

# Hanford-Armona Road Intersection Improvements

On State Route 198, near Hanford in Kings County, California

06-KIN-198-PM-R15.5

Project ID: 0613000034

EA: 06-0Q320

SCH No: 2015091034

## Initial Study with Mitigated Negative Declaration



Prepared by the  
State of California Department of Transportation

December 2015



## **General Information About This Document**

### ***What's in this document?***

The California Department of Transportation (Caltrans) has prepared this final Initial Study with Mitigated Negative Declaration that describes the project, the existing environment that could be affected by the project, potential impacts from the project, and avoidance, minimization, and/or mitigation measures.

The draft Initial Study with proposed Mitigated Negative Declaration was circulated to the public from September 15, 2015 to October 15, 2015. Comment letters were received on the draft document. Responses to the circulated document are shown in Appendix E, Comments and Responses, which has been added since the draft. Appendix F has also been added since the draft. Elsewhere throughout this document, a line in the right margin indicates a change made since the draft document circulation.

### ***What happens after this?***

The project has completed environmental compliance after the circulation of this document, and filing of the Notice of Determination with the Office of Planning and Research—State Clearinghouse. Once funding is appropriated, the California Department of Transportation can design, acquire right-of-way for, and build all or part of the project.

This document can also be accessed electronically at the following website:  
<http://www.dot.ca.gov/dist6/environmental/envdocs/d6/>.

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the sections and appendices.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Michelle A. Ray, Sierra Pacific Environmental Analysis Branch, 855 M Street, Suite 200, Fresno, CA 93721; telephone 559-445-5286, or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

SCH #: 2015091034  
06-KIN-198-R15.5  
0613000034

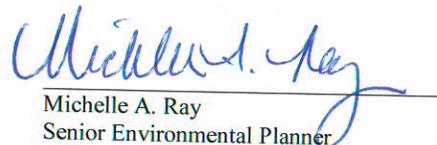
Construct a single-lane roundabout at the State Route 198 westbound on-ramp intersection with Hanford-Armona Road and 13<sup>th</sup> Avenue, east of the City of Hanford in Kings County, California

**INITIAL STUDY  
with Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA  
Department of Transportation

12-21-15  
Date of Approval

  
Michelle A. Ray  
Senior Environmental Planner  
California Department of Transportation

## Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

### **Project Description**

The California Department of Transportation (Caltrans) will construct a single-lane roundabout at the State Route 198 westbound on-ramp intersection with Hanford-Armona Road and 13th Avenue, at post mile 15.5, west of the city of Hanford in Kings County.

### **Determination**

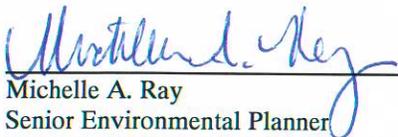
Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the project will not have a significant effect on the environment for the following reasons.

The project will have no effect on: agriculture, cultural resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, public services, recreation, transportation and traffic, and utilities.

In addition, the project will have no significant effect on: air quality, hazards and hazardous materials, and noise.

In addition, the project will have no significantly adverse effect on aesthetics and biological resources because the following mitigation measures would reduce potential effects to insignificance:

- Environmentally sensitive areas and exclusion areas to protect nesting birds, burrowing owls and San Joaquin kit fox dens would be established.
- Tree and vegetation removal will be done outside of nesting season or after a qualified biologist determines no nesting birds are present.
- Replacement planting of a Heritage oak tree may occur outside of the project limits.

  
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Michelle A. Ray  
Senior Environmental Planner  
California Department of Transportation

12-21-15  
Date

# **Project Description and Background**

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## ***Project Title***

Hanford-Armona Intersection Improvement Project

## ***Project Location***

The project is located at the State Route 198 westbound on-ramp intersection with Hanford-Armona Road and 13th Avenue, at post mile 15.5, near Armona, west of the city of Hanford in Kings County. See Figures 1-1 and 1-2.

## ***Project Accident History***

According to the Caltrans District 6 Office of Traffic Operations, the accident history within the project limits for the most recent three-year period (beginning May 1, 2010) shows that the actual total accident rates are higher than the statewide average for similarly designed intersections. There were 20 collisions reported at this intersection during this time period, 5 of the accidents involved injuries and one fatality. The accidents were caused by drivers either failing to slow down or not stopping at the State Route 198 on-ramp at Hanford-Armona Road.

## ***Description of Project***

Caltrans will construct a single-lane roundabout that will later be upgraded to a double-lane roundabout at the State Route 198 westbound on-ramp intersection at Hanford-Armona Road and 13th Avenue, west of Hanford. The project will require partial right-of-way acquisition from two parcels, an estimated 2.87 acres total. Construction is slated to begin in September 2018. A Traffic Management Plan will be implemented during construction; and the Caltrans Public Information Office will provide project information to the media and the motoring public as needed.

## ***Surrounding Land Uses and Setting***

The project sits at the edge of the rural community of Armona at the existing State Route 198/Hanford-Armona Road interchange. The interchange is surrounded by homes, businesses and one agricultural parcel. The project area is zoned for agricultural and commercial use.

## ***Other Public Agencies Whose Approval is Required***

<b>Agency</b>	<b>Permit/Approval</b>	<b>Status</b>
U.S. Fish and Wildlife Service	Letter of Concurrence	Received on November 23, 2015.

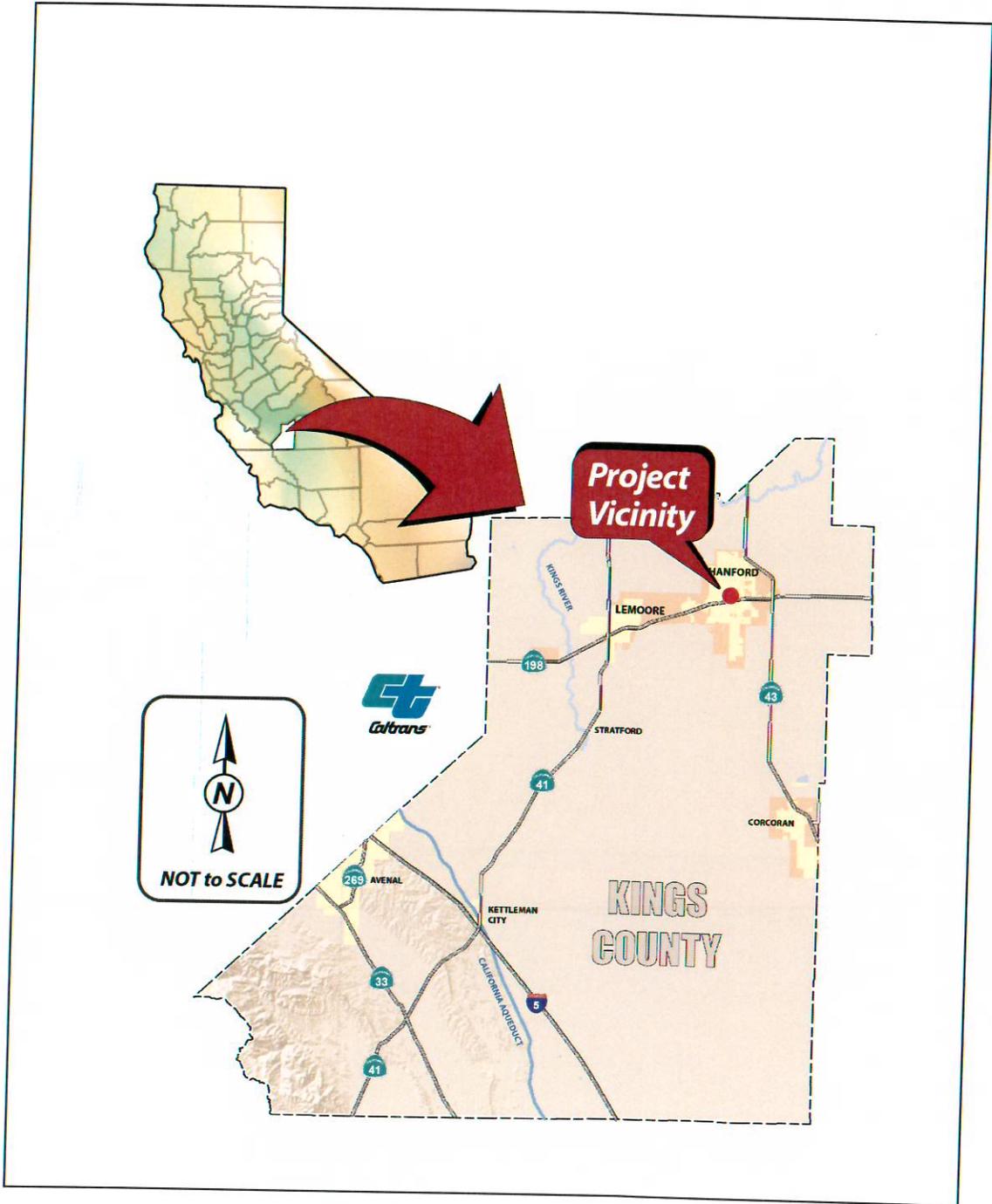


Figure 1-1 Project Vicinity Map

# CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

(Questions a and c): See the discussion in the Additional Explanations for Questions in the Impacts Checklist section.

**II. AGRICULTURE AND FOREST 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 Department 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, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Result in the loss of forest land or conversion of forest land to non-forest use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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(Question a): While land is presently being farmed in the project area, the Kings County General Plan designates the area surrounding the interchange for residential and commercial development (Kings County General Plan and Armona Community Plan).

**III. AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Expose sensitive receptors to substantial pollutant concentrations?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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(Question b): This intersection channelization project is exempt from regional emissions analysis. A PM10 and PM2.5 hotspot assessment was done, which determined the project was not a Project of Air Quality Concern; no further analysis was required. Interagency consultation was completed on May 4, 2015. Standard specifications pertaining to dust control are part of all construction contracts and would effectively reduce and control emissions during construction (Air Quality memorandum, November 2013 and Hot-spot Conformity Assessment, May, 2015).

**IV. BIOLOGICAL RESOURCES:** Would the project:

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

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Question a): See the discussion in the Additional Explanations for Questions in the Impacts Checklist section.

**V. CULTURAL RESOURCES:** Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VI. GEOLOGY AND SOILS:** Would the project:

a) Expose people or structures to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**VII. GREENHOUSE GAS EMISSIONS:** Would the project:

- 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?

While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project.

**VIII. HAZARDS AND HAZARDOUS MATERIALS:** Would the project:

- 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Question a): No potential hazardous waste sites would be affected by the project. An aerially deposited lead study was done in the area; soils were determined suitable for off-site disposal or reuse on-site without restriction. Special provisions addressing the preparation of a lead compliance plan and for handling traffic striping paint and pavement markings would be included in the project specifications (Hazardous Waste Compliance Memorandum, July 2014).

**IX. HYDROLOGY AND WATER QUALITY:** Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**X. LAND USE AND PLANNING:** Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XI. MINERAL RESOURCES:** Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XII. NOISE:** Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Question d): Noise levels would temporarily increase during construction of the proposed project in the immediate project vicinity. Construction noise is regulated by Caltrans standard specifications, Section 14-8.02 Construction Noise Control, which would apply to this project (Noise Compliance Study, April 2015).

**XIII. POPULATION AND HOUSING:** Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(Question b): While portions of two parcels would be acquired for the proposed project, no homes or businesses would be displaced (project description).

**XIV. PUBLIC SERVICES:**

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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**XV. RECREATION:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XVI. TRANSPORTATION/TRAFFIC:** Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XVII. UTILITIES AND SERVICE SYSTEMS:** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

a) Does the project have the potential to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## **Additional Explanations for Questions in the Impacts Checklist**

### *I. Aesthetics (checklist questions a and c)*

#### ***Affected Environment***

A Visual Impact Assessment for the project was completed in July 2015. The project area sits in flat terrain in an agricultural/light industrial setting. Agricultural fields and a few homes are found within the project limits. Also within the project limits are light industrial sites with large metal structures, including recreational vehicle and boat storage and automotive performance businesses with numerous vehicles in various states of repair. The existing visual quality of the area is considered fair, with a single homogeneous landscape type—Valley Agricultural/Light Industrial.

There are no outstanding historic structures or visual resources in the area. The surrounding area has no outstanding visual qualities or large trees except for the existing Heritage valley oak and two jujube trees within the project limits. Local residents and daily commuters are expected to be the most sensitive to changes in the visual environment.

#### ***Environmental Consequences***

With construction of the proposed project, current users of Hanford-Armona Road and the State Route 198 westbound on-ramp would notice the following changes:

- Construction of the roundabout would be visually noticeable because the center island would be above grade, and motorists would be required to maneuver around the roundabout to access the on-ramp.
- Construction of the proposed project may increase the urban look within the project limits. The area has existing light industrial uses and structures, and over the years the land use has become increasingly urban in appearance. The roundabout is expected to blend in and be visually compatible to the surrounding land uses.
- Construction of the proposed project is expected to have a moderate visual impact to viewers because the completed changes would differ significantly from the existing intersection. However, the visual response is not expected to be negative because roundabouts are becoming more prevalent along state and county highways and within light industrial and commercial areas. In addition, the roundabout would facilitate the efficient use of the local road and access to State Route 198; this benefit would help decrease sensitivity to the new construction.

#### **Trees—Heritage Oak and Jujube**

The valley oak within the project limits has a diameter at breast height of 43 inches. It is considered a Heritage tree. A Heritage tree is defined by the International Society of Arboriculture (ISA) by various criteria; trees with a diameter at breast height

(measured 4.5 feet above grade) of 24 inches or greater are often labeled Heritage trees. Two large jujube trees also exist in the project area. Because of the significant size of the Heritage oak and jujube trees in the project area, removing them would likely create a moderate negative viewer response. In addition, the native oak is considered to have exceptional visual value and is a community resource that required many years to develop; it is expected to provide a community benefit for generations to come. These factors allow for a higher level of concern for preservation than is usually given to other vegetation in the urban landscape. Based on the International Society of Arboriculture criteria, replacement cost of the existing valley oak would be \$70,000 and replacement cost of the existing jujube trees would be \$7,000 each.

As of the submittal date of the Visual Impact Assessment, a plan for preservation of the trees had not been determined. However, every effort will be made to include tree preservation in the project's design, which may include steep side slopes, and/or a retaining wall to limit the amount of grading near the drip line of the trees.

State Route 198 in Kings County is not an eligible or officially designated scenic highway. However, because the area is mostly devoid of any scenic qualities, efforts would be made to preserve the existing Heritage valley oak tree and other trees in the project limits.

#### Other Planting

Aesthetic treatment and/or planting in the center portion of the roundabout would be determined during the design process.

#### Slopes

Because terrain in the project limits is relatively flat, side slopes in excess of 1:4 may be visually noticeable. Except where steeper slopes would preserve existing trees or other vegetation, all proposed slopes should be designed at gradients of 4:1 (horizontal:vertical) or flatter. The newly constructed slopes should be designed to aesthetically blend with the surrounding landscape. Steeper slopes may preserve the existing oak and jujube trees because excessive grading within the dripline can damage tree roots.

#### ***Avoidance, Minimization, and/or Mitigation Measures***

The Highway Design Manual (Chapter 62.5 Landscape Architecture (4) Highway Planting Revegetation) provides planting as mitigation for native vegetation damaged or removed due to a roadway construction project. In addition, the Highway Design Manual (Chapter 62.5 Landscape Architecture (5) Replacement Highway Planting) requires replacement of vegetation installed by Caltrans or others that has been damaged or removed due to transportation project construction. Both Highway Planting Revegetation and Replacement Highway Planting must be programmed and funded by the roadway project.

To ensure that the visual quality of this segment of the route will be preserved, it is recommended that:

- Mature trees within the project limits should be preserved where possible. For this project, the emphasis will be to minimize disturbance and protect the Heritage oak and two jujube trees. If avoidance cannot be maintained during construction, replacement planting would be considered.
- All disturbed areas not to be paved should receive erosion control and storm water runoff control measures.
- Maximum recommended slopes for this project are 1:2 with transitions to 1:4 side slopes as soon as possible. The newly constructed slopes should be designed to aesthetically blend with the surrounding landscape. To comply with the Highway Design Manual and the National Pollutant Discharge Elimination System Storm Water Permit, the slope design will require the written concurrence of the District Landscape Architect, and may also require concurrence from District Maintenance and the District Storm Water Coordinator. The District Landscape Architect should be involved early in the design phase to help make the determination on slope design.

#### *IV. Biological Resources (checklist question a)*

##### *Special-Status, Threatened and Endangered Species*

##### ***Affected Environment***

A Natural Environmental Study for the project was completed in July 2015. Federal, State of California and California Native Plant Society species lists are provided in Appendix B. Caltrans Federal Endangered Species Act determinations are provided in Appendix C.

The following sensitive species have the potential to occur within the project area:

##### *Tri-colored Blackbird*

The tri-colored blackbird (*Agelaius tricolor*) is a medium-sized blackbird that closely resembles the common red-winged blackbird. The species was given an emergency endangered status under the California Endangered Species Act in December 2014. It is also protected under the Migratory Bird Treaty Act as amended in 1985 (50 Code of Federal Regulations Part 10 13708).

Tri-colored blackbirds nest in large dense colonies, typically in wetlands or marshy areas full of cattails or bulrushes with willows, nettles, mustards, blackberries, thistles, and mallows. Recently, they have formed colonies in grain fields (almost exclusively triticale); they also frequent dairies. They focus their diet on various grains, but will eat a variety of plant and animal foods in a variety of habitats that include shrub lands, pastures, wetlands, and rice paddies. Populations of tri-colored

blackbirds occur throughout the Central Valley, and a distinct sub-population occurs at scattered locations in Southern California, south of the Tehachapi Range.

### Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is state listed as threatened and is protected by the Migratory Bird Treaty Act. This hawk is a summer migrant to the Central Valley and typically winters in South America. This hawk is a slender bird with long pointed wings and dark flight feathers. It occurs in a range of color morphs, with a clean whitish underside and neat dark breast. These hawks forage in grasslands, suitable grain or alfalfa fields, and livestock pastures. They eat mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles, birds and sometimes fish. These hawks roost in trees, but will roost on the ground if no trees are available. The Swainson's hawk breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannahs in the Central Valley. Breeding occurs from late March to late August, with peak activity occurring in late May or July. Clutch size is 2 to 4 eggs, with an incubation period of 25 to 28 days.

The nearest California Natural Diversity Database record of the Swainson's hawk is 7.2 miles east of the project site and dates from 2009. The large oak and black walnut trees at an abandoned residential parcel are suitable for nesting by Swainson's hawks. The open parcels and agricultural fields around the vicinity of the project site may provide foraging habitat for Swainson's hawks, though they tend to be smaller and more fragmented than foraging areas in more rural settings. No protocol surveys for Swainson's hawks have been performed for this project. The species has not been observed on or near the project site.

### Burrowing Owl

The burrowing owl (*Athene cunicularia*) is the only owl in North America that nests in underground burrows. The burrowing owl is listed as a California Species of Concern. This small owl (about 9 inches long, with a 15-inch wingspan, and weighing 5 to 8 ounces) is brown with white spots on the wings and back, with an off-white breast with brown bars. The eyes are yellow, and the face is highlighted by a white eyebrow. The burrowing owl has long legs and spends a great deal of time standing on the ground or on a small mound near the burrow entrance, or perched on low perches such as brush and fence posts. They can be quite conspicuous and easy to observe in the wild.

Burrowing owls can be active during the day or night. They often inhabit old rodent burrows (typically that of the California ground squirrel), but are capable of digging their own. Their habitat consists of open, dry annual or perennial grasslands, deserts, or open scrublands with low vegetation, soils suitable for digging, and a suitable prey base of burrowing rodents, small reptiles, and insects. Several owl pairs may nest close to one another and form loose colonies, but adult owls will aggressively defend their own burrow against other burrowing owls and predators. Burrowing owl predators include larger raptors, badgers, skunks, snakes, and feral or domestic dogs

and cats (particularly near human habitation). Rodent control efforts, such as poisoning and trapping, can reduce the availability of prey and may also contribute to secondary poisoning. Because the burrowing owl often flies low to the ground, it may collide with vehicles, resulting in its injury or death.

### Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*), a predatory songbird, is a California species of concern and is also protected by the Migratory Bird Treaty Act. The loggerhead shrike is slightly smaller than an American robin, with a wingspan of about 12 inches. It weighs 1.2 to 1.8 ounces. The top of the head and back are slate grey, the neck and chest are off-white, and the black wings have a single distinct white bar. These birds have a very distinct black eye mask and a large hooked bill that give them a somewhat sinister appearance.

Loggerhead shrikes inhabit open areas with scattered trees and/or brush and low groundcover in a variety of habitats such as desert scrubland, riparian areas, agricultural fields, pastures, savannas, and golf courses. They prefer to nest in thorny shrubs or trees. They perch conspicuously on fences, utility lines, trees, and brush where they scan for prey. Loggerhead shrikes are aggressive and consume a large variety of prey, including insects, small amphibians and reptiles, other birds, and small mammals.

### Hoary Bat

The hoary bat (*Lasiurus cinereus*), a tree-roosting bat found throughout the continental U.S., is a California species of concern and is the only native land mammal on Hawaii. This bat is covered in long dense white-tipped fur that gives it a frosted or “hoary” appearance. Throughout the day, the bats roost individually 10-15 feet up in trees, well hidden by foliage, emerging to forage only after dark, and returning to the roost an hour before sunrise. This species is rarely observed by humans. Female hoary bats bear litters of 1-4 (generally 2) young between mid-May and early July in the same trees they use as their day roost site. The young are able to fly after 33 days. They generally forage along habitat edges and can travel up to 12 miles or more in a single trip. The hoary bat feeds on a variety of insects, but moths make up most of the prey taken. In late summer to early fall, the bats start their winter migration to parts of Central America and South America, traveling in waves, often in the company of birds. This species does not roost in caves or human-made structures. The hoary bat is classified by the Western Bat Working Group as a species of medium conservation concern.

### San Joaquin Kit Fox

The San Joaquin kit fox (*Vulpes macrotis mutica*) is federally listed as endangered and state listed as threatened. The San Joaquin kit fox is the smallest canid species in North America. These foxes average 31 inches long and about 12 inches tall at their shoulders. They have a small slim body, relatively long ears set close together, narrow nose and a long busy tail tapering slightly toward the black-tipped tail. They

typically carry their tail low and straight. Coat color varies from buff, tan, grizzled or yellow-grey.

The San Joaquin kit fox is found in the southern half of the state in annual grassland or grassy open stages of vegetation with scattered shrubs and brush. It is mostly carnivorous, feeding on desert cottontails, rodents, insects, reptiles, birds, bird eggs and vegetation. Kit foxes dig their own dens in open level areas with loose-textured soils supporting scattered, shrubby vegetation. They are active all year long, mostly nocturnal but occasionally can be seen during the day in cool weather. Litters averaging 4 pups are born from February to April.

### ***Environmental Consequences***

#### **Tri-colored Blackbird**

The nearest recorded occurrence of the tri-colored blackbird in the project vicinity is about 14 miles northwest of the project and dates from 2000. The agricultural field within the project study area is suitable foraging habitat; about 1.87 acres of this field would be affected by the project. No nesting habitat would be affected because none exists within the project impact area.

#### **Swainson's Hawk**

The nearest recorded occurrence of the Swainson's hawk is 7.2 miles east of the project and dates from 2009. The large oak and black walnut trees at an abandoned residence are suitable for nesting by the hawk. The open land and agricultural fields around the project area may provide foraging habitat. The proposed project is expected to affect up to 5.26 acres of low-quality foraging habitat. About 2.49 acres would be permanently affected, and 2.77 acres would be temporarily affected because the area would be re-contoured and seeded after construction. The area is considered low quality because it is near a busy roadway and the parcel size is small and fragmented. One large oak tree suitable for nesting habitat could be removed by the project.

#### **Burrowing Owl**

The closest occurrence of burrowing owl is 11.8 miles west of the project area and dates from 2008. The ruderal (weedy) habitat in the project area provides a small amount of low-quality burrowing and foraging habitat. Because of the small amount of low-quality habitat available, the potential for burrowing owls being present is low. The proposed project would affect 3.39 acres (1.76 acres of permanent and 1.63 acres of temporary impacts) of potentially suitable foraging and nesting habitat.

#### **Loggerhead Shrike**

About 5.26 acres of potentially suitable low-quality loggerhead shrike (*Lanius ludovicianus*) foraging habitat would be affected by the project. This habitat is considered low-quality, however, due to its proximity to a busy travel way, level of disturbance, and lack of thorny shrubs or trees for nesting. Of these, approximately

2.49 acres of impacts would be considered permanent and 2.77 acres would be temporary in that those areas would be re-contoured and seeded after construction, and thus available to be used as habitat in the future.

### Hoary Bat

The nearest recorded record for the hoary bat is 2.7 miles northeast of the project site and dates from 1991. Suitable habitat occurs on and around the project site; the trees may provide suitable roost sites, and the open areas are potentially suitable for foraging. No hoary bat (or any other bat species) has been observed on the project site, but no focused bat surveys have been performed.

The proposed project would remove one tree (a large black oak) that may provide suitable roosting habitat for the hoary bat. Impacts to ruderal habitat and the agricultural field are not expected to reduce foraging opportunities for the hoary bat in this area. Lights used during any possible night work may attract moths and other insects, which may also attract hoary bats.

### San Joaquin Kit Fox

The closest record of a San Joaquin kit fox is 2.1 miles southeast of the project site and dates from 2000. Low-quality habitat occurs within and around the project site, mainly in the Caltrans right-of-way and open portions of the commercial parcels. These habitat patches are fragmented and small, so habitat suitability is very limited. Existing roadways and the heavily traveled highway corridor represent a serious threat of mortality from vehicles. San Joaquin kit foxes, or evidence of their occupancy, have not been observed during any of the site visits. The potential is low that this species may occur on the project site. No protocol surveys have been performed.

In consultation with the U.S. Fish and Wildlife Service, Caltrans determined that the project may affect, but is not likely to adversely affect, the federally listed as endangered San Joaquin kit fox. The Service concurred on November 23, 2015. Refer to Appendix E for a copy of the concurrence letter.

The proposed project would affect about 3.39 acres of habitat for the San Joaquin kit fox. This habitat is considered low quality due to its proximity to a busy road, small and fragmented patch size, and level of disturbance. Of the 3.39 acres, about 1.76 acres of impacts would be considered permanent and 1.63 acres would be considered temporary (those areas would be re-contoured and seeded after construction, and therefore available for use as habitat in the future).

The permanent habitat impacts are considered to be minimal due to their small acreage relative to the habitat available in the area and their proximity to an existing, heavily traveled highway. Because of the low potential for kit foxes to occur on the project site, it is very unlikely that any night work or placement of temporary k-rail would result in detrimental impacts to individual foxes. With implementation of

avoidance and minimization efforts, no direct impacts to the San Joaquin kit fox are expected.

### ***Avoidance, Minimization, and/or Mitigation Measures***

With avoidance and minimization measures, no direct impacts are expected to occur. No compensatory mitigation is proposed for the tri-colored blackbird, Swainson's hawk, burrowing owl, and San Joaquin kit fox.

#### *Tri-colored Black Bird*

- Pre-construction surveys would be conducted within the project area to determine any presence of the tri-colored blackbird.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.

#### *Swainson's Hawk*

- Pre-construction surveys would be conducted to ensure no nesting Swainson's hawk would be affected if construction occurs during nesting season.
- A special provision for migratory birds would be included to ensure that no potential nesting birds are affected during construction.
- Tree removal within the project impact area would be done outside of the nesting season, or only after the tree(s) has been surveyed by a qualified biologist to ensure that no migratory birds are nesting.

#### *Burrowing Owl*

- Pre-construction surveys would be performed within 500 feet of the project area no more than 30 days prior to the start of construction to determine any presence or sign of burrowing owl occupancy.
- Active burrowing owl burrows would be protected by a 150-foot radius protection buffer outside of the nesting season (September 1 to January 31).
- Active burrowing owl burrows would be protected by a 500-foot protection buffer during the nesting season (February 1 to August 31).
- If active burrows are located within a construction area that cannot be avoided by a protection buffer, passive relocation efforts would be implemented by installing one-way exclusion doors on burrow entrances, and providing artificial burrows constructed nearby (within 50-100 yards if possible). A minimum of 6.5 acres of contiguous foraging habitat would be available within a 300-foot radius around the new burrow site per owl pair or resident single bird. All passive relocation work would be performed by State-approved, qualified biologists.
- All burrowing owl avoidance and minimization guidelines would conform to the "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" (California Burrowing Owl Consortium, 1993).

### Loggerhead Shrike

- If nesting shrikes are observed onsite, the nest would be designated an Environmentally Sensitive Area, with a 250-foot radius no-work area around the nest until it was determined by a qualified biologist that the young have fledged.
- Vegetation removal would be performed outside of nesting season (February 15 through August 30), or only after a qualified biologist had surveyed the vegetation to ensure no nesting birds would be impacted.

### Hoary Bat

- Tree removal would be performed in the late fall or early winter seasons, when hoary bats are not expected to be in the area.

### San Joaquin Kit Fox

- Pre-construction/pre-activity surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200-ft. of the footprint.
- Surveys would be conducted within the proposed project boundary and a 200-foot area outside the project footprint to identify habitat features.
- If natal/pupping dens are discovered within the project area or within 200 feet of the project boundary, the U.S. Fish and Wildlife Service would be immediately notified.
- The configuration of exclusion zones around San Joaquin kit fox dens should have a 50-foot radius around potential dens and a 100-foot radius around known dens measured outward from the entrance or cluster of entrances.
- Disturbance to all San Joaquin kit fox dens would be avoided to the maximum extent possible. Potential and atypical dens that are located at least 50 feet from construction will be protected with a 50-foot zone. Known dens that are located at least 100 feet from construction will be protected with a 100-foot zone. In instances where 50-foot or 100-foot exclusion zones cannot be maintained, potential and/or known dens will be monitored; once these dens are verified to be unoccupied, they will be blocked temporarily (via sandbagging or installation of a one-way door) for the duration of the project.
- All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.

- No pets or firearms will be allowed on the project site.
- Parts of the project area that are temporarily affected will be re-contoured and re-vegetated with an appropriate, weed-free native plant seed mixture following the completion of construction.
- A qualified biologist would be present at the construction site during initial ground-disturbing activities.
- To the extent possible, a qualified biologist would be available on-call during all construction periods when not present onsite.

## Appendix B Species List



### United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
PHONE: (916)414-6600 FAX: (916)414-6713



Consultation Code: 08ESMF00-2015-SLI-0908

July 21, 2015

Event Code: 08ESMF00-2015-E-02828

Project Name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead. Please visit our office's website (<http://www.fws.gov/sacramento>) to view a map of office jurisdictions.

**Lead FWS offices by County and Ownership/Program**

<b>County</b>	<b>Ownership/Program</b>	<b>Species</b>	<b>Office Lead*</b>
<b>Alameda</b>	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
<b>Alameda</b>	All ownerships but tidal/estuarine	All	SFWO
<b>Alpine</b>	Humboldt Toiyabe National Forest	All	RFWO
<b>Alpine</b>	Lake Tahoe Basin Management Unit	All	RFWO
<b>Alpine</b>	Stanislaus National Forest	All	SFWO
<b>Alpine</b>	El Dorado National Forest	All	SFWO
<b>Colusa</b>	Mendocino National Forest	All	AFWO
<b>Colusa</b>	Other	All	By jurisdiction (see map)
<b>Contra Costa</b>	Legal Delta (Excluding ECCHCP)	All	BDFWO
<b>Contra Costa</b>	Antioch Dunes NWR	All	BDFWO
<b>Contra Costa</b>	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
<b>Contra Costa</b>	All ownerships but tidal/estuarine	All	SFWO

El Dorado	El Dorado National Forest	All	SFWO
El Dorado	Lake Tahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)

<b>Marin</b>	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
<b>Marin</b>	All ownerships but tidal/estuarine	All	SFWO
<b>Mendocino</b>	Russian River watershed	All	SFWO
<b>Mendocino</b>	All except Russian River watershed	All	AFWO
<b>Napa</b>	All ownerships but tidal/estuarine	All	SFWO
<b>Napa</b>	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
<b>Nevada</b>	Humboldt Toiyabe National Forest	All	RFWO
<b>Nevada</b>	All other ownerships	All	By jurisdiction (See map)
<b>Placer</b>	Lake Tahoe Basin Management Unit	All	RFWO
<b>Placer</b>	All other ownerships	All	SFWO
<b>Sacramento</b>	Legal Delta	Delta Smelt	BDFWO
<b>Sacramento</b>	Other	All	By jurisdiction (see map)
<b>San Francisco</b>	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO

San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO

Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
	Shasta Trinity National Forest		

Tehama	except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO
*Office Leads:			
<b>AFWO=Arcata Fish and Wildlife Office</b>			
<b>BDFWO=Bay Delta Fish and Wildlife Office</b>			
<b>KFWO=Klamath Falls Fish and Wildlife Office</b>			
<b>RFWO=Reno Fish and Wildlife Office</b>			
<b>YFWO=Yreka Fish and Wildlife Office</b>			

Attachment



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

## Official Species List

**Provided by:**

Sacramento Fish and Wildlife Office  
FEDERAL BUILDING  
2800 COTTAGE WAY, ROOM W-2605  
SACRAMENTO, CA 95825  
(916) 414-6600

**Consultation Code:** 08ESMF00-2015-SLI-0908

**Event Code:** 08ESMF00-2015-E-02828

**Project Type:** TRANSPORTATION

**Project Name:** 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

**Project Description:** Intersection of Hanford-Armona Road and State Route 198 on the east side of the city of Armona. Project proposes to replace the existing intersection with a roundabout design to improve traffic safety and flow. Project is expected to impact a total of 5.26 acres of agricultural and ruderal habitat. One large valley oak tree and up to 4 smaller trees are proposed for removal. Construction is expected to begin in early 2019 and end by mid-2021.

**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

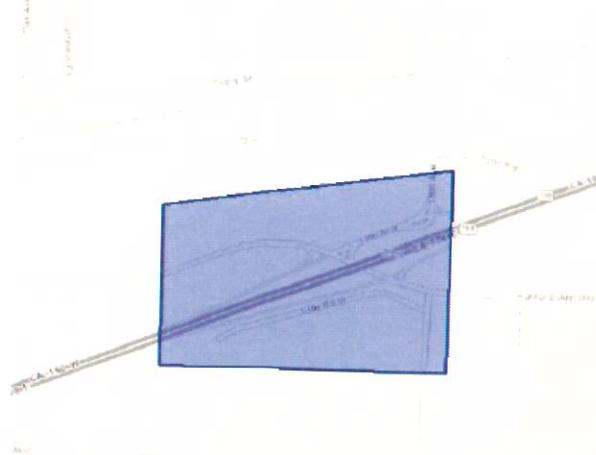
<http://ecos.fws.gov/ipac>, 07/21/2015 12:35 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

**Project Location Map:**



**Project Coordinates:** MULTIPOLYGON (((-119.69737529754637 36.3152288873562, -119.69741821289061 36.31201288701601, -119.6905517578125 36.311943724261184, -119.69046592712402 36.316024221816726, -119.69737529754637 36.3152288873562)))

**Project Counties:** Kings, CA

<http://ecos.fws.gov/ipac>, 07/21/2015 12:35 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

## Endangered Species Act Species List

There are a total of 9 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FW office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog ( <i>Rana draytonii</i> ) Population: Entire	Threatened	Final designated	
<b>Crustaceans</b>			
Vernal Pool fairy shrimp ( <i>Branchinecta lynchi</i> ) Population: Entire	Threatened	Final designated	
Vernal Pool tadpole shrimp ( <i>Lepidurus packardii</i> ) Population: Entire	Endangered	Final designated	
<b>Fishes</b>			
Delta smelt ( <i>Hypomesus transpacificus</i> ) Population: Entire	Threatened	Final designated	
<b>Mammals</b>			
Fresno kangaroo rat ( <i>Dipodomys nitratoides exilis</i> ) Population: Entire	Endangered	Final designated	

<http://ecos.fws.gov/ipac>, 07/21/2015 12:35 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

San Joaquin Kit fox ( <i>Vulpes macrotis mutica</i> ) Population: U.S.A.(CA)	Endangered		
Tipton kangaroo rat ( <i>Dipodomys nitratoides nitratoides</i> ) Population: Entire	Endangered		
<b>Reptiles</b>			
Blunt-Nosed Leopard lizard ( <i>Gambelia silus</i> ) Population: Entire	Endangered		
Giant Garter snake ( <i>Thamnophis gigas</i> ) Population: Entire	Threatened		

<http://ecos.fws.gov/ipac>, 07/21/2015 12:35 PM



United States Department of Interior  
Fish and Wildlife Service

Project name: 06-0Q320 SR 198/Hanford-Armona/13th Ave Intersection Improvement

### **Critical habitats that lie within your project area**

There are no critical habitats within your project area.

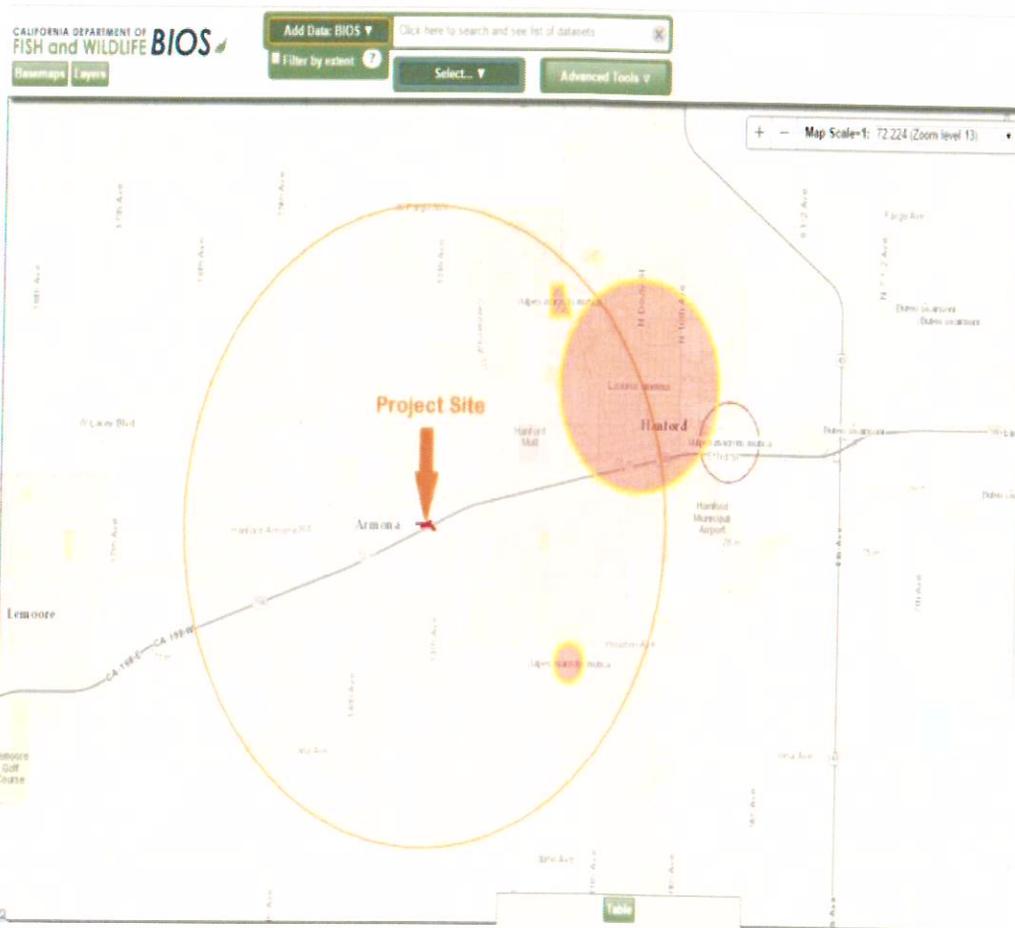
<http://ecos.fws.gov/ipac>, 07/21/2015 12:35 PM

5

List of CNDDDB Records within a 3-mile radius from the Project Area. Query date is April 27, 2015.

SCIENTIFIC NAME	COMMON NAME	QUAD	SITE DATE, YR MO/DAY	FED STATUS*	CA STATUS*
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	Hanford	2000 08/15	FE	ST
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	Hanford	2006 06/12	FE	ST
<i>Lasiurus cinereus</i>	Hoary bat	Hanford	1991 04/22	None	None

Key: FE = Federal Endangered; ST = State Threatened



## Plant List

7 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in 9 Quads around 36119C6

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<a href="#">Atriplex cordulata var. erecticaulis</a>	Earlmarc orache	Chenopodiaceae	annual herb	1B 2	S1	G3T1
<a href="#">Atriplex depressa</a>	brittlescale	Chenopodiaceae	annual herb	1B 2	S2	G2
<a href="#">Atriplex minuscula</a>	lesser saltscale	Chenopodiaceae	annual herb	1B 1	S2	G2
<a href="#">Atriplex subtilis</a>	subtle orache	Chenopodiaceae	annual herb	1B 2	S1	G1
<a href="#">Delphinium recurvatum</a>	recurved larkspur	Ranunculaceae	perennial herb	1B 2	S3	G3
<a href="#">Lepidium jaredii ssp. album</a>	Panoche pepper-grass	Brassicaceae	annual herb	1B 2	S2	G2T2
<a href="#">Nama stenocarpum</a>	mud nama	Boraginaceae	annual / perennial herb	2B 2	S1S2	G4G5

### Suggested Citation

CNPS. Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 27 April 2015].

## Appendix C Species Effect Determination

Species	Status <sup>(1)</sup>	Possible in Which Habitat Type	Ac. Habitat Impacts Perm/Temp	Species Impacts Expected After AMMs <sup>(2)</sup> ?	FESA Determination
Vernal pool fairy shrimp	FT	Vernal pools	0/0	No, no habitat onsite.	<i>No effect.</i>
Vernal pool tadpole shrimp	FE	Vernal pools	0/0	No, no habitat onsite.	<i>No effect.</i>
Valley elderberry longhorn beetle	FT	Elderberry bushes, usually in riparian areas	0/0	No, no habitat onsite.	<i>No effect.</i>
Delta smelt	FT	Semi-saline aquatic habitat in the Bay Delta region	0/0	No, no habitat onsite, not upstream of suitable habitat.	<i>No effect.</i>
California red-legged frog	FT	Pools, ponds, slow streams and adjacent riparian areas	0/0	No, no habitat onsite.	<i>No effect.</i>
Blunt-nosed leopard lizard	FE, SE, FP	Open saltbush scrub with rodent burrows.	0/0	No, no habitat onsite.	<i>No effect.</i>
Giant garter snake	FT	Marshes and aquatic habitats with slow water, and adjacent uplands	0/0	No, no habitat onsite.	<i>No effect.</i>
Fresno kangaroo rat	FE, SE	Open saltbush scrub and grasslands.	0/0	No, no habitat onsite.	<i>No effect.</i>
Tipton kangaroo rat	FE, SE	Open saltbush scrub and grasslands.	0/0	No, no habitat onsite.	<i>No effect.</i>
San Joaquin kit fox	FE, ST	Ruderal habitat, edge of agricultural fields.	1.76/1.63	Possible. Species not observed but may occur onsite.	<i>May affect, not likely to adversely affect.</i>

(1) Species-Status Key: FE = Federal Endangered; SE = State Endangered; FP = Fully Protected; ST = State Threatened

(2) AMMs = Avoidance and Minimization Measures

## **Appendix D** Response to Comments

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This appendix contains the comments received during the public circulation and comment period from September 15, 2015 to October 15, 2015. A Caltrans response follows each comment presented. Caltrans has also had verbal communication with property owner Mr. Nelson Majors. A written response to his e-mail is found within this Appendix D.



September 30, 2015

Michelle Ray  
Sierra Pacific Environmental Analysis Branch  
California Department of Transportation  
855 M Street, Suite 200  
Fresno, CA 93721

**Agency Project: Hanford-Armona Road Intersection Improvements**  
**06-KIN-198-PM-R15.5; Project ID: 0613000034; EA: 06-0Q320**

**District CEQA Reference No: 20150812**

Dear Ms. Ray:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above. Per the Initial Study, the project consists of the construction of a single-lane roundabout at the State Route 198 westbound on-ramp intersection with Hanford-Armona Road and 13<sup>th</sup> Avenue, at post mile 15.5, west of the city of Hanford in Kings County. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOx, 10 tons/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.
2. Based on information provided to the District, the proposed transportation project may be subject to District Rule 9510 (Indirect Source Review).

District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees. Any applicant subject to District Rule 9510 is required to submit an Air Impact Assessment (AIA) application to the District no later than applying for final discretionary approval, and to pay any applicable off-site mitigation fees before issuance of the first building permit. If approval of the subject project constitutes the

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-9718  
Tel: (209) 557-9400 FAX: (209) 557-8475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34848 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661 392 5500 FAX: 661 392 5585

[www.valleyair.org](http://www.valleyair.org)    [www.healthyairliving.com](http://www.healthyairliving.com)

Printed on recycled paper 

1

last discretionary approval by your agency, the District recommends that demonstration of compliance with District Rule 9510, including payment of all applicable fees before issuance of the first building permit, be made a condition of project approval. Information about how to comply with District Rule 9510 can be found online at: <http://www.valleyair.org/ISR/ISRHome.htm>.

3. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). The above list of rules is neither exhaustive nor exclusive.

More information regarding compliance with District rules and regulation can be obtained by:

- Visiting the District's website at <http://www.valleyair.org/rules/1ruleslist.htm> for a complete listing of all current District rules and regulation, or
- Visiting the District's website at [http://www.valleyair.org/busind/comply/PM10/compliance\\_PM10.htm](http://www.valleyair.org/busind/comply/PM10/compliance_PM10.htm) for information on controlling fugitive dust emissions, or
- Contacting the District's Small Business Assistance (SBA) Office by phone at (559) 230-5888.

If you have any questions or require further information, please contact Georgia Stewart at (559) 230-5937.

Sincerely,

Arnaud Marjollet  
Director of Permit Services



For: Chay Thao  
Program Manager

AM: gs

***Response to comment from the San Joaquin Valley Air Pollution Control District***

The San Joaquin Valley Air Pollution Control District letter acknowledges that the District has reviewed the project and concluded that project-specific criteria pollutant emissions would have no significant adverse impact on air quality. The project may be subject to San Joaquin Valley Air Pollution Control District rules and regulations. Caltrans will continue to coordinate with the District.



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

October 16, 2015

Michelle Ray  
California Department of Transportation, District 6  
855 M Street, Suite 200  
Fresno, CA 93721

Subject: State Route 198 Hanford Armona Road Intersection Improvement Agency  
SCH#: 2015091034

Dear Michelle Ray:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on October 13, 2015, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044  
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2015091034  
**Project Title** State Route 198 Hanford Armona Road Intersection Improvement Agency  
**Lead Agency** Caltrans #6

**Type** MND Mitigated Negative Declaration  
**Description** Caltrans proposes to construct a single-lane roundabout that could be upgradable to a double-lane roundabout at the State Route 198 westbound onramp intersection with Hanford-Armona Road and 13th Avenue, west of the City of Hanford in Kings County. The project could require partial right-of-way acquisition from two parcels.

**Lead Agency Contact**

**Name** Michelle Ray  
**Agency** California Department of Transportation, District 6  
**Phone** 559 445 5286 **Fax**  
**email**  
**Address** 855 M Street, Suite 200  
**City** Fresno **State** CA **Zip** 93721

**Project Location**

**County** Kings  
**City** Hanford  
**Region**  
**Lat / Long** 36° 31' N / 119° 6.9' W  
**Cross Streets** Armona Road  
**Parcel No.**  
**Township** 18/19S **Range** 21E **Section** 3/4/33 **Base**

**Proximity to:**

**Highways** Hwy 198  
**Airports**  
**Railways**  
**Waterways**  
**Schools**  
**Land Use** Agricultural and Commercial Use

**Project Issues** Aesthetic/Visual; Air Quality; Biological Resources; Flood Plain/Flooding; Noise; Toxic/Hazardous; Water Quality; Landuse

**Reviewing Agencies** Resources Agency; Department of Fish and Wildlife, Region 4; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Air Resources Board; Regional Water Quality Control Bd., Region 5 (Fresno); Native American Heritage Commission; Public Utilities Commission

**Date Received** 09/14/2015 **Start of Review** 09/14/2015 **End of Review** 10/13/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

***Response to comment from the California State Clearinghouse***

The State Clearinghouse letter acknowledges that Caltrans has completed the review requirements for the draft environmental document as stated in the California Environmental Quality Act.

**Letter from Nelson E. Majors**

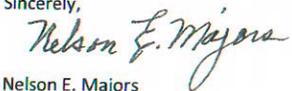
Department of Transportation  
District 6  
855 M Street, Suite 200  
Fresno, Ca. 93721  
October 7, 2015

Attention Michelle A Ray:

2

I am writing in disagreement to the new proposed right of way in Armona.  
I am against this proposal because we have plans to build RV storage on  
that location. I have indicated our plans on the enclosed map.

Sincerely,



Nelson E. Majors

P. O. Box 399  
Lemoore, Ca. 93245



***Response to comments from Nelson E. Majors***

Thank you for your comments. Your concern has been noted, and the Caltrans Project Development Team has reviewed the information you have provided. At this time, based on the Kings County Planning Department, there are no records of a filed conditional use permit for your parcel. Please be assured that consideration has been given to your proposed building plans. If possible, we will try to minimize any potential impacts to your property will continue to coordinate with you during the design phase of this project.

## **Appendix E** Coordination

---

### Cultural Resources:

After circulation of the Historic Property Survey Report (HPSR), the comments received generated a site visit with the Santa Rosa Rancheria Tribe to discuss the evaluation and potential preservation of cultural resources within the project. The concerns expressed, specifically the removal of an oak and other plant resources, have been elevated to various personnel within the project development team for further consideration. Decisions regarding the cultural resources will be made during the Plans, Specifications and Estimate phase of the project. Communication with the tribal council is anticipated to continue throughout the life of the project.

### Biology Resources:

Informal consultation was conducted with the U.S. Fish and Wildlife Service. A letter of concurrence was received on November 23, 2015. A copy of the letter is located on the next page.



In Reply Refer to:  
08ESMF00-  
2015-I-1022

## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Suite W-2605  
Sacramento, California 95825-1846



NOV 23 2015

Dena Gonzalez  
Chief, Central Region Biology Branch  
California Department of Transportation, District 6  
855 M Street, Suite 200  
Fresno, California 93721

Subject: Informal Consultation for the State Route 198/13<sup>th</sup> Avenue/Hanford-Armona Road Intersection Safety Improvement Project, Kings County, California (California Department of Transportation 06-KIN-198-PM R15.54; EA 06-0Q320)

Dear Ms. Gonzalez:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) letter requesting the initiation of informal consultation on its action to construct the proposed State Route 198/13<sup>th</sup> Avenue/Hanford-Armona Road Intersection Safety Improvement Project (project) in Kings County, California.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law on July 16, 2012. Caltrans was approved to participate in the MAP-21 Surface Transportation Project Delivery Program through the National Environmental Policy Act (NEPA) assignment Memorandum of Understanding (MOU) between the Federal Highway Administration (FHWA) and Caltrans (effective October 1, 2012), as codified in 23 U.S.C. 327. The MOU allows Caltrans to assume the FHWA's responsibilities under NEPA as well as FHWA's consultation and coordination responsibilities under Federal environmental laws for the majority of transportation projects in California.

We received your August 5, 2015 letter in this office on August 6, 2015. In this letter, Caltrans determined that the proposed project may affect, but is not likely to adversely affect the federally-listed as endangered San Joaquin kit fox (*Vulpes macrotis mutica*).

This letter has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act). The findings and recommendations of this document are based on: (1) Caltrans' August 5, 2015 letter and its supporting *State Route 198/13<sup>th</sup> Avenue/Hanford-Armona Road Intersection Safety Improvement Project Biological Assessment*, dated July 2015; (2) email correspondence between the Service and Caltrans; and (3) other information available to the Service.

### **Project Description**

Caltrans proposes to replace the intersection at State Route (SR) 198, 13<sup>th</sup> Avenue, and Hanford-Armona Road (post-mile R15.2) in northern Kings County with a single-lane roundabout. The existing skewed intersection design does not meet Caltrans' current design standards. The project is located near the eastern edge of the town of Armona, just west of the City of Hanford. The purpose of the project is to improve intersection safety by reducing accident severity along the approaches and at the intersection, and by improving traffic flow. SR 198 is a four-lane divided highway. Hanford-Armona Road and 13<sup>th</sup> Avenue are both two-lane undivided surface streets under County jurisdiction. The existing intersection is controlled by a single stop sign located on westbound 13<sup>th</sup> Avenue at the intersection with Hanford-Armona Road.

Most of the existing roadways within the construction limits will be removed as part of the project and replaced with curved roadways ("chicane" areas designed to slow traffic) and the roundabout intersection. The design will include a center concrete island with an inscribed circle diameter of 175-ft. to 195-ft. to accommodate large trucks and extra-legal-oversized-overweight vehicles. Within the circulatory path of the roundabout, three entry lanes will be constructed (at eastbound and westbound Hanford-Armona Road, and westbound 13<sup>th</sup> Avenue), and four exit lanes will be constructed (at eastbound and westbound Hanford-Armona Road, eastbound 13<sup>th</sup> Avenue, and westbound SR 198 on-ramp). The initial design will be single-lane, but will allow for a dual-lane expansion in order to accommodate future traffic increases.

Concrete work will be required for a portion of the approach pavement, the circulatory intersection area, the truck aprons, the intersection center island and splitter island curbs, the outside gutters, the sidewalks/bicycle paths and curb ramp areas, and the drainage inlets. Existing electrical facilities will need to be removed in order to facilitate electrical work for lighting and flashing beacons. Other required activities will include permanent erosion control/landscaping, placement of duff and concrete aesthetic treatments for the truck aprons, utility line relocation, and temporary and permanent road striping and signage.

#### *Right-of-Way and Staging Areas*

Caltrans will acquire additional right-of-way (ROW) parcels along the northern and western sides of the new roundabout. The southern half of the new design will be located within existing Caltrans ROW, primarily the gore areas between SR 198 and the westbound on- and off-ramps. Caltrans has indicated that designated staging areas for equipment storage and vehicle parking will be pre-approved by a Caltrans biologist and will be located within the proposed ROW. Likely staging areas include the agricultural field in the northeastern part of the project footprint, the vacant lot in the northwestern section of the footprint, and the existing median/gore areas on the south side of 13<sup>th</sup> Avenue and the SR 198 on-ramp. For the purpose of this project, all staging areas for equipment storage, vehicle parking, and other project-related activities will occur within the project footprint, as described on page 4 of this document under the *Action Area* heading. Any location the contractor uses for equipment and materials staging that is outside this area will need to be evaluated and may require Caltrans either to revise its informal consultation or initiate formal consultation.

#### *Detours and Project Staging*

The construction of the roadway, embankment, side slopes, and ditch will be organized by stage (three or four stages in total) and will require detour- and temporary traffic handling. All detours will be within the existing construction footprint.

*K-rail*

A total of approximately 3,200-ft. of standard temporary k-rail barriers will be installed on-site to prevent traffic from entering the work zones and to protect personnel in these areas. These barriers will be placed along four linear alignments at the intersection site. All k-rail will be removed once construction at the site is completed.

*Scheduling, Dust Control, Borrow/Fill, and Parking/Access*

Caltrans proposes to begin construction in January 2019 and to finish by July 2021. The project is expected to take approximately 70 working days to complete. Due to the heavy volume of daytime traffic throughout the project area, an estimated 14 nights of work are proposed to minimize construction-related traffic delays and to improve safety for the traveling public and construction personnel.

The contractor will follow Best Management Practices during construction. Dust control measures will be implemented as part of the project. Prior to construction, the contractor will be responsible for the selection and environmental compliance of a selected borrow site in the event that fill material needs to be imported to the project area. Equipment parking, project access, equipment maintenance, and other project-related activities may occur within the existing ROW, proposed ROW areas, or temporary construction easements.

Avoidance and Minimization Measures

Caltrans will implement the following measures to reduce the potential for effects to the San Joaquin kit fox. For the purpose of this consultation, a “qualified biologist,” as referenced in this document, refers to an individual who, at a minimum, holds a four-year degree in a relevant biological field and who has demonstrated knowledge of, and experience with, a given species.

1. Preconstruction surveys will be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. Surveys for the San Joaquin kit fox and its dens will be performed throughout the project footprint as well as within 200-ft. of the footprint.
2. A qualified biologist(s) will conduct an environmental awareness training program for all construction personnel, covering the status of the San Joaquin kit fox, the importance of avoiding impacts to the species, and the penalties for not complying with minimization requirements. New construction personnel who are added to the project after the training is first conducted also will be required to take the training.
3. A qualified biologist(s) will be present on-site during initial ground-disturbing activities. To the extent possible, the biologist(s) also will be available on-call when not present on-site.
4. Disturbance to all San Joaquin kit fox dens will be avoided to the maximum extent possible.
  - a. Potential and atypical dens that are located at least 50-ft. from construction will be protected with a 50-ft. zone. Known dens that are located at least 100-ft. from construction will be protected with a 100-ft. zone. In instances where 50-ft. or 100-ft. exclusion zones cannot be maintained, potential and/or known dens will be monitored; once these dens are verified to be unoccupied, they will be blocked

temporarily (via sandbagging or installation of a one-way door) for the duration of the project.

- b. If a natal/pupping den is discovered either within the project footprints or within 200-ft. of the footprint, Caltrans will notify the Service immediately.
5. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site in order to reduce the potential for attracting predator species.
6. No pets or firearms will be allowed on the project site.
7. Parts of the project area that are temporarily affected will be re-contoured and re-vegetated with an appropriate, weed-free native plant seed mixture following the completion of construction.

### **Action Area**

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” The action area is composed of the project footprint (or project impact area), which encompasses 1) the SR 198/13<sup>th</sup> Avenue/Hanford-Armona Road intersection and approaches, and 2) neighboring portions of ruderal areas, developed areas, and agricultural land in which the roundabout will be constructed, staging areas established, and other roadway improvements carried out. The action area also includes land extending approximately 200-ft. from the edge of the footprint, which will experience further-reaching effects of construction activities such as noise and visual disturbance.

### **Effects Analysis**

#### *Habitat*

The action area consists of developed areas, including the existing roadways like SR 198 and its associated on- and off-ramps, 13<sup>th</sup> Avenue, and Hanford-Armona Road, and part of an auto repair shop located west of the proposed roundabout and south of Hanford-Armona Road; ruderal areas, including road edges, Caltrans’ existing ROW, part of an abandoned residential lot on the north side of Hanford-Armona Road, and open land around the auto repair shop; and agricultural land, including part of a row crop field located north and northeast of the intersection. Vegetation at the intersection site has been significantly altered by the previous conversion to agricultural use and urbanization. Where periodic disking, mowing, and other vegetation management activities still occur, the vegetation there consists primarily of disturbance-favoring, invasive species like Russian thistle (*Salsola tragus*) and other weedy species. Caltrans maintenance activities along SR 198 involve grading the shoulders and mowing grass.

#### *Surveys*

According to the California Natural Diversity Database (CNDDB, 2015)<sup>1</sup>, there are no San Joaquin kit fox records identified within the action area. The closest record is located approximately 2.1 miles (mi) southeast of the action area and dates from 2000.

<sup>1</sup> California Natural Diversity Database. 2015. Natural Heritage Division, California Department of Fish and Wildlife. RareFind 5. Sacramento, California. Accessed October 19, 2015.

Caltrans biologists conducted reconnaissance surveys of the project area on August 7, 2014 and April 30, 2015. No San Joaquin kit foxes or associated sign were observed during either survey. Caltrans did identify some low quality habitat both within and outside the project area; this included areas within the Caltrans ROW and in the open lands around the commercial properties like the auto repair shop.

#### *Habitat Impacts*

The project footprint encompasses 5.26 acres (ac) and is composed of ruderal and agricultural areas. Of this total, construction will permanently remove 1.76 ac of ruderal land and 0.73 ac of agricultural land, as well as temporarily disturb 1.63 ac of ruderal land and 1.14 ac of agricultural land as a result of work activities associated with the roundabout construction. Caltrans has defined permanently affected habitat as those areas that are converted to new hardscape/roadway; in so doing, all habitat availability is eliminated. Caltrans further has defined temporarily affected habitat as those areas that are re-contoured and re-vegetated following the completion of construction, and which within 3-5 years can once again become available habitat for the species.

Caltrans has identified the existing ruderal areas as potential, though low-quality, habitat for the San Joaquin kit fox. These areas are 1) fragmented and small, 2) highly disturbed, and 3) in proximity to a busy travel way, so suitability as habitat for the species is limited. The loss of, and disturbance to, this habitat is unlikely to result in adverse effects to the San Joaquin kit fox since the amount of land to be permanently and temporarily impacted is minimal and of impaired quality.

#### *Temporary K-rail Barriers*

Caltrans expects to use standard temporary k-rail barriers on the project site as a means of traffic control and safety. The presence of these structures will be unlikely to adversely affect the species given that the potential for the San Joaquin kit fox to occur in the footprint is low. The low potential for occurrence is based on the following reasons: 1) the action area is not located within any core, satellite, or linkage recovery areas for the San Joaquin kit fox (Service, 2010)<sup>2</sup>, and 2) the overall habitat quality within the action area is degraded and therefore is likely to be less suitable for the species.

#### *Other Construction Effects*

Adverse effects to the San Joaquin kit fox from project-related equipment/vehicle strikes are unlikely to occur given the low likelihood of the species' presence in the action area, and the implementation of the proposed avoidance and minimization measures such as preconstruction surveys, personnel training, monitoring during ground-breaking, and den exclusion zones.

#### **Determination**

The Service concurs with Caltrans' conclusion that the action may affect, but is not likely to adversely affect the San Joaquin kit fox. This conclusion is based on the results of recent surveys, the absence of observable sign within the action area, the impaired quality of the habitat, and the conservation measures proposed to reduce potential effects to the species. We concur because there is a low likelihood that the San Joaquin kit fox occurs within the action area and therefore the potential for the action to affect the species is discountable.

<sup>2</sup> U.S. Fish and Wildlife Service. 2010. San Joaquin Kit Fox (*Vulpes macrotis mutica*) 5-Year Review: Summary and Evaluation. Sacramento Fish and Wildlife Office, Sacramento, California. 122 pp.

**Closing Statement**

This concludes the Service's review of Caltrans' action to construct the State Route 198/13<sup>th</sup> Avenue/Hanford-Armona Road Intersection Safety Improvement Project and the Service's consideration of the project's effects on the San Joaquin kit fox. No further coordination with the Service under the Act is necessary at this time. Note that take of listed species is not exempted from the prohibitions described under section 9 of the Act. If conditions change so that the project may adversely affect listed species, initiation of formal consultation, as provided in 50 CFR § 402.14, is required.

If you have questions regarding this letter, please contact Jen Schofield (jen\_schofield@fws.gov) or me (thomas\_leeman@fws.gov) at the letterhead address, by email, or at (916) 414-6544.

Sincerely,



Thomas Leeman  
Chief, San Joaquin Valley Division

cc:  
Craig Bailey, California Department of Fish and Wildlife, Fresno, California

## List of Technical Studies

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### **List of Technical Studies that are Bound Separately**

Air Quality Study Report

Climate Change

Cultural Resources Compliance Memo

Hazardous Waste Environmental Assessment

Natural Environmental Study

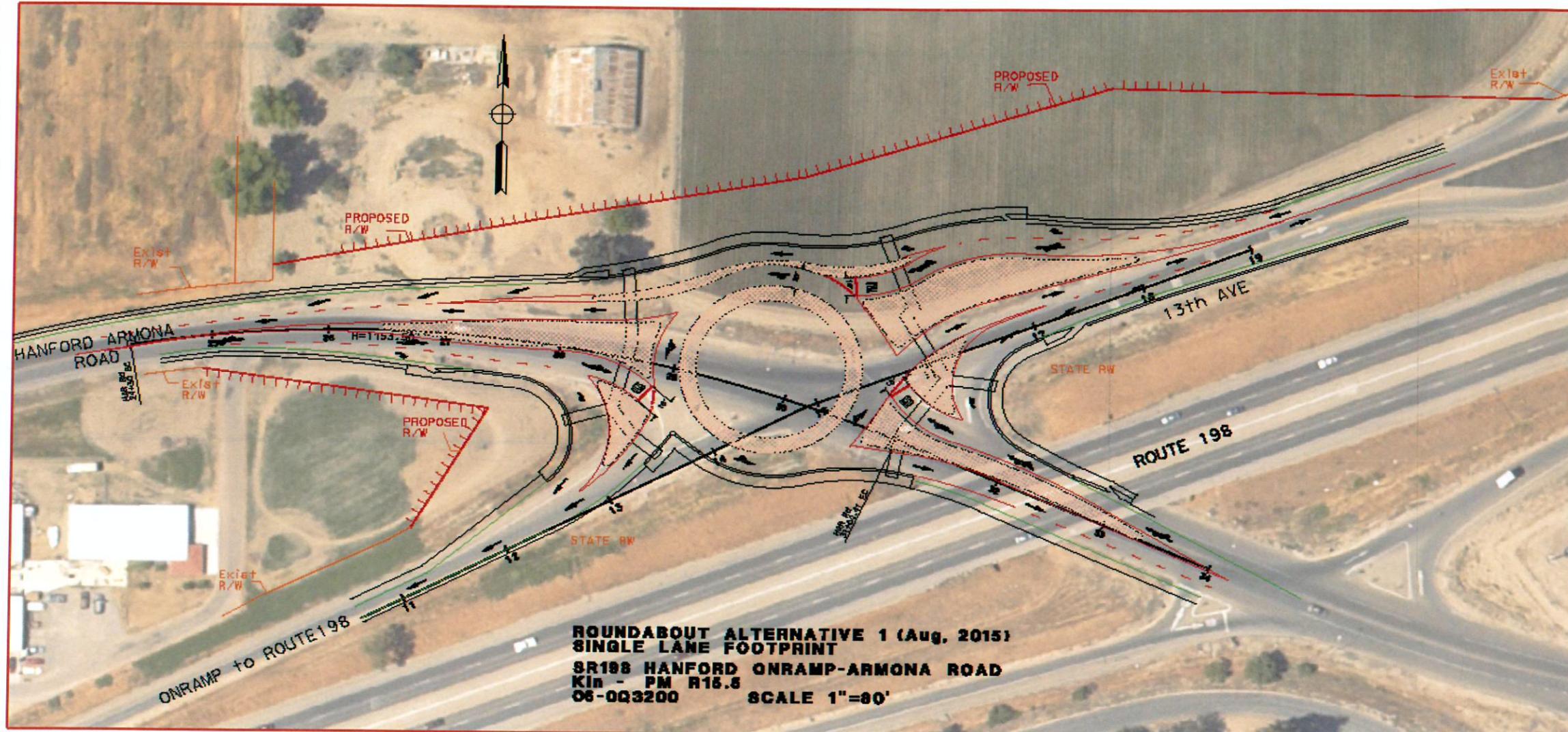
Noise Study Report

Paleontological Identification Report

Visual Impact Assessment

Water Quality Assessment Report

## Appendix A Preliminary Design Map



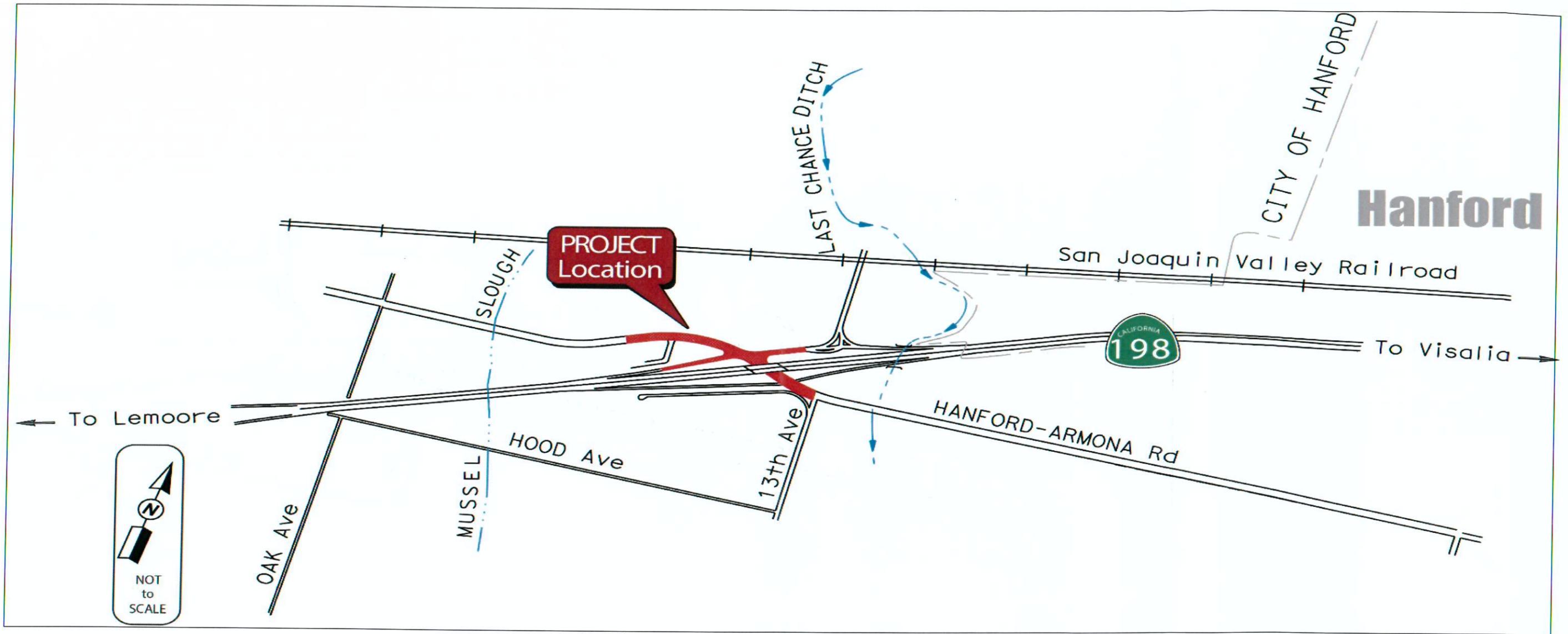


Figure 1-2 Project Location Map