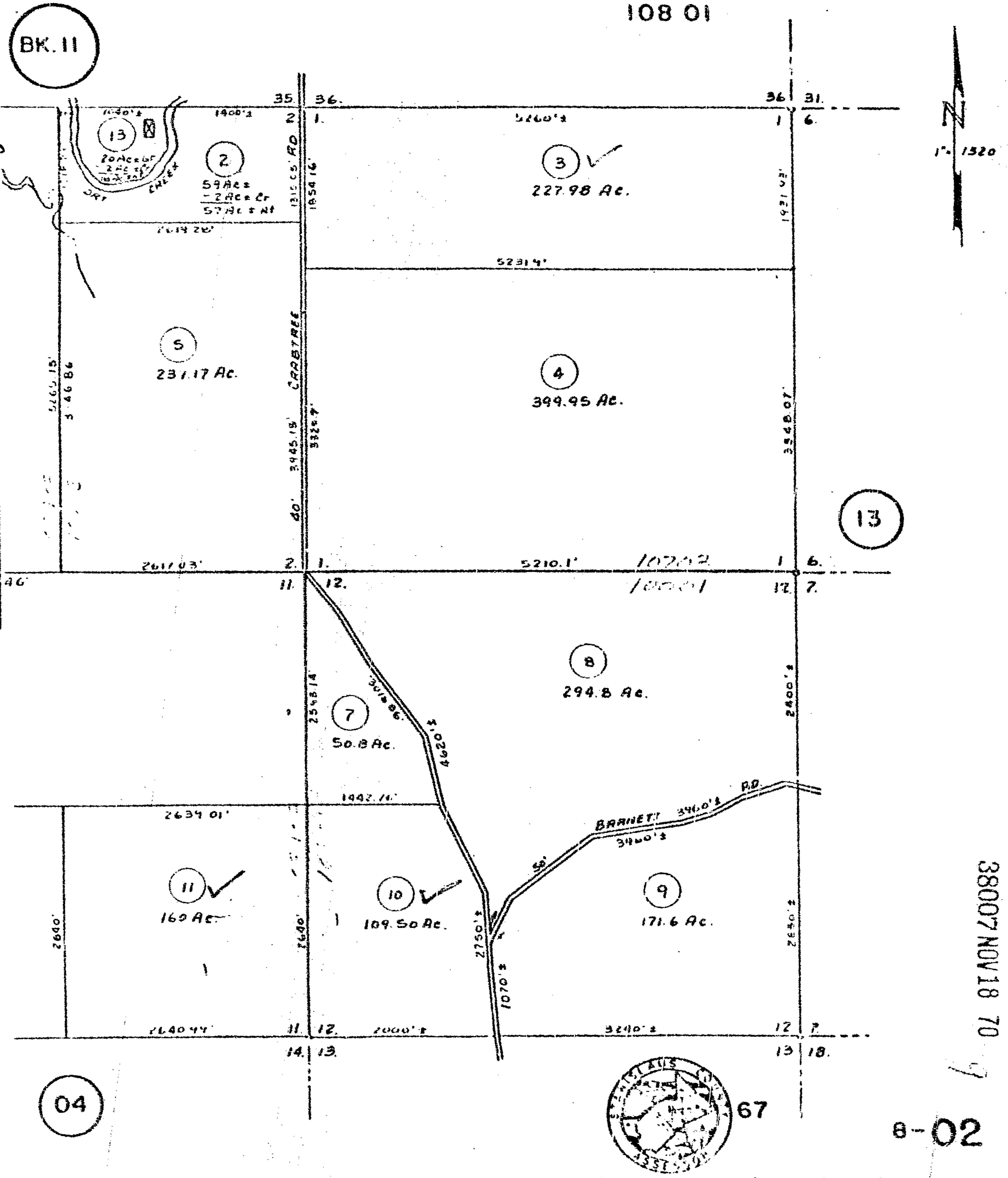
107 03 . VOL 2357 PAGE 867
108 01

8-02



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SECTIONS 4-9 T.3S.R.I

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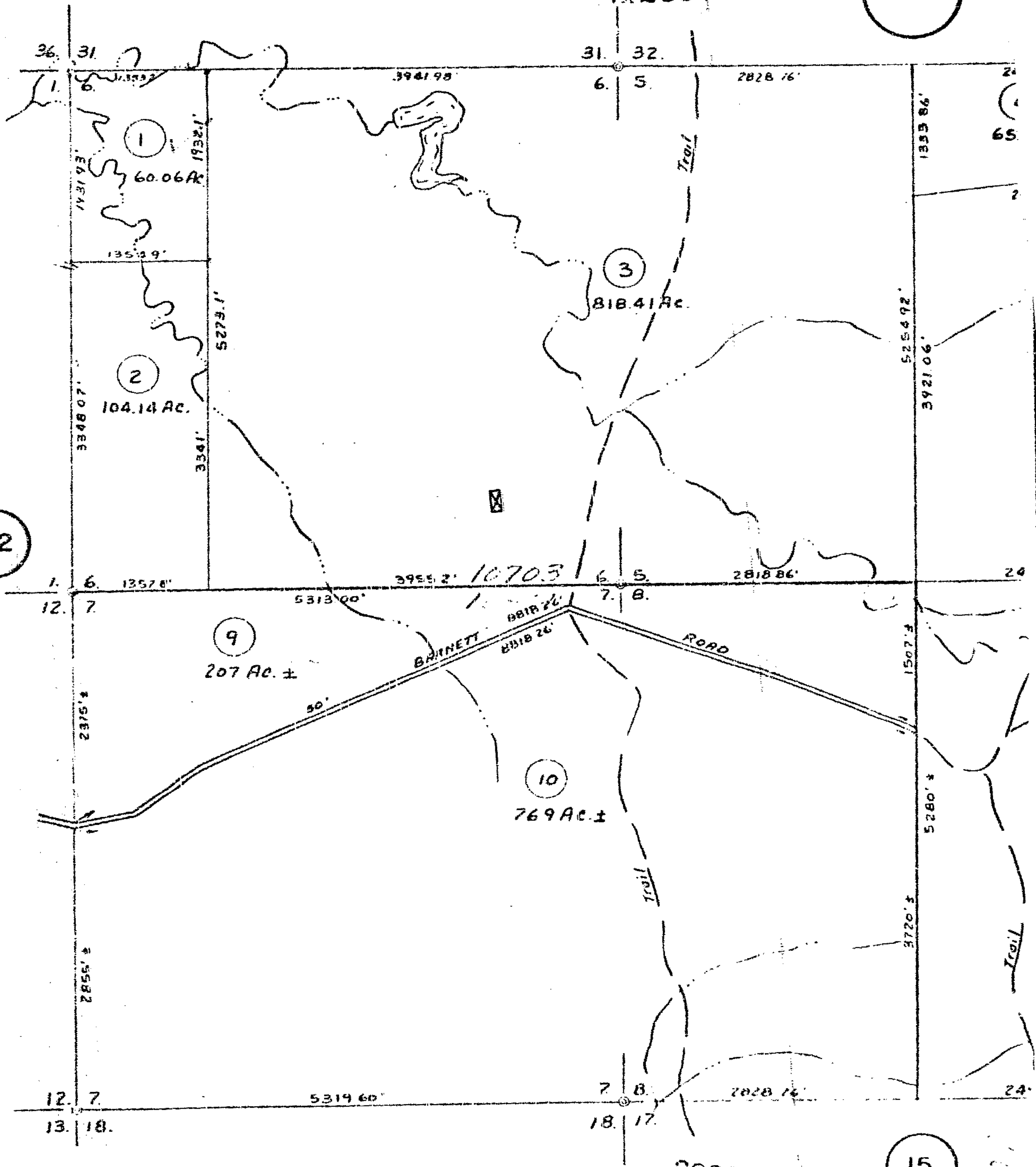
BK. 11



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15

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FROM G-76 thru G-81
ABE-100-52,66,68
3-18-66

M. D. B. & M.

107-3

11-06

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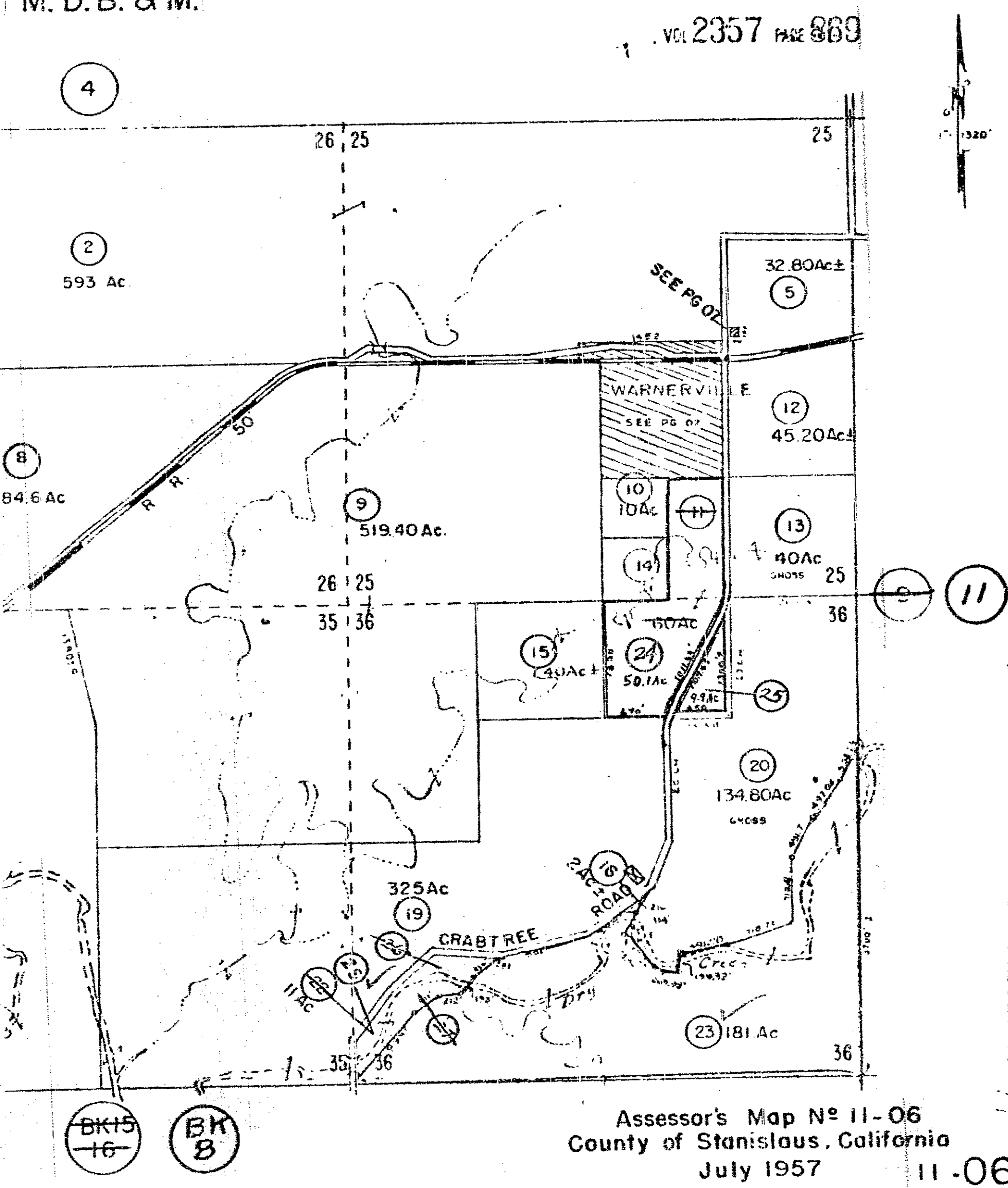

Assessor's Map Nº 11-06
County of Stanislaus, California
July 1957

11-06

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-15,22-24 T. 3 S. R. 12 E. M.D.B. & M.

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108 02

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