

# State Route 118/State Route 34 Intersection Improvement



## Natural Environment Study Report

State Route 118/State Route 34 Intersection  
Intersection Improvement

Ventura County

07-Ven-118-(PM 10.72-11.80)

07-Ven-034-(PM 16.80-17.66)

EA 105960-E-FIS 0700000069

March 2012



Natural Environment Study  
State Route 118/State Route 34 Intersection  
Intersection Improvement

07-Ven-118-(PM 10.72-11.80)

07-Ven-034-(PM 16.80-17.66)

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STATE OF CALIFORNIA

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## Summary

Caltrans is proposing an operational improvement project in the community of Somis, an unincorporated area of Ventura County. The purpose of the proposed project is to reduce delay time, relieve congestion and enhance safety at the State Route-118 (SR-118) (Los Angeles Ave.)/SR-34 (Somis Rd) "T" intersection. The need of the proposed project is due to the fact that SR-118/SR-34 intersection currently operates poorly due to high volumes and limited queuing capacity.

The impact analysis for the proposed project considered five build alternatives, all of which included the realignment of Donlon Rd. to combine the SR-118/SR-34 and Sr-118/Donlon Rd. "T" intersections into a four-way intersection. However, the Ventura County Public Works Agency (VCPWA) informed Caltrans of their intent to realign Donlon Rd. separately from the proposed project. As a result of the VCPWA project, the realignment of Donlon Rd. is no longer a part of the proposed project and two of the build alternatives (4 and 6) considered in the impact analysis are no longer considered feasible.

There are four alternatives (1, 2, 3 and 5) under consideration for the proposed project, including the No Build Alternative. Two of the build alternatives (2 and 3) propose modifications to the existing intersection configuration, while the other build Alternative (5) proposes to construct a new bypass roadway at a different location within the community of Somis.

The overall footprint (disturbed area), for the build alternatives is as follows:

Build Alternatives	Drainage impact areas(Acres)	Permanent impact to biological resources	Temporary Impact
2	0.37	0.18	0.0
3	0.37	0.18	0.0
5	6.49	6.49	0.0

The following section will address the impacts to biological resources from the construction of each of the proposed alternative.

### Alternative 1

Alternative 1, will not result in any impacts to any biological resources, since it is the no build alternative.

### Alternatives 2 and 3

Alternatives 2, and 3, will result in permanent impacts to the biological resources existing in Coyote Canyon. The widening of SR-118 and SR-34 will require longitudinal extension of both the upstream and the downstream sides of the existing

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10ftx11 ft culvert. This will result in 0.18 acres of permanent impact to the riparian vegetation during the project construction. The primary habitat within the undeveloped portion of Alternatives 2 and 3 is a Eucalyptus grove with elements of native riparian undergrowth (Appendix A-Site Photos). At SR-118 and SR-34 intersection, Coyote Canyon is dominated by ornamental vegetation, specifically Tasmanian blue gum (*Eucalyptus globulous*), which was likely planted to provide windrows for past agricultural land uses. Other plant species found are Peruvian pepper trees (*Schinus molle*), willows (*Salix* spp.), Mexican elderberry (*Sambucus mexicana*), black mustard (*Brassica nigra*), Greater Periwinkle (*vinca major*), Cape ivy (*Delairea odorata* Lem.), and castor bean (*Ricinus communis*). Coyote Canyon provides habitat for woodrat ssp as well as some bird species. Temporary impacts to these species are anticipated during the construction phase. Mitigation measures will be implemented during construction.

Build Alternatives 2 and 3 will require the widening of the SR-118 and SR-34. The widening of SR-118 and SR-34 will not result in permanent impacts to any native biological resources, since all the vegetation composition along the shoulders is a mixture of landscaped, ruderal and invasive species.

Alternatives 2 and 3 will extend existing SR-118 drainage structure for Coyote Canyon on both the upstream and downstream sides; install rock slope protection in Coyote Canyon to minimize erosion of the creek bed which will result in a positive impact for the wildlife crossing since despite its disturbed condition, the creek likely allows for some limited wildlife movement to the north associated with South Mountain and the Santa Clara River Valley. The culvert under SR 118 is undersized and likely consist a barrier to connectivity within Coyote Canyon Creek during at least some portion of the year. Another barrier to movement is the significant concrete drop that occurs on the north side of Highway 118. There is currently a large vertical concrete wall over 6 feet in height which likely precludes most movement within the channel even when dry. Approximately 0.5 miles downstream of SR 118 bridge, Coyote Canyon Creek is blocked from the Arroyo Los Posas by the elevated railroad tracks, with a rectangular concrete box under the tracks providing limited connectivity.

Alternatives 2 and 3 will install two biofiltration swales, one on each side of SR-118 which will improve the water quality downstream in Coyote Canyon and can result in improving the aquatic life downstream in the creek.

Mitigation measures would include onsite and offsite restoration. Onsite mitigation would include invasive control in Coyote Canyon and onsite vegetation replacement where space allows. Onsite mitigation will consider the enhancement of the wildlife crossing along the Coyote Creek through improvements of the existing culvert under SR-118. Off-site mitigation will be established through Santa Monica Mountain Conservancy in Calleguas Creek watershed. Once permits are issued from the resource agencies, onsite and offsite mitigation will be further detailed.

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## **Alternative 5**

Alternative 5 will result in permanent impacts to the riparian vegetation existing along the channels located within its limits (Appendix A-Site Photos). It will impact 6.49 acres of riparian habitat. Alternative 5, will have both permanent and temporary impacts to riparian habitat occupied by the Federal and State endangered species least Bell's Vireo (*Vireo bellii pusillus*) as well as to other bird species that utilize this area as an important stopping point along their migratory routes. Pre-construction surveys will be conducted to determine if any sensitive species have occupied the project limits. The proposed project may result in permanent habitat loss, which would be subject to minimization measures and compensatory mitigation. Although the project is anticipated to be completed in one season, some impacts, primarily those due to an increase in noise to nesting birds and the local avian populations, are anticipated to be temporary impacts during the construction phase that cannot be fully mitigated.

A total of two least Bell's vireo territories, three yellow-breasted chat (*Icteria virens*) territories and several yellow warblers (*Dendroica petechia*) were observed over the course of the surveys along the drainage along Alternative 5 north of the railroad tracks in spring and summer 2010

Mitigation measures would include onsite and offsite restoration. Onsite mitigation would include invasive control in Coyote Canyon, a cowbird trapping program that will be beneficial for the riparian birds in the area, and onsite vegetation replacement where space allows. Off-site mitigation will be established through Santa Monica Mountain Conservancy in Calleguas Creek watershed. Once permits are issued from the resource agencies, onsite and offsite mitigation will be further detailed.

Invasives in the project limits included both floral and faunal species. Brown-headed cowbird (*Molothrus ater*) were reported during bird surveys. It is a predator for some riparian birds that exist in the project area. Introduced aquatic wildlife including red-swamp crayfish (*Procambarus clarkii*), mosquitofish (*Gambusia affinis*), and American bullfrog (*Rana catesbeiana*), represent a predatory threat to native amphibians and their eggs and reduce their potential to occur and persist. Invasive vegetation included Cape ivy (*Delairea odorata* Lem.), Blue gum Eucalyptus sp. (*Eucalyptus globules*), Thistle spp (*Centauria.ssp.*), Castor beans (*Ricinus communis*) and Tree tobacco (*Nicotiana glauca*).

Permits anticipated for this project include Streambed Alteration Agreement from the Department of Fish and Game (CDFG), Army Corps of Engineers (ACOE) permit is also anticipated and may include a Section 404 permit and either a Nationwide or Individual Permit, depending on a determination by ACOE. If a determination is made by the ACOE that a Section 404 permit will be required, then a Section 401 permit from the Regional Water Quality Control Board will also be required. Permits anticipated for Alternative 5 will include all the previously mentioned permits and a 2081 Take Permit for Least Bell's Vireo, as well as Section 7 Consultation with the United State Fish and Wildlife Services (USFWS), which could result in a Biological Opinion (BO) and subsequent Take Permit.

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## List of Abbreviated Terms

ACOE	Army Corps of Engineers
AEP	Associate Environmental Planner
Alt	Alternative
Ave	Avenue
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHP	California Highway Patrol
CMS	Portable Changeable Message Sign
CNDDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
COZEPP	Zone Enhanced Enforcement Program
CRLF	California Red Legged Frog
CY	Cubic Yard
DBA	Decibel
DBH	Diameter at breast height (~4 ft)
EIR	Environmental Impact Report
EO	Executive Order
FC	Federal Concern
FE	Federal Endangered
FHWA	Federal Highway Administration
FP, FPE, FPT	Federal Protected
Ft	foot/feet
FT	Federal Threatened
USFWS	Fish and Wildlife Service
In	Inches
IP	Individual Permit
IS/EA	Initial Study/Environmental Assessment
LBV	Least Bell's Vireo
M	meter(s)
Mi	mile(s)
Mm	Millimeter
ND/FONSI	Negative Declaration/Finding of No Significant Impact
NEPA	National Environmental Protection Act
NESR	Natural Environmental Study Report
NS	Natural Science
NWP	Nationwide permit
PM	post mile
Rd	Road

ROW	Right of Way
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SCE	Southern California Edison
SE	State Endangered
SI	Site Investigation
SOS	Save Our Somis
SR	State Route
SR	State Regulated
SSC	Species of Special Concern
SWWF	Southwestern Willow Flycatcher
USACOE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCPWA	Ventura County Public Works Agency
WB	Westbound

# Chapter 1. Introduction

## 1.1. Project Description

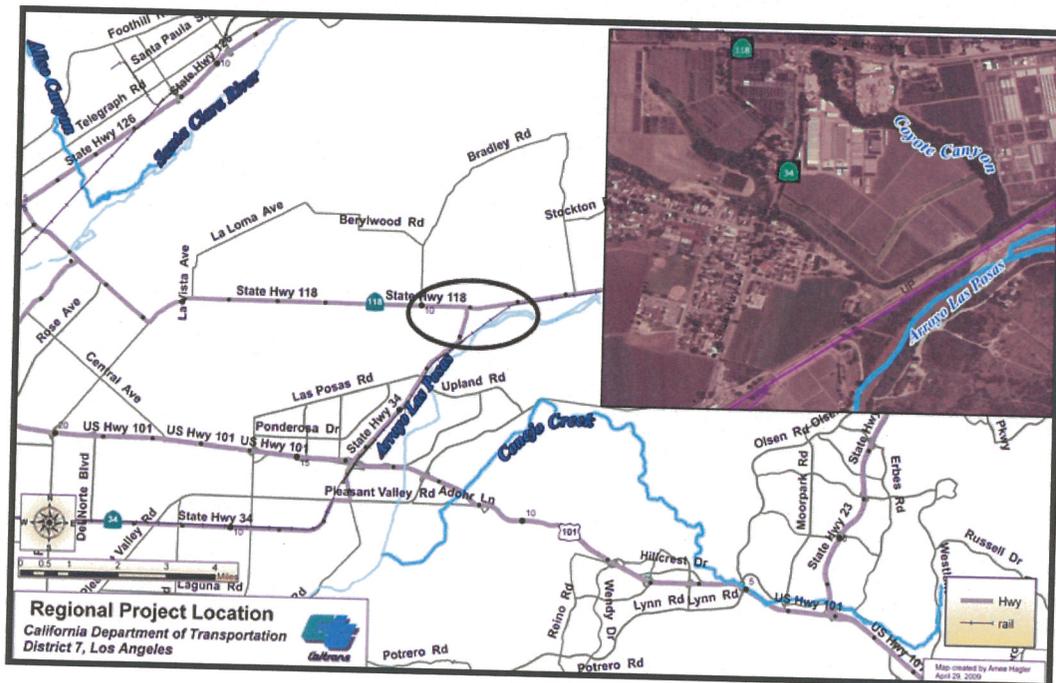


Figure 1: Project Location Map

Caltrans is proposing an operational improvement project in the community of Somis, an unincorporated area of Ventura County. The project limits extend approximately 1.1 miles on SR-118 from PM 10.72 to PM 11.80 and approximately 0.86 mile on SR-34 from PM 16.80 to PM 17.66.

The community of Somis is located within the Las Posas Valley in Ventura County, north the city of Camarillo and west of the city of Moorpark. The SR-118/SR-34 intersection is located in the community of Somis and is part of the non-freeway segment of SR-118. This segment of SR-118 is primarily a two-lane conventional highway traveling through mostly agricultural and rural areas between the community of Saticoy and the City of Moorpark. Within the project limits, SR-118 forms two closely spaced “T” intersections with SR-34 and Donlon Rd. From the project location, SR-118 provides regional connectivity to SR-23 to the east, SR-34 and US-101 to the south and SR-126 to the west. SR-34 is primarily a two-lane conventional highway that travels between Oxnard Boulevard in the City of Oxnard through Camarillo to SR-118 in the community of Somis. Between Las Posas Rd. and SR-118, the route becomes Somis Rd. At its intersection with SR-118, SR-34 forms the south leg of the “T” intersection. “Downtown” Somis is located just south of the

intersection, along SR-34. Within the project limits, SR-118 forms two closely spaced intersections with SR-34 and Donlon Rd. The SR-118/SR-34 intersection is located between Post Mile (PM) 10.80 and PM 11.05 on SR-118 and at PM 17.66 on SR-34.

The purpose of the proposed project is to reduce delay time, relieve congestion and enhance safety at the SR-118 (Los Angeles Ave.)/SR-34 (Somis Rd.) intersection. Motorists experience heavy traffic congestion at the intersection during both the AM (6:00 – 9:00) and PM (3:00 – 6:00) peak hours. Insufficient storage for vehicles making left turns from westbound (WB) SR-118 to southbound (SB) SR-34 poses a problem at the intersection, as this causes vehicles to back-up onto the WB SR-118 thru lane. The high volume of traffic passing through the intersection at these hours results in substantial delays and is a factor in congestion related accidents in the vicinity of the project location.

## 1.2. Project History

An Initial Study/Environmental Assessment (IS/EA) was previously prepared for this project and approved for circulation on February 1, 2000. Biological studies were prepared for the IS/EA between 1997 and 2000. Caltrans finalized a Negative Declaration/Finding of No Significant Impact (ND/FONSI) for the proposed project on September 26, 2000.

In November 2000, the community group “Save Our Somis” (SOS) filed a Writ of Mandate, challenging Caltrans’ approval of the project and contending that Caltrans violated the California Environmental Quality Act (CEQA) by declining to prepare an Environmental Impact Report (EIR) for the proposed project. In late 2002, the Ventura County Superior Court vacated approval of the proposed project and held that an EIR was necessary. As a result, Caltrans is now preparing a Draft EIR.

The impact analysis for the proposed project considered five build alternatives, all of which included the realignment of Donlon Rd. to combine the SR-118/SR-34 and SR-118/Donlon Rd. “T” intersections into a four-way intersection. However, the Ventura County Public Works Agency (VCPWA) informed Caltrans of their intent to realign Donlon Rd. separately from the proposed project. As a result of the VCPWA project, the realignment of Donlon Rd. is no longer a part of the proposed project and two of the build alternatives (4 and 6) considered in the impact analysis are no longer considered feasible.

## 1.3. Project Description

Please refer through this section to Appendix B-Project Plans

There are four alternatives under consideration for the proposed project, including the No Build Alternative. Two of the alternatives under consideration propose

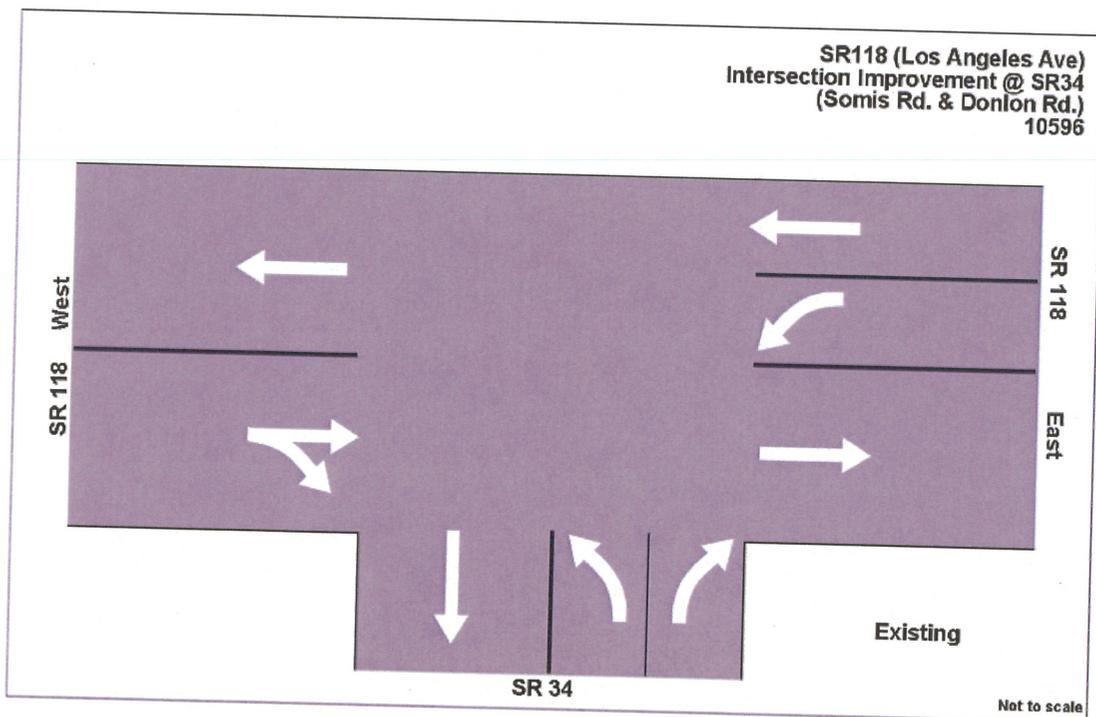
modifications to the existing intersection configuration, while one alternative proposes to construct a new bypass roadway at a different location within the community of Somis.

The Intersection Improvement Alternative and SOS Alternative both proposed the following at the SR-118/SR-34 intersection:

- add left-turn lane and right-turn lane on eastbound (EB) SR-118;
- widen shoulders along SR-118 and SR-34;
- reconstruct existing pavement;
- extend existing SR-118 drainage structure for Coyote Canyon on both the upstream and downstream sides;
- install rock slope protection in Coyote Canyon to minimize erosion of the creek bed;
- install two biofiltration swales, one on each side of SR-118;
- relocate utilities (e.g., telephone poles, cable pull boxes, water meters);
- right-of-way (ROW) acquisition and drainage easement.

### 1.3.1. No Build Alternative

The figure below illustrates the existing SR-118/SR-34 intersection configuration. The No Build Alternative proposes to maintain the existing configuration.



### **1.3.2. Intersection Improvement Alternative**

Aside from the features presented in section 1.2, this alternative also proposes the following:

- 800 ft. left-turn lane on WB SR-118;
- merge lane on EB SR-118;
- merge lane on southbound (SB) SR-34;
- merge lane on WB SR-118;
- extending the existing left-turn lane on westbound (WB) SR-118 from 160 ft. to 800 ft;
- extending the existing left-turn lane on northbound (NB) SR-34 from 170 ft. to 629 ft.

This alternative requires 2.07 acres of new ROW. The ROW width on SR-118 would vary from 115 ft. near the intersection to 63 ft. near the end of the project limits, west of the intersection, and from 142 ft. near the intersection to 100 ft. near the end of the project limits, east of the intersection. The ROW width on SR-34 would vary from 119 ft. near the intersection to 90 ft. near the end of project limits.

### **1.3.3. Save Our Somis (SOS) Alternative**

Aside from the features presented in section 1.2, this alternative also proposes the following:

- extending the existing left-turn lane on WB SR-118 from 160 ft. to 1,164 ft.;
- extending the existing left-turn lane on NB SR-34 from 170 ft. to 619 ft.

This alternative requires 1.43 acres of new ROW. The ROW width on SR-118 would vary from 100 ft. near the intersection to 60 ft. near the end of the project limits, west of the intersection, and from 107 ft. near the intersection to 100 ft. near the project limits, east of the intersection. The ROW width on SR-34 would vary from 85.5 ft. near the intersection to 92 ft. near the project limits.

### **1.3.4. Somis Bypass Alternative**

This alternative proposes to construct a 1 mile two-lane roadway east of “downtown” Somis and two new intersections along SR-34 and SR-118. The new roadway would serve as a bypass that would divert the majority of future traffic away from the SR-118/SR-34 intersection and “Downtown” Somis. A bridge would be constructed at the location where the bypass would cross Coyote Canyon and a new box culvert would be constructed under the bypass to partially divert Fox Barranca. This alternative requires 18.35 acres of new ROW, most of which is currently in agricultural production (e.g., row crops, nursery stock, green houses) and 9.9 acres of it are a manmade channel with a dense riparian habitat.

**1.3.4.1 STATE ROUTE 118 PROPOSED INTERSECTION**

A signalized “T” intersection is proposed on SR-118 that would be located approximately one-half mile east of the SR-118/SR-34 intersection.

Additional lanes on SR-118 at the proposed “T” intersection with the bypass would include the following:

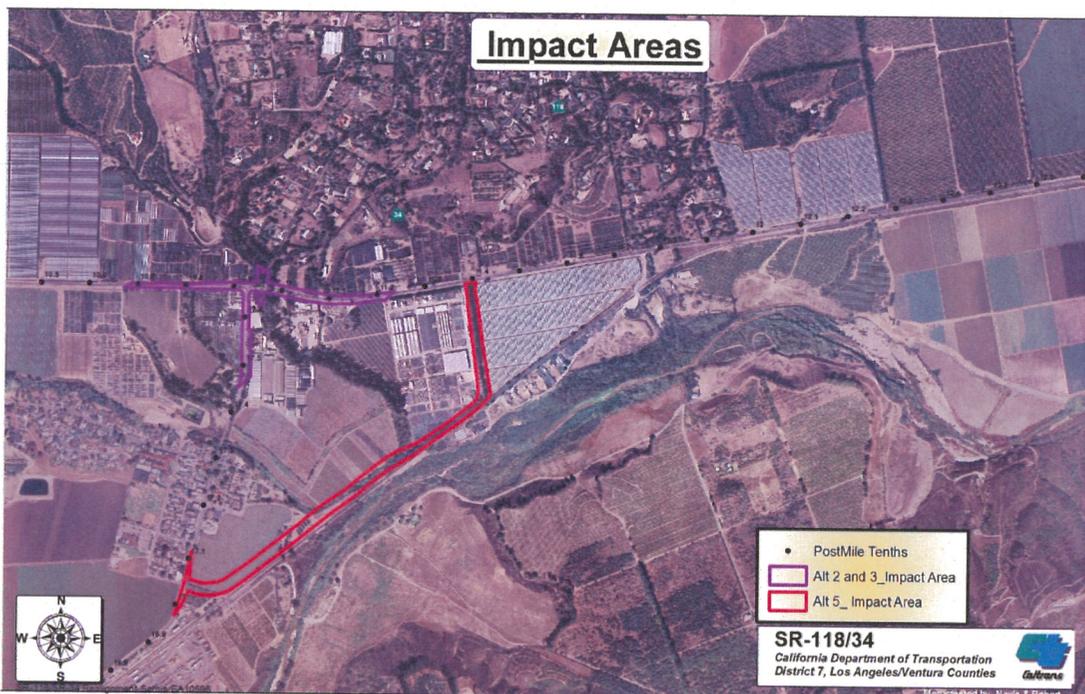
- 800 ft. dual westbound left-turn lanes;
- eastbound merge lane;
- eastbound right-turn lane.

**1.3.4.2 STATE ROUTE 34 PROPOSED INTERSECTION**

A signalized four-way intersection is proposed on SR-118 that would be located approximately one-half mile south of the SR-118/SR-34 intersection.

Additional lanes on SR-34 at the proposed intersection with the bypass would include the following:

- southbound left-turn lane;
- northbound right-turn lane;



**Figure 2: Project Impact Area**

#### **1.4. Project footprint, borrow, disposal, staging, access, utilities, detours**

Imported Borrow range between 1,440 cubic yards (cy) and 4,165 cy between the build alternatives.

It is anticipated that the contractor can utilize the space provided inside of the proposed new ROW for storing equipment.

The estimated Construction Start Date is October 2018, with construction completion started for June, 2019. Construction of this project will occur in stages to accommodate the outside widening and the removal/replacement of the roadway structural section. The number of closed lanes in each direction of travel, per individual stage construction phase will be limited to one. Temporary railing (Type K) will be used to separate the work area from lanes open to traffic. Existing traffic stripes will be removed and replaced by temporary traffic stripes. Also, temporary crash cushions will be utilized.

A Transportation Management Plan (TMP) will be implemented during the construction of this project. The TMP will consist of the following:

- Construction information flyers;
- Portable Changeable Message Sign (CMS); and
- Ground mounted construction signs.

Disposal Sites for this project (ADL, Lead and Chromium in the delineation etc.) will be determined in the next phase as per the Hazardous Waste discussion on the Draft Project Report. A thorough Site Investigation (SI) will be conducted during the PS&E phase

A Construction Zone Enhanced Enforcement Program (COZEEP) will also be implemented as part of the TMP for this project. The COZEEP is a Statewide Interagency Agreement between Caltrans and the California Highway Patrol (CHP). It enables Caltrans to hire CHP officers and vehicles to patrol project construction zones.

Utilities will be affected as a result of this project and the relocation of the impacted utilities will be required. The Utilities Plans will be developed in the next phase or at PS&E. The impacted utilities vary between alternatives and include the following:

- Southern California Edison (SCE) wood and steel poles.
- Verizon telephone poles.
- Fire hydrants.

- Air ventilation.
- Cable pull boxes.
- Water station facilities.
- Water meters.
- Water valves.
- Water manholes.

## Chapter 2. Study Methods

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This Natural Environment Study Report (NESR) is based on a review of project plans (Appendix B) submitted by the Caltrans Division of Design and meetings between the District Biology and District Design Staff. Background research consisting of aerial photos of the project area, United States Geological Survey (USGS) 7.5 minute topographic quadrangle maps, a United States Fish and Wildlife Service (USFWS) Species List (Appendix C), California Department of Fish and Game California Natural Diversity Database (CNDDDB) (Appendix D), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants were reviewed with respect to the project footprint. Two consecutive year round field surveys of the site were performed to inventory plant and animal species, to determine the presence or absence of sensitive species and determine the potential effects of the project on the natural environment.

General biological field surveys were conducted over several seasons to identify the flora and fauna present in the project area. These field surveys consisted of a combination of windshield surveys and ground surveys within areas of project impact. Initial surveys were conducted in the spring of 2008, with the last surveys being concluded in spring 2011.

### 2.1. Regulatory Requirements

The following is a general summary of the various permits, agreements, and certifications required prior to initiation of project activities that involve impacts to areas under USACE, RWQCB, CDFG and/or USFWS jurisdictions. Required regulatory permits include:

- USACE Section 404 Permit;
- RWQCB Section 401 Water Quality Certification; and
- CDFG Section 1602 SAA.
- USFWS Section 7 Consultation.

Permit authorizations from the USACE, the RWQCB, and the CDFG are required prior to the initiation of any construction-related project activity for a development proposal that involves impacts to drainages, streams, or wetlands within and/or immediately adjacent to a project site through activities including filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

## 1. Army Corps of Engineers

There are two primary permits that the USACE routinely issues. These include a "Nationwide Permit" (NWP) and an "Individual Permit" (IP). The NWP is a type of general permit that authorizes certain specified activities nationwide. An IP is a permit that is issued following an individual evaluation and a determination that the proposed activity is not contrary to the public interest. Standard permits and letters of permission are types of IPs. The specific permit that is required depends on the project description and extent of jurisdictional impacts.

It should be noted that the USACE will likely issue conditional approval of the Section 404 permit subject to its receipt of the RWQCB's Section 401 Water Quality Certification. The USACE refers to this conditional approval as "Denial Without Prejudice". It should also be noted that the USACE, the RWQCB, and the CDFG applications can be processed concurrently. In addition, the RWQCB and the CDFG application submittals will not be deemed complete until the application fees have been paid and they are provided with a certified California Environmental Quality Act (CEQA) document and a signed copy of the receipt of County Clerk filing fees for the Notice of Determination. Land use jurisdictions can no longer make "de minimis" findings if they determine that the project will not impact resources under the CDFG's jurisdiction. Therefore, the finding of "No Impact" to the CDFG jurisdictional resources must now be made by the CDFG prior to the payment of CDFG fees.

**Section 10 and Section 404 of the Clean Water Act (33 U.S.C. 1251-1376)** This section, administered by the Army Corps of Engineers (ACOE), regulates the discharge of dredged or fill material into navigable waters and waters of the U.S. (including wetlands). The Nationwide Permit Authorization Program is a form of general permit which authorizes a category of activities. These permits are only applicable if the conditions applicable to the permits are met. An Individual Permit is acquired when the project impacts do not meet the eligibility for the Nationwide Permit Program.

Regulatory authorization in the form of an IP will be required from the USACE Regulatory Branch, Ventura District Office if any permanent and/or temporary construction-related activity results in a discharge of material into USACE jurisdictional Waters of the U.S. that are greater than 0.5 acre or 300 linear feet. Impacts up to 0.5 acre and less than 300 linear feet may be authorized under the provisions of the NWP, such as NWP No.14 (Linear Transportation Projects) (Attachment D).

## 2. Regional Water Quality Control Board

**Section 401 of the Clean Water Act (33 U.S.C. 1251-1376)** Section 401 of the Clean Water Act requires a permit for activities resulting in discharge into waters of the United States and that the discharge complies with other state provisions.

As noted above, issuance of the USACE Section 404 Permit would be contingent upon the approval of a Section 401 Water Quality Certification from the RWQCB. In addition, the RWQCB requires certification of the project's CEQA documentation before it will approve the Section 401 Water Quality Certification or the WDR. The RWQCB, as a responsible agency, will use the project's CEQA document to satisfy its own CEQA compliance requirements.

Upon acceptance of a complete permit application, the RWQCB has between 60 days to 1 year to make a decision regarding the permit request. That is, USACE regulations indicate that the RWQCB has 60 days from the date of receipt of a completed application that requests water quality certification to make a decision (33 CFR §325.2[b][1][ii]). Please note that the USACE District Engineer may specify a longer time (up to one year) or shorter time based on his/her determination of a reasonable processing time (33 CFR §325.2[b][1][ii]). If the RWQCB determines that more than 60 days are needed to process the request, it has the option of requesting additional time from the USACE. Also, please note that the ACOE has the option of issuing a "Denial Without Prejudice", which does not mean that the request is denied, but that it requires more information in order to make a decision. This effectively stops the processing clock until the requested information is provided.

### **3. Section 7 Consultation with USFWS**

Interagency Cooperation, as defined in Section 7 of FESA, requires all Federal agencies to consult with the Service(s) if the Federal agency (and Caltrans under NEPA Delegation) determines that any action it funds, authorizes, or carries out may affect a listed species or its designated critical habitat.

Specifically, Section 7(a)(1) directs the Secretary to review other programs administered by them and utilize such programs to further the purposes of FESA. It also directs all other Federal agencies to utilize their authorities in furtherance of the purposes of FESA by carrying out programs for the conservation of listed species pursuant to FESA.

Section 7(a)(2) requires that, "each Federal agency shall, in consultation with the Secretary of the Interior, ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of designated critical habitat."

Under NEPA Delegation, Caltrans acts on behalf of the FHWA for Section 7 Interagency Cooperation (Caltrans is the Federal lead agency for projects subject to Section 7). Under Section 7, Caltrans must consult with the Service(s) when an action we carry out, fund, or authorize, may affect a proposed, threatened or endangered species.

### **4. California Department of Fish and Game (CDFG)**

The California Endangered Species Act (CESA) requires lead agencies to consult with the CDFG during the CEQA process to avoid jeopardy to State threatened or

endangered species. A current species list obtained from the CNDDDB shows an occurrence of state listed least Bell's vireo within the project quad and in the adjacent quad (6.768 miles N75W); therefore, it is anticipated that coordination with CDFG regarding listed species and a 2081 Incidental Take Permit will be required for alternative 5.

It is anticipated that a 1600 SAA will be required for the bridges that will span over Fox Barranca Creek and the drainage work under SR-118 in the Coyote Canyon Creek vicinity. The CDFG regulates all work (including initial construction and ongoing operation and maintenance) that may substantially divert or obstruct the natural flow of or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake through its Streambed Alteration Program. An applicant must enter into an agreement with the CDFG to ensure no net loss of wetland values and acreages.

Impacts resulting from project implementation will require a Section 1600 SAA. The SAA must address the initial construction as well as long-term operation and maintenance of any structures within areas identified as "Waters of the State" (such as a culvert or desilting basin) that may require periodic maintenance.

Prior to construction, a notification (SAA application) must be submitted to the CDFG that describes any proposed streambed alteration contemplated by a proposed project. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., an Environmental Impact Report) must be included in the submittal, consistent with CEQA requirements. The CDFG will prepare a draft SAA, which will include standard measures to protect sensitive plant and wildlife resources during project construction as well as during ongoing operation and maintenance of any project element that occurs within a CDFG jurisdictional area.

## 2.2. Studies Required

The biological study area (BSA) was determined after performing windshield surveys and a literature search for the project area. Please refer to the Figure 3-Biological Study Area map in section 3.1.1.

The project area and its surrounding habitats have the potential to support several sensitive wildlife species. In consultation with California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS), Caltrans has identified one sensitive animal species, Least bell's vireo (LBV) whose presence was addressed by pre-project protocol surveys and/or habitat assessments following the USFWS guidelines during summer 2010 (Appendix E-Results of the Least Bell's Vireo Surveys-BonTerra Consulting). BonTerra Consulting personnel performed herps surveys within the project boundary, and elevated the concern of the project site being a potential habitat for the federally listed species California red legged frog (CRLF) [*Rana draytonii*] (Appendix F-Results of the Habitat Assessment for Arroyo

Toad and California Red Legged Frog-BonTerra Consulting). After consulting with USFWS it was determined the need for pre-project protocol surveys and/or habitat assessments following the USFWS guidelines. Protocol surveys for CRLF were performed between February and April of 2011 (Appendix G-Results of Focused Surveys for California Red-Legged Frog). BonTerra Consulting personnel performed LBV surveys within the project boundary between April and July of 2010, and elevated the concern of the project site being a potential habitat for the federally listed species Southwestern willow flycatcher (SWWF) [*Empidonax traillii extimus*]. Consultation with USFWS concluded there was no need for performing protocol surveys for SWWF (Appendix H-Steve Kirkland-USFWS-Email dated 04-11-2011).

### 2.3. Personnel and Survey Dates

Several surveys have been conducted to evaluate the biological resources within the vicinity of the project.

Survey Date	Survey Type
10-08-2008	Windshield biological survey
10-15-2008	Migratory bird Survey
10-22-2008	Migratory bird Survey
12-18-2008	Monarch Butterfly Survey
1-30-2009	Monarch Butterfly Survey
07-09-2009	Botanical and bird survey
03-24-2009	Botanical and bird survey
06-17-2009	Bird survey
09-23-2009	Monarch Butterfly Survey
12-09-2009	Monarch Butterfly Survey and Vegetation Survey
April 30, May 10, May 26, June 7, June 17, June 28, July 8, July 19, 2010	Least Bell's Vireo Surveys and sensitive species surveys
July 2010	Herp Surveys
July 2010	Wetland Delineations
February-April 2011	California Red Legged Frog

**Table 1: Survey Dates and types**

The following personnel assisted in the above-mentioned surveys:

Caltrans Personnel: Paul Caron, District Chief Biologist; Nayla El-Shammas, Associate Environmental Planner-Natural Science(AEP-NS); Peter Champion (AEP); Christopher Stevenson (AEP-NS), Linna Wei (AEP-NS), Francis Appiah (AEP), Joel Bonilla (AEP), Robert Wong (AEP-GIS Specialist), Sarah Berns (AEP), Mohammed Y Shaikh (AEP-NS), and Cesar Moreno (AEP).

BonTerra Consulting personnel: Amber S. Oneal (Associate & Senior Ecologist, Project Manager, Biological Services) conducted LBV protocol surveys, and Samuel Stuart (Herpetologist) conducted the Herp surveys and the CRLF protocol surveys, and Gary Medeiros (Associate Principal) conducted the jurisdictional wetland delineation (Appendix I-Jurisdictional Delineation Report-BonTerra Consulting)

## **2.4. Agency Coordination and Professional Contacts**

A request for species list was sent on October 27, 2008 to USFWS. The species list was received on December 9, 2008 (See appendix C). The species list recommended that Least Bell's Vireo survey to be conducted according to the USFWS protocol. Least Bell's Vireo protocol survey was conducted in 2010.

Further consultation with Steve Kirkland (USFWS) was done in order to assess the need for Southwestern Willow Flycatcher (SWWF) protocol survey within the project vicinity, especially along Alternative 5. The determination was that there is no need for SWWF protocol surveys since not even one migrant flycatcher was observed during the LBV protocol surveys conducted in 2010.

Caltrans and the Consultant found the need for herp surveys. Therefore, a habitat assessment for Arroyo Toad and CRLF surveys were conducted in 2010. A Habitat Assessment CRLF Data Sheet was forwarded for Steve Kirkland. Furthermore, CRLF breeding protocol surveys were conducted between February and April 2011. Results were communicated with USFWS personnel, Steve Kirkland. Communication and discussions with USFWS are ongoing.

Jamie Jackson, CDFG Environmental Scientist, was contacted via email on 6-22-2009 and via phone on 06-22-2009 to discuss the longitudinal encroachment along the Alternative 5-Bypass. A California Endangered Species Act (CESA) Coordination Technical Assistance letter was sent in March 2011 to CDFG, Environmental Services, South Coast Region, Attention Jamie Jackson, to inform CDFG that Caltrans is in consultation with USFWS for LBV.

As part of Caltrans outreach, an early coordination National Environmental Protection Act (NEPA) 404 email was sent to the cooperative agencies representatives on September 10, 2009, included in this email were: Betty Courtney (CDFG Senior Environmental Scientist), Mark Cohen (ACOE Senior Program Manager), Stephanie Hall (ACOE Environmental Protection Specialist), Steve Kirkland (USFWS Ventura Office), and LB Nye (RWQCB Senior Environmental Specialist).

Veronica Chan (ACOE Project Manager) was contacted via email on 09-10-2009 as she was assigned to handle the project, file number is 2009-00706-VCC. An onsite meeting was held on 02-04-2010. The attendees were Veronica Chan (ACOE), Paul D Caron, Nayla El-Shammas and Cesar Moreno (Caltrans).

## 2.5. Limitations That May Influence Results

Year round surveys were conducted for two consecutive years to maximize the chances of identifying the plant and wildlife species present within the project area.

Although no special status aquatic species were noted during the surveys, and there is also a notable lack of historic records within the project area, some have a low potential to occur in portions of the study area. These species include Western pond turtle (*Actinemys marmorata pallida*), and Two-striped garter snake (*Thamnophis hammondi*). These species would have the highest potential to occur along Arroyo Las Posas; however, they could also occur in Drainages 1, 2, and 3 (Appendix G)

Woodrat nests were spotted inside the Coyote Canyon Creek area. As a result of the VCPWA project, the realignment of Donlon Rd. is no longer a part of the proposed project, and Caltrans project might result in no impact to the woodrat sp. in Coyote Canyon Creek. Desert Woodrat (*neotoma lepida*) nest presence within the project BSA, will result in some best management practices.

## Chapter 3. Results: Environmental Setting

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The project is located within Ventura County. Ventura County is located along the southern coast of California between Santa Barbara and Los Angeles Counties.

Ventura County is the 11<sup>th</sup> most important agricultural producing county in the state of California, and the project area is in the Santa Clara Valley, which is private agricultural land.

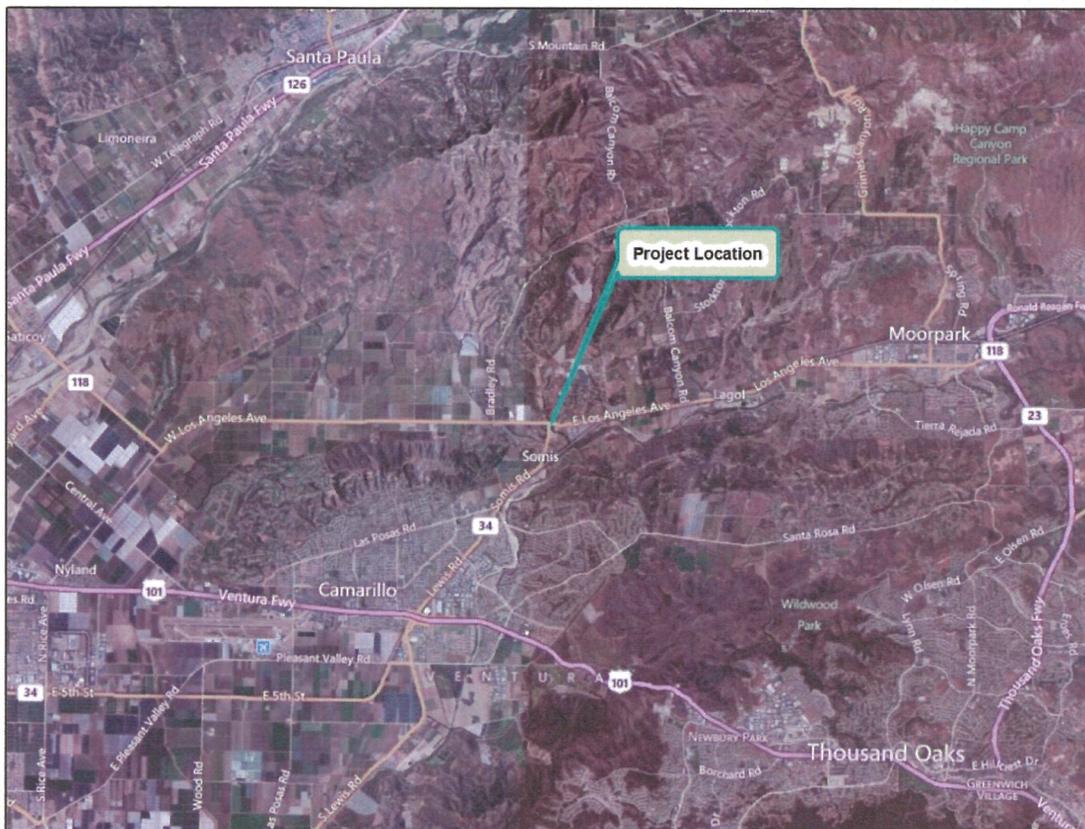
Urban lands occupy approximately 101,841 acres in Ventura County, as of 2004. Residences and supporting services are the major urban uses along with light industry.

### 3.1. Study Area



**Figure 3: Biological Study Area**

The study area is surrounded by SR-118 on the east and west sides, SR-34 on the south side, and a Ventura County flood control basin on the north side. Unnamed intermittent streams intersect the project area in the northern portion and drain into Coyote Canyon south of the SR-118. Fox Barranca is located in the south region of the project area.

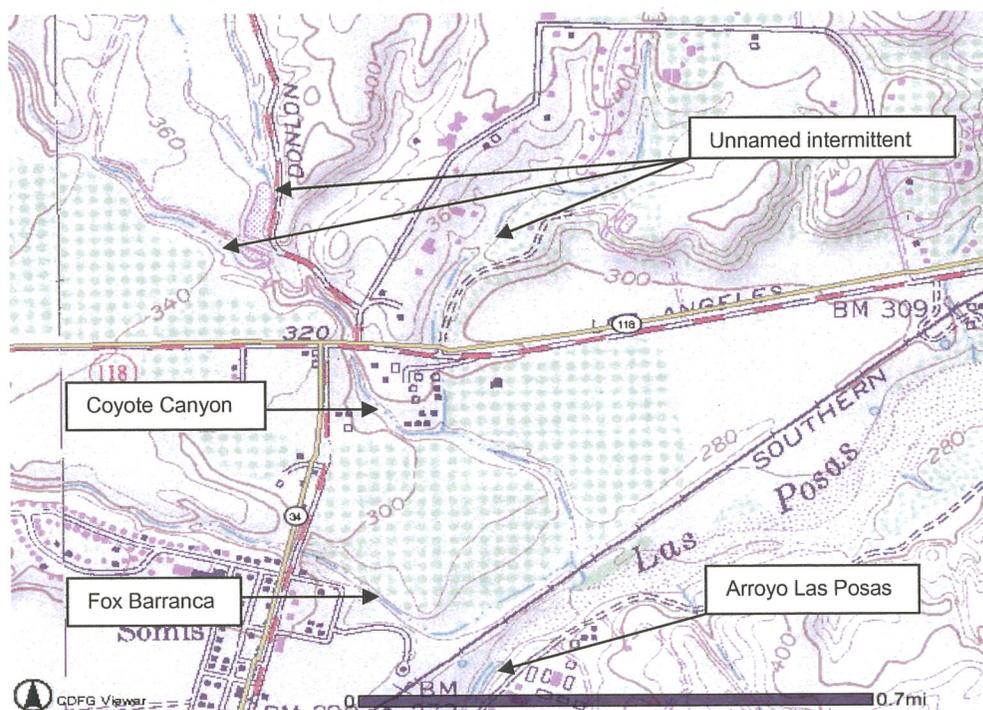


**Figure 4: Aerial Views of the Project Area**

Current land uses within the project area consist mostly of agricultural lands and associated businesses. It is common consensus that the dividing line between what is considered Uptown Somis and Downtown Somis is Los Angeles Avenue (State Route 118) and that the Uptown Section consists of most properties and businesses to the North of Los Angeles Avenue (State Route 118) and Downtown is considered all the businesses to the south of Los Angeles Avenue (State Route 118).

### 3.2. Physical Conditions

The project area at the intersection of SR-118/SR34 does not contain unique geologic features or steep topography. The proposed project is within a rural agricultural setting and low density residential. The surrounding terrain is a valley floor and generally flat. The Santa Susana Mountains and the Camarillo Mountains are intermittently visible in the distance at some points along State Route 118. Agricultural tree windrows are generally perpendicular within the project area. The Somis area is located in the North Las Posas Basin. The area overlies 200 ft (61m) or more of Quaternary alluvial materials, which in turn overlie the San Pedro Formation. The alluvial materials are composed primarily of clays and silts with some lenses of water-bearing sandier materials.



**Figure 5: Topographic Map and Streams in the project area**

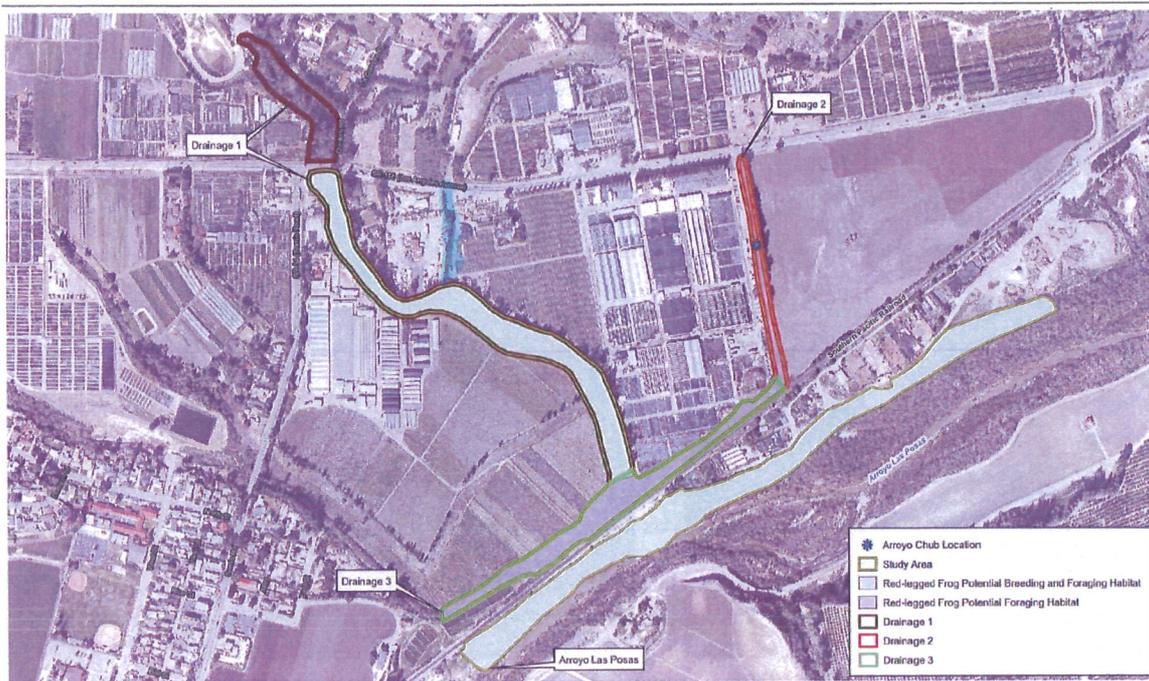
Puerta Auella Canyon surface water combines with Coyote Canyon surface water north of the project area and cross SR-118 just east of the SR-34 intersection. Coyote Canyon Tributary crosses SR-118 east of Donlon Road intersection and joins Coyote Canyon south of the project area. Coyote Canyon merges with Fox Barranca just before the Union (Southern) Pacific Railroad tracks. The merged stream travels in a box culvert underneath the railroad to join the Arroyo Las Posas. All the water bodies in the project area are intermittent. Arroyo Las Posas drains to Calleguas Creek which is considered intermittent and farther downstream becomes impaired and joins Calleguas Creek at Point Mugu, draining into Mugu Lagoon and then into the Pacific Ocean.

### 3.3. Biological Conditions in the Biological Study Area

The surveyed BSA for this project is mainly made up of farmland, riparian and disturbed areas. Habitats found directly within the project area include riparian areas that run along the north side and the south side of the project, and highway right-of-way developed area with the shoulders vegetated primarily by ruderal and landscaped vegetation. (Appendix J-Vegetation Map)

The study area is located on the USGS Moorpark 7.5-minute quadrangle map at Longitude-118.9944 and Latitude 34.2638. The study area includes three unnamed tributaries to the Arroyo Las Posas: two north-south drainages (Drainages 1 and 2) that flow into a third east-west drainage (Drainage 3) north of the railroad tracks that parallel Arroyo Las Posas (The study area also includes the northern edge of riparian

habitat along Arroyo Las Posas. None of the project alternatives would directly impact Arroyo Las Posas; however, a portion of the Arroyo was included in the study area to account for indirect impacts of the Somis Bypass-Alternative 5, which would parallel the railroad tracks.



**Figure 6: Aerial map of surveyed drainages within the project limits**

*Drainage 1 (Coyote Canyon Creek)*

Drainage 1 is a north-south drainage adjacent to Donlon Road from SR-118 upstream approximately 800 feet to a debris basin. This area is comprised primarily of gum trees (*Eucalyptus* spp.) with no appreciable understory habitat. This segment of the drainage was dry throughout the surveys. It is an ephemeral drainage. Coyote Canyon vegetation along Donlon Road consists of mostly exotics with some natives and fruit trees mixed in. Natives include willows (*Salix* spp) in the tree stratum and salt bush (*Atriplex californica*) and coyote brush (*Baccharis pilularis*) in the shrub stratum. Non native and invasives consist of black locust (*Robinia pseudoacacia*), Avocado (*Persea Americana*), Cherry tree spp (*Prunus* spp) and Peruvian pepper (*Schinus molle*), Cape ivy (*Delairea odorata Lem.*), Blue gum Eucalyptus (*Eucalyptus globulus*), Thistle spp, Castor beans, Tree tobacco. Please refer to the vegetation map appendix J. The plant species that were identified in the project area are listed in Table 2

Directly adjacent to the location where Drainage 1 crosses under SR-118, there are few willows (*Salix* spp.) and Mexican elderberry (*Sambucus mexicana*); however, these species are limited to the portion of the drainage directly adjacent to SR-118. This segment of Drainage 1 was also typically dry during the surveys. Drainage 1 continues south of SR-118 and east of SR-34 through agricultural fields for

approximately 2,700 linear feet where it joins with Drainage 3 located north of the railroad tracks. This segment of Drainage 1 is dominated by gum trees with an understory of invasive species, including greater periwinkle (*Vinca major*), German ivy (*Senecio mikanioides*), and castor bean; some (native) hoary nettle (*Urtica dioica*) also occurs. Most of this segment contains slowly flowing water and pools, which likely consisted of runoff from the adjacent agricultural fields.

#### *Drainage 2*

Drainage 2 is a north-south drainage located 2,400 feet east of Donlon Road. This drainage extends from SR-118 downstream approximately 1,500 feet to its confluence with Drainage 3 north of the railroad tracks. Drainage 2 is a windrow of gum trees through an agricultural field. The understory of this narrow drainage was dominated by cattails (*Typha* sp.) and poison hemlock (*Conium maculatum*) with other ruderal (weedy) species also occurring. Drainage 2 generally contained standing water along much of the drainage.

#### *Drainage 3*

Drainage 3 is an east-west drainage located north of the railroad tracks. The study area begins at Drainage 3's confluence with Drainage 2 (described above) and continues for approximately 2,300 feet southwest along Drainage 3 (i.e., where riparian habitat ends). Drainage 3 consists of dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock, castor bean, and hoary nettle. Other species commonly occurring along this drainage include coyote brush, Mexican elderberry, California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. Patches of giant reed (GR) [*Arundo donax*] are also present. The water in the channel is mainly farmland runoff.

#### *Arroyo Las Posas*

The study area also includes the northern edge of riparian habitat along Arroyo Las Posas. None of the project alternatives would directly impact Arroyo Las Posas; however, a portion of the arroyo was included in the study area to account for indirect impacts of the Somis Bypass-Alternative 5, which would parallel the railroad tracks. The study area includes the Arroyo Las Posas from approximately 975 feet northeast of Drainage 2 (described above) downstream to 2,300 feet southwest of Drainage 2. The Arroyo Las Posas consists of an extensive willow riparian forest dominated by arroyo willow and black willow (*Salix gooddingii*), with narrow-leaved willow (*Salix exigua*) and giant reed also commonly occurring. The study area only includes the northern edge of riparian habitat, which was adjacent to a horse stable, a nursery, and the railroad tracks.

Site photos showing representative views of each drainage in the study area are included in Appendix A.

During several surveys of the project area, actual sightings of some species occurred. A list of these species is included in Table 2 below.

<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>
<b><u>INSECTS</u></b>	<b><u>INSECTA</u></b>
<b>BUTTERFLIES</b>	<b>NYMPHALIDAE</b>
Monarch butterfly	<i>Danaus plexippus</i>
<b><u>MAMMALS</u></b>	<b><u>MAMMALIA</u></b>
<b>HARES &amp; RABBITS</b>	<b>LEPORIDAE</b>
Desert cottontail	<i>Sylvilagus audubonii</i>
<b>SQUIRRELS</b>	<b>SCIURIDAE</b>
California ground squirrel	<i>Spermophilus beecheyi</i>
<b>MICE, RATS, &amp; VOLES</b>	<b>MURIDAE</b>
Desert woodrat	<i>Neotoma lepida</i>
<b>POCKET GOPHERS</b>	<b>GEOMYDAE</b>
Botta's pocket gopher	<i>Thomomys bottae</i>
<b>WOLVES &amp; FOXES</b>	<b>CANIDAE</b>
Coyote	<i>Canis latrans</i>
<b>RACCOONS</b>	<b>PROCYONIDAE</b>
Common raccoon	<i>Procyon lotor</i>
<b><u>REPTILES</u></b>	<b><u>REPTILIA</u></b>
<b>PHRYNOSOMATIDAE</b>	<b>PHRYNOSOMATIDAE-ZEBRA-TAILED,</b>
Western Fence lizard	<i>Sceloporus occidentalis</i>
Side-blotched lizard	<i>Uta stansburiana</i>
<b>ALLIGATOR LIZARDS</b>	<b>ANGUIDAE</b>
Southern Alligator Lizard	<i>Elgaria multicarinata</i>
<b>COLUBRID SNAKES</b>	<b>COLUBRIDAE</b>
Gopher snake	<i>Pituophis catenifer</i>
<b><u>AMPHIBIANS</u></b>	<b><u>AMPHIBIA</u></b>
<b>TRUE TOADS</b>	<b>BUFONIDAE</b>

Western Toad	<i>Bufo boreas</i>
<b>TREEFROGS</b>	<b><i>HYLIDAE</i></b>
Pacific chorus frog	<i>Pseudacris (Hyla) regilla</i>
<b>TRUE FROGS</b>	<b><i>RANIDAE</i></b>
Bullfrog	<i>Rana catesbeiana</i> *
<b><u>CLAWED FROGS</u></b>	<b><u><i>XENOPUS</i></u></b>
African clawed frog	<i>Xenopus laevis</i> *
<b><u>SLENDER SALAMANDERS</u></b>	<b><u><i>BATRACHOCEPS</i></u></b>
Black-bellied slender salamander	<i>Batrachoceps nigriventris</i>
<b><u>CRUSTACEANS</u></b>	
<b><u>FRESHWATER CRAYFISH</u></b>	
Red-Swamp crayfish	<i>Procambarus clarkii</i>
<b><u>Fish</u></b>	<b><u><i>Piscium</i></u></b>
Arroyo-Chub	<i>Gila orcutti</i>
Western mosquitofish	<i>Gambusia affinis</i> *
<b><u>BIRDS</u></b>	<b><u><i>AVES</i></u></b>
<b><u>WATERFOUL</u></b>	<b><u><i>ANATIDAE</i></u></b>
Mallard	<i>Anas platyrhynchos</i>
<b><u>QUAILS</u></b>	<b><u><i>ODONTOPHORIDAE</i></u></b>
California quail	<i>Callipepla californica</i>
<b><u>VULTURES</u></b>	<b><u><i>CATHARTIDAE</i></u></b>
Turkey vulture	<i>Cathartes aura</i>
<b><u>CORMORANTS</u></b>	<b><u><i>PHALACROCORACIDAE</i></u></b>
Double-crested cormorant	<i>Phalacrocorax auritus</i>
<b><u>HERONS, BITTERNs, &amp; ALLIES</u></b>	<b><u><i>ARDEIDAE</i></u></b>
Great blue heron	<i>Ardea Herodias</i>
Green heron	<i>Butorides virescens</i>
Black-crowned night-heron	<i>Nycticorax nycticorax</i>

<b>HAWKS, KITES, EAGLES, &amp; ALLIES</b>	<b>ACCIPITRIDAE</b>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
<b>PLOVERS</b>	<b>CHARADRIIDAE</b>
Killdeer	<i>Charadrius vociferus</i>
<b>PIGEONS &amp; DOVES</b>	<b>COLUMBIDAE</b>
Rock pigeon*	<i>Columba livia</i>
Mourning dove	<i>Zenaida macroura</i>
Common ground-dove	<i>Columbina passerina</i>
<b>TRUE OWLS</b>	<b>STRIGIDAE</b>
Great horned owl	<i>Bubo virginianus</i>
<b>HUMMINGBIRDS</b>	<b>TROCHILIDAE</b>
Anna's hummingbird	<i>Calypte anna</i>
<b>WOODPECKERS</b>	<b>PICIDAE</b>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Downy woodpecker	<i>Picoides pubescens</i>
<b>TYRANT FLYCATCHERS</b>	<b>TYRANNIDAE</b>
Pacific-slope flycatcher	<i>Empidonax difficilis</i>
Black phoebe	<i>Sayornis nigricans</i>
Cassin's kingbird	<i>Tyrannus vociferans</i>
Say's phoebe	<i>Sayornis saya</i>
Western kingbird	<i>Tyrannus verticalis</i>
<b>VIREOS</b>	<b>VIREONIDAE</b>
Least Bell's vireo	<i>Vireo bellii pusillus</i>
<b>CROWS &amp; JAYS</b>	<b>CORVIDAE</b>
Western scrub-jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
Common raven	<i>Corvus corax</i>
<b>SWALLOWS</b>	<b>HIRUNDINIDAE</b>

Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Barn swallow	<i>Hirundo rustica</i>
<b>BUSHTITS</b>	<b>AEGITHALIDAE</b>
Bushtit	<i>Psaltriparus minimus</i>
<b>WRENS</b>	<b>TROGLODYTIDAE</b>
Bewick's wren	<i>Thryomanes bewickii</i>
<b>SYLVIID WARBLERS</b>	<b>SYLVIIDAE</b>
Wrentit	<i>Chamaea fasciata</i>
<b>THRUSHES &amp; ROBINS</b>	<b>TURDIDAE</b>
Swainson's thrush	<i>Catharus ustulatus</i>
Western bluebird	<i>Sialia mexicana</i>
<b>THRASHERS</b>	<b>MIMIDAE</b>
Northern mockingbird	<i>Mimus polyglottos</i>
California thrasher	<i>Toxostoma redivivum</i>
<b>STARLINGS</b>	<b>STURNIDAE</b>
European starling*	<i>Sturnus vulgaris</i>
<b>WARBLERS</b>	<b>PARULIDAE</b>
Orange-crowned warbler	<i>Oreothlypis [Vermivora] celata</i>
Yellow warbler	<i>Dendroica petechia</i>
Common yellow throat	<i>Geothlypis trichas</i>
Wilson's warbler	<i>Wilsonia pusilla</i>
Yellow-breasted chat	<i>Icteria virens</i>
Townsend's warbler	<i>Dendroica townsendi</i>
Yellow-rumped warbler	<i>Dendroica coronata</i>
<b>SPARROWS &amp; JUNCOS</b>	<b>EMBERIZIDAE</b>
Spotted towhee	<i>Pipilo maculatus</i>
California towhee	<i>Melospiza [Pipilo] crissalis</i>
Song sparrow	<i>Melospiza melodia</i>

White-crowned sparrow	<i>Zonotrichia leucophrys</i>
<b>CARDINALS &amp; ALLIES</b>	<b>CARDINALIDAE</b>
Western tanager	<i>Piranga ludoviciana</i>
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>
<b>BLACKBIRDS</b>	<b>ICTERIDAE</b>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Bullock's oriole	<i>Icterus bullockii</i>
<b>FINCHES</b>	<b>FRINGILLIDAE</b>
House finch	<i>Carpodacus mexicanus</i>
Lesser goldfinch	<i>Spinus [Carduelis] psaltria</i>
American goldfinch	<i>Spinus [Carduelis] tristis</i>
<b>OLD WORLD SPARROWS</b>	<b>PASSERIDAE</b>
House sparrow *	<i>Passer domesticus</i>
<b>MANNIKINS</b>	<b>ESTRILDIDAE</b>
Nutmeg mannikin*	<i>Lonchura punctulata</i>
Tricoloured munia	<i>Lonchura Malacca</i>
<b>WATER KINGFISHERS</b>	<b>CERYLIDAE</b>
Belted kingfisher	<i>Ceryle alcyon</i>

**Table 2: Animal Species List within the BSA.**

\* Introduced species

### 3.4. Regional Species and Habitats of Concern

The following table lists the regional sensitive species that were identified using the California Natural Diversity Database (CNDDB) for the following quads: Santa Paula, Camarillo, Newbury Park, and Moorpark. Further evaluation of species that may have habitat present in the project area is discussed in the following chapter.

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Scientific Name	Common Name	Status	Habitat Description	Habitat Present/Absent	Rationale
<i>Actinemys marmorata pallida</i>	Southwestern pond turtle	SSC	Ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation below.	P (Alt 5)	This species is known to occur in the Conejo creek 2.1 miles south of the project area. It was not observed during general surveys. More surveys are to be conducted prior to the construction.
<i>Antrozous pallidus</i>	Pallid bat	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	A	The habitat within the project limits is not suitable for this species.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	CNPS 1B.2	Rocky and sandy sites, usually of granitic or alluvial material.	A	The habitat within the project limits is not suitable for this species.
<i>Centromadia parryi ssp. Australis</i>	Southern tarplant	CNPS 1B.1	Marshes and swamps (Margins), valley and foothill grassland. Near the coast at marsh edges, alkaline soils, vernal pools margins.	A	The habitat within the project limits is not suitable for this species.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FC, SE	Riparian forest nester along the broad lower flood bottoms of larger river systems.	A	The habitat within the project limits is not suitable for this species. The habitat to the south of Alternative 5 across the railroad is suitable for this species. However, this species was not observed during conducted focused surveys.
<i>Delphinium parryi ssp. blochmaniae</i>	Dune larkspur	CNPS 1B.2	Chaparral, coastal dunes on rocky areas and dunes.	A	The habitat within the project limits is not suitable for this species.
<i>Dudleya blochmaniae ssp. Blochmaniae</i>	Blochman's dudleya	CNPS 1B.1	Coastal scrub, coastal bluff scrub, valley and foothill grassland.	A	The habitat within the project limits is not suitable for this species
<i>Dudleya cymosa ssp. Marcescens</i>	Marcescent dudleya	FT, SR, CNPS 1B.2	Chaparral, on sheer rock surfaces and rocky volcanic cliffs.	A	The habitat within the project limits is not suitable for this species.

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<i>Dudleya parva</i>	Conejo dudleya	FT, CNPS 1B.2	Coastal scrub, valley and foothill grassland.	A	The habitat within the project limits is not suitable for this species.
<i>Dudleya verityi</i>	Verity's dudleya	FT, CNPS 1B.2	Chaparral, cirmontane woodland, coastal scrub.	A	The habitat within the project limits is not suitable for this species.
<i>Elanus leucurus</i>	White-tailed kite	FP	Rolling Foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	A	The habitat within the project limits is not suitable for this species.
<i>Empidonax trillii extimus</i>	Southwestern willow flycatcher	FE, SE	Riparian woodlands in Southern California.	P (Alt 5)	The CNDDDB occurrence is 6.6 miles N45W. This species was not observed during focused surveys. Consultation with USFWS determined no need for further surveys for this species.
<i>Eremophila alpestris actia</i>	California horned lark	WL	Coastal regions, short grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	A	The habitat within the project limits is not suitable for this species.
<i>Eriogonum crocatum</i>	Conejo buckwheat	SR, CNPS 1B.2	Chaparral, coastal scrub, valley and foothill grassland.	A	The habitat within the project limits is not suitable for this species.
<i>Gila orcutti</i>	Arroyo chub	SSC	Los Angeles basin south coastal streams. Slow water streams sections with mud or sand bottoms.	P (Alt 5)	This species is known to be present in Conejo Creek, 2.9 miles south of the impact area. It was observed during focused surveys along a portion of the channel (Drainage 2 along Alternative 5). Please refer to Exhibit A3-Appendix G. The potential of this species to occur along the other portion of the channel (Drainage 3 along Alternative 5) is ruled out due to the presence of predators (red-swamp crayfish, ( <i>Procambarus clarkii</i> ), mosquitofish ( <i>Gambusia affinis</i> ), and American bullfrog ( <i>Rana catesbeiana</i> )).
<i>Taxidea taxus</i>	American Badger	SSC	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	A	The habitat within the project limits is not suitable for this species.

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<i>Spea Hammondii</i>	Western spadefoot	SSC	Grassland habitat, valley-foothill, hardwood woodlands.	A	The habitat within the project limits is not suitable for this species.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	A	This species is known to be present 4.6 miles west of the project impact area. It was not observed during focused surveys. More surveys are to be conducted prior to the construction. Dens observed in project vicinity. If needed, relocation will occur prior to construction.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	FE, SE, CNPS 1B.1	Chaparral, Valley and foothill grassland.	A	The habitat within the project limits is not suitable for this species.
<i>Poliopitila californica californica</i>	Coastal California gnatcatcher	FT, SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in southern California.	A	The habitat within the project limits is not suitable for this species.
<i>Senecio aphanactis</i>	Chaparral ragwort	CNPS 2.2	Cismontane woodland, coastal scrub, drying alkaline flats.	A	The habitat within the project limits is not suitable for this species.
<i>Texosporium sancti-jacobi</i>	Woven-spored lichen	CDFG S1.1	Chaparral, open sites in California with Adenostoma Fassiculatum, Eriogonum, Selainella. At pinnacles on small mammal pellets.	A	The habitat within the project limits is not suitable for this species.
<i>Thamnophis hammondii</i>	Two-striped garter snake	SSC	Coastal California. Highly aquatic, found in or near permanent fresh water. Often along the streams with rocky beds and riparian growth.	P (Alt 5)	This species is known to be present in Conejo Creek, 3.5 miles south of the impact area. It was not observed during focused surveys. More surveys are to be conducted prior to the construction (Alt 5).
<i>Trimerotropis occidentiloides</i>	Santa Monica grasshopper	S1S2	Bare hillsides and along dirt trails in Chaparral.	A	The habitat within the project limits is not suitable for this species.

<i>Vireo bellii pusillus</i>	Least Bell's	FE, SE, USFWS BCC	(Nesting) Summer resident of Southern Ca. in low riparian in vicinity of water or in dry river bottoms below 2000 ft.	P (Alt 5)	Focused surveys revealed the presence of two territories along alt 5 within Arroyo las Posas. Please refer to Appendix E. The CNDDDB occurrence is 6.768 miles N75W
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**Table3: Regional Listed and Proposed Species**

Absent [A] means no further work needed. Present [P] means general habitat is present and species may be present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC); State Endangered (SE); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS); U.S. Fish and Wildlife Services (USFWS); Department of Fish and Game (CDFG), Alternative 5 (Alt 5).

## Chapter 4. Results: Biological Resources, Discussion of Impacts and Mitigation

### 4.1. Natural Communities of Special Concern

The California Natural Diversity Database (CNDDDB) for the following quads: Santa Paula, Camarillo, Newbury Park, and Moorpark, revealed the following natural communities: Southern Coast Live Oak Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Riparian Scrub, Southern Willow Scrub, valley needlegrass grassland and Valley Oak Woodland. The field surveys revealed the finding of one natural community, Southern Willow Scrub within the project BSA.

### 4.2. Discussion of Southern Willow Scrub

The Southern Willow Scrub is a native plant community of concern that is listed in the Natural Diversity Database as occurring adjacent to the project area. This plant community generally exists within loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. This early seral type requires repeated flooding.

#### 4.2.1. Survey Results

Several surveys of the man made channel, Drainage 3 and within the project footprint to the south of SR-118, were conducted. This channel joins a natural ephemeral stream. The man made channel contains dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock, castor bean, and hoary nettle. Other species commonly occurring along this drainage include coyote brush (*Baccharis pilularis*), Mexican elderberry

(*Sambucus Mexicana*), California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. Patches of giant reed are also present.

#### **4.2.2. Avoidance and Minimization Efforts**

The removal of the riparian habitat will be avoided to the greatest extent possible. However, should it be necessary to remove riparian trees for the construction of the project, the number of trees removed will be minimized to the least amount necessary.

#### **4.2.3. Project Impacts**

Impacts to southern willow scrub as a result of this project will be limited to the area south of SR-118, Alt 5. Alt 5 will result in a longitudinal encroachment to a riparian community. The length of the riparian community is approximately 17000 ft and composed of dense vegetation, where the dominant species is willows sp..

#### **4.2.4. Compensatory Mitigation**

Should the removal of trees be necessary due to the SR-118/34 Interchange Project the loss will be mitigated through replacement. Due to the relatively high value that trees in the project footprint provide, any trees removed are proposed to be replaced at a 3 to 1 ratio. Mitigation measures can include, but are not limited to enhancement. Enhancement can be done by removing the invasive species at Coyote Canyon Creek area and subsequent willow plantings. Based on the total acreage of southern willow scrub impacted and the availability of on-site locations, favorable areas within the ROW will be selected by the District Biologist and Landscape Architect. Any required replacement beyond the space available in the ROW will be planted off-site, in coordination with an agency or organization that has yet to be determined.

#### **4.2.5. Cumulative Impacts**

Impacts from Alternatives 5 to the southern willow scrub community will be limited to the area south of SR-118. The proposed project is not anticipated to contribute to cumulative impacts to this plant community for this area. No future projects are anticipated to impact scrub in the area.

### **4.3. Special Status Animal Species Occurrences**

Special status animal species that were listed in the CNDDDB or U.S. Fish and Wildlife Service species list, including Least Bell's Vireo, San Diego Desert Woodrat (*Neotoma lepida intermedia*), Two-striped snake (*Thamnophis hammondi*), Arroyo chub (*Gila orcutti*), Southwestern pond turtle (*Actinemys marmorata pallid*),

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), as well as species identified by the Ventura Audubon Society as having an historic presence in the area, and species identified by SOS were further studied to determine the potential impacts that the project may have and are discussed below.

#### 4.3.1. Discussion of Least Bell's Vireo

Least Bell's (*bellii pusilus*) vireo is a state and federally endangered species. These birds are small, measuring only 4.5 to 5.0 inches long (11.3-12.7 cm). They have short rounded wings, short straight bills and have a faint white eye ring. The feathers of this vireo are mostly grey above and pale below. Least Bell's are typically found in the dense deciduous shrubs along riparian habitats as well as in ravines and along forest edges. The range of the least Bell's Vireo is along the southern coastal areas of California as well as parts of Colorado, Indiana and Mexico. This species is threatened by brown-headed cowbird (*Molothrus ater*) parasitism, habitat degradation and increases in agricultural land uses. The least Bell's vireo was formerly more common and widespread, but is now a rare, local summer resident of Southern California's lowland riparian woodlands. As a result, the least Bell's vireo was listed by the California Department of Fish and Game (CDFG) as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986.

##### 4.3.1.1. SURVEY RESULTS

A search of the CNDDDB revealed an occurrence of this species in 1991 within Santa Clara River southwest of Santa Paula. The breeding habitat of the least Bell's vireo is primarily riparian dominated by willows with dense understory vegetation; shrubs such as mule fat and California rose (*Rosa californica*) are often a component of the understory. The least Bell's vireo is often found in areas that include trees such as willow, western sycamore (*Platanus racemosa*), or cottonwood (*Populus* sp.) particularly where the canopy is within or immediately adjacent to an understory layer of vegetation. The least Bell's vireo generally nests in early successional stages of riparian habitats, with nest sites frequently located in willows that are between four and ten years of age. The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two to ten feet above ground. The survey area is not located in the designated critical habitat area for this species. The USFWS protocol for the least Bell's vireo requires that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. BonTerra Consulting Senior Biologist, Amber Oneal, conducted surveys on April 30; May 10 and 26; June 7, 17, and 28; and July 8, and 19, 2010. All surveys were conducted under optimal weather conditions. Please refer to Appendix E.

A total of three least Bell's vireo territories were observed in the study area along Drainage 3 (Alt5) and the Arroyo Las Posas (Exhibit 3-Appendix E). Two territories were located along Drainage 3 north of the railroad tracks; however, the vireos at both these territories were observed crossing the railroad tracks and also using habitat within the Arroyo Las Posas. A third territory was located within the Arroyo Las

Posas; this pair was also observed crossing the railroad tracks to use habitat along Drainage 3.

#### **4.3.1.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The territories of LBV were detected along one of the four proposed alternatives for this project. Two of the territories are located within Alternative 5. Avoiding or minimizing impacts on southern willow scrub (along Drainage 3) and willow riparian forest (along the Arroyo Las Posas) to the extent practicable, will reduce the impacts to the LBV. Any riparian vegetation that would be impacted should be removed outside the vireo nesting season (March 15 to September 15). Construction noise within 500 feet of vireo habitat (Drainage 3 and Arroyo Las Posas) should be minimized during the vireo nesting season (March 15 to September 15). Typically, the resource agencies require that noise be less than 65 dba in the vicinity of territory. If construction noise would exceed this level during the nesting season, temporary sound walls or other noise minimization measures should be considered to reduce noise effects at the nest. Brown-headed cowbird trapping should be considered as a possible mitigation measure. Brown-headed cowbirds were abundant in the study area throughout the LBV survey period. A successful brown-headed cowbird trapping program should reduce the nest parasitism by this species, and should increase the nest success of vireo and other riparian birds, including special status species such as yellow-breasted chat and yellow warbler. If Alternative 5 is dropped, no impacts to the LBV will result from the implementation of the project. The selection of Alternative 5 will lead to the need for Section 7 Formal Consultation.

#### **4.3.1.3. PROJECT IMPACTS**

The implementation of Alternative 5 will result in a permanent impact to a portion of LBV habitat. There will be a temporary, but substantial increase in noise levels during the construction phase of this project associated with pile driving and other high noise signature equipment. A permanent increase overall from post construction traffic noise would be expected and will likely cause a degradation in functionality of a portion of Las Posas Creek. Brood parasitism would likely increase along with this degradation.

#### **4.3.1.4. COMPENSATORY MITIGATION**

Compensatory mitigation measures should be adopted according to the CDFG and USFWS guidelines. Caltrans will conduct trapping of the brown-headed cowbird in the project area. Alternative 5 will require off site mitigation to compensate for the LBV habitat loss. This will be at a ratio greater than 1:1 after consultation with USFWS and CDFG.

#### **4.3.1.5. CUMULATIVE EFFECTS**

The project will result in direct impact along Alternative 5 to Drainage 3. The

fragmentation of LBV habitat along alt 5 will result in cumulative effect on the LBV nesting and foraging sites.

#### **4.3.2. Discussion of San Diego Desert Woodrat (*Neotoma lepida intermedia*)**

The San Diego Desert Woodrat (*Neotoma lepida intermedia*) is a California species of special concern (CDFG-SSC). The Desert Woodrat is a total length of approximately 282-305 mm (11.3-12.2 inches). It is a pale gray with light undersides, with the fur on the throat region gray at its base; the tail is distinctly bicolored. Woodrats are generally nocturnal. They frequently carry small items in their mouths, including typical campsite trash, and much of this is added to their houses. The presence of woodrat is usually obvious by the large houses built from sticks, twigs, cacti, horse and cow manure, and other bits of plant materials and man-made debris. These houses are above ground, frequently beneath a rock outcrop, in a rock pile, partially under a shrub or within a large branching prickly pear cactus, or at the center of agave patches. The San Diego Desert Woodrat habitat consists of Coastal Sage Scrub and ranges from San Diego County to San Luis Obispo County. They prefer moderate to dense canopies. They are particularly abundant in rock outcrops and rocky cliffs and slopes. They eat a variety of buds, fruits, seeds, bark, and leaves. In desert habitats, the Desert Woodrat feeds on creosote, cholla and prickly pear. These desert animals do not need to drink water but require quantities of succulent vegetation including the prickly pear cactus and agave for moisture. The distribution of these plants may determine the woodrat range. The cactus spines and partially eaten cacti litter the entrance of their houses.

##### **4.3.2.1. SURVEY RESULTS**

A search of the CNDDDB did not reveal any historic occurrences of this species within the project impact area, but there was a recent occurrence of this species (1992) 4.6 miles west of the project impact area. A preliminary focused survey revealed suitable habitat at the northern and southern points of the project area. Additional pre construction surveys are to be conducted.

Desert woodrat dens are prevalent in the project area. On December 9, 2009, a desert woodrat nest was found within the project area, but outside of the project impact area. The woodrat nest was large and constructed with sticks. The exact location is along Donlon Road, east of the electrical pole # Z258543. On February 4, 2010, other woodrat nests were spotted inside the Coyote Canyon Creek area. As a result of the VCPWA project, the realignment of Donlon Rd. is no longer a part of the proposed project, and Caltrans project might result in no impact to the woodrat sp. in Coyote Canyon Creek. During the consultant CRLF protocol surveys, many woodrat houses were found along the drainages in the south side of the project vicinity which fall within the impact area of Alternative 5. (Please refer to appendix A for site photos).

#### **4.3.2.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The avoidance and the minimization measures will include pre-construction surveys. If the San Diego Desert Woodrat is determined to be present within the project impact area, passive translocation will be employed. The passive translocation technique will be used in accordance to the guidelines outlined by the Department of Fish and Game.

#### **4.3.2.3. PROJECT IMPACTS**

San Diego desert woodrat (*Neotoma lepida intermedia*) is listed as a Species of Special Concern by California Fish and Game. Desert woodrats are vulnerable to predation by coyotes, raccoons, owls, gopher, rattlesnakes, and hawks. Populations may be impacted by habitat loss to agricultural and urban development, isolation and fragmentation of habitats, and wildfires, especially in cactus areas. As estimated 30 percent of desert woodrat habitat was lost in the 2004 San Diego County wildfires. The San Diego Desert Woodrat potential habitat is located directly in the path of the proposed Alternative 5. The implementation of Alternative 5 will result in a temporary impact during the construction period and permanent impact due to habitat loss along the drainages that fall within this alternative.

#### **4.3.2.4. COMPENSATORY MITIGATION**

Presence of San Diego Desert Woodrat was not determined within the project site, therefore compensatory mitigation is not required. However if San Diego Woodrat are found prior to construction, mitigation will be required according to CDFG guidelines. Woodrat dens are prevalent in the project area. If any dens are determined to be impacted due to the project implementation, avoidance and minimization measures will include relocation of woodrat dens during the construction of the project

#### **4.3.2.5. CUMULATIVE EFFECTS**

The VCPWA project implementation will result in impacts to the woodrat habitat along Drainage 1 in Donlon Road area. Caltrans project, along alternative 5 will result in cumulative permanent impacts to the woodrat species in the project vicinity.

#### **4.3.3. Discussion of Two-striped snake (*Thamnophis hammondi*)**

The Two-striped garter snake is highly aquatic, found in or near fresh water. often along streams with rocky beds and riparian growth. It is generally found around pools, creeks, cattle tanks, and other water resources. The Two-striped garter snake (*Thamnophis hammondi ssp*) is a California Species of Special Concern, and a federal Sensitive Species. The Two-Striped Garter Snake eats tadpoles, newt larvae, small frogs and toads, fish, and occasionally worms and fish eggs. It forages for food

in and under water. This snake is primarily aquatic and diurnal. It is also active at night and at dusk during hot weather in some areas. It can be active from January to November depending on weather conditions. The typical size of the Two-striped garter snake is 24-40 inches long (61-102 cm), though more often 18-30 inches long (46-76 cm). Its range is from near Salinas in Monterey County south along the coast mostly west of the south Coast Ranges, to southern California where it ranges east through the Transverse Ranges (and into the desert in Victorville) and south through the Peninsular Ranges into northern Baja California. It occurs in southern Baja in isolated areas, as well as on Catalina Island, at elevations from sea level to 6,988 ft. (2130 m).

#### **4.3.3.1. SURVEY RESULTS**

A search of the CNDDDB did not reveal any historic occurrences of this species within the project impact area. This species is known to be present in Conejo Creek, 3.5 miles south of the impact area. They are found in Coastal California. It was not observed during focused surveys. More surveys are to be conducted prior to the construction along Alternative 5, if that alternative is selected.

#### **4.3.3.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The avoidance and the minimization measures will include pre-construction surveys along Alternative 5. If the Two striped garter snake is determined to be present within the project impact area, CDFG will be notified, and passive translocation will be employed as an option. The passive translocation technique will be used in accordance to the guidelines outlined by CDFG.

#### **4.3.3.3. PROJECT IMPACTS**

The Two-striped garter snake is a California Species of Special Concern, and a federal Sensitive Species. The two-striped garter snake is now common only in eastern San Diego County. Populations have been affected by the elimination of natural sloughs and marshy areas, loss of riparian habitat through agricultural practices and urban development, predation by introduced bullfrogs, fishes, and feral pigs, and loss of amphibian prey. The loss of wetland habitats have contributed to a reduction in the range of this snake.

The Two striped garter snake potential habitat is located directly in the path of the proposed Alternative 5. The implementation of Alternative 5 will result in a permanent impact, that will be mitigated by the construction of another channel located to the north of the existing one. The impact during construction phase will be minimized by coordination with the Department of Fish and Game.

#### **4.3.3.4. COMPENSATORY MITIGATION**

Presence of Two striped garter snake was not determined within the project site,

therefore compensatory mitigation is not required. However, if Two striped garter snake is found prior to construction, mitigation will be required according to CDFG guidelines. The impact resulting from the implementation of Alternative 5 will be compensated through the replacement of the existing dredged channel with another channel located to its north.

#### **4.3.3.5. CUMULATIVE EFFECTS**

Because no permanent impact to this species are anticipated due to absence from the project area (with the exception of Alternative 5) and no future projects in this location are anticipated, there will be no cumulative effects to the Two striped garter snake as a result of this project.

#### **4.3.4. Discussion of Monarch (*Danaus plexippus plexippus*)**

The Monarch (*Danaus plexippus plexippus*) is not a State or Federal endangered species. In Ventura County, the recorded occurrences are located about 17 mile west of the project location, in Saticoy and Ventura quads. However, special attention was given to this species in order to address the concerns of Somis Community. Monarchs are especially noted for their lengthy annual migration. In North America they make massive southward migrations starting in August until the first frost. A northward migration takes place in the spring. By the end of October, the population east of the Rocky Mountains migrates to the sanctuaries of the Mariposa Monarca Biosphere Reserve in the Mexican states of Michoacán and México. The western population overwinters in various sites in central coastal and southern California, notably in Pacific Grove and Santa Cruz. Monarch butterflies are poisonous or distasteful to birds because of milkweed poison stored by the caterpillar stage; their habitat consists of milkweed, eucalyptus and oyamel fir tree. Its wings feature an easily recognizable orange and black pattern, with a wingspan of 8.9–10.2 centimetres (3½–4 in).

##### **4.3.4.1. SURVEY RESULTS**

A search of the CNDDDB did not reveal any historic occurrences of this species within the project area. No occurrences were reported in the project quad (Moorpark) nor its adjacent quads (Santa Paula, Camarillo and Newbury Park). In Los Angeles County they are located in the Santa Monica Mountains, at Ballona Creek, in the city of Santa Monica, on the Palos Verdes Peninsulas and in Ventura County, they are located 17 miles west of the project location, in Saticoy and Ventura quads in Ventura county. Somis residents are concerned about the project impacts on the Eucalyptus trees (windbreak) along Donlon Road to the northern side of the project. According to the Somis Community, these previously mentioned trees provide a habitat for the Monarch Butterfly. Another windbreak eucalyptus tree population is located within the project footprint area, 2,400 feet east of Donlon Road. For two consecutive years surveys were conducted along the previously mentioned two locations, in order to address the Somis Community concerns. Surveys were conducted in the early cold mornings (40°F to 65°F) between the months of October and March. No Monarch

butterfly population was detected. However, on 12-18-2008 one female Monarch Butterfly (*Danaus plexippus*) was detected along Donlon Road on a cut trunk of a eucalyptus tree. On that day all Eucalyptus trees were surveyed closely, but no evidence of Monarch Butterflies roosting in the eucalyptus trees along Donlon Road was detected. The eucalyptus windbreak trees along Donlon Road do not provide a roosting site for the Monarch since the milkweed, the Monarch hosting plant is not located adjacent or within the project area. Since the Ventura County Public Works Agency (VCPWA) intends to realign Donlon Rd. separately from the proposed project, the realignment of Donlon Rd. is no longer a part of the proposed project and the windbreak eucalyptus trees along Donlon Road will not be impacted by the Caltrans intersection improvement project.

#### **4.3.4.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The avoidance and the minimization measures will include pre-construction surveys. If required, removal of eucalyptus trees within the project area should be kept to its minimum and outside the migration season of the Monarch (October to March). The migration season period could vary depending on the winter season start.

#### **4.3.4.3. PROJECT IMPACTS**

Roads, commercial development, homes and farms can destroy important monarch habitat. Milkweed, their host plant is considered a weed by some people and is often destroyed. Many monarchs and other butterflies are killed by pesticides. Simple steps like planting milkweed and other important wildflowers and reducing herbicide and pesticide use helps monarchs. The project implementation will result in no impacts to the Monarch, since there was no evidence of Monarch roosting sites or host plants within the project area.

#### **4.3.4.4. COMPENSATORY MITIGATION**

Because impacts to this species are not expected and the adjacent habitat is plentiful, compensatory mitigation is not required.

#### **4.3.4.5. CUMULATIVE EFFECTS**

Since this species is not expected, except for occasional individual fly-over, there will be no cumulative effects.

#### **4.3.5. Discussion of the Arroyo Chub (*Gila orcuttii*)**

Arroyo chubs reach a size of 80-90 mm by their fourth year and rarely live longer than this. Females can reproduce at age one. Spawning takes place in pools and edge habitat from February to August with a peak in June and July. Several males may fertilize the eggs of one female. Fertilized eggs stick to plants or bottom substrate and

hatch in about 4 days. Fry stay on the substrate for a few days, then rise to the surface and stay among plants or other cover for 3 – 4 months.

Arroyo chub are small fish that can reach lengths of 120 mm SL but typical length are 70-100 mm. Males can be distinguished from females by their larger fins and, when breeding, by the prominent patch of tubercles on the upper surface of the pectoral fins (Tres 1992). Both sexes have chunky bodies, fairly large eyes, and small mouths. The pharyngeal teeth are hooked and closely spaced with a formula of 2, 5 and 4, 2, but may be variable. They have seven annal fin rays and 8 dorsal rays, gill rakers number 5-9. The lateral line is complete with 48-62 scales, extends to the caudal peduncle, and is not decurved. Body color is silver or grey to olive-green dorsally, white ventrally, and there usually is a dull grey lateral band (Moyle 1976).

Arroyo chub are adapted to survive in cool to warm (10 – 24°C) streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations associated with this flow regime. They are most common in slow flowing or backwater areas with sand or mud substrate, but may also inhabit areas with velocities in excess of 80 cm/s over coarse substrate. They feed on plants such as algae and water fern (Azolla), and on invertebrates such as insects and mollusks.

#### **4.3.5.1. SURVEY RESULTS**

The search of the CNDDDB did not reveal any historic occurrences of this species within the project impact area. This species is known to be present, 0.5 miles upstream from Calleguas Creek at the confluence with Conejo Creek and downstream from the project site, 9.27 miles south west of the impact area. It was observed during focused surveys in spring 2011 along the north-south drainage along Alternative 5. More surveys are to be conducted if Alternative 5 is selected.

#### **4.3.5.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The avoidance and the minimization measures will include pre-construction surveys, if Alternative 5 is selected, translocation will be employed. The translocation technique will be used in accordance to the guidelines outlined by the Department of Fish and Game. The selection of Alternatives other than Alternative 5 will result in full impact avoidance.

#### **4.3.5.3. PROJECT IMPACTS**

The Arroyo chub (*Gila orcutti*) is a California Species of Special Concern, and a federal Sensitive Species. Arroyo chub are native to the streams and rivers of the Los Angeles plain in southern California, including the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita Rivers, and Malibu and San Juan Creeks. They have been extirpated from much of their native range, but have been introduced to streams along the coast as far north as Chorro Creek in San Luis Obispo County.

They have also been introduced to the Mojave River system where they have eliminated the Mojave tui chub. The Arroyo chub potential habitat is located directly in the path of the proposed Alternative 5. Note that chub in the project area has been found in previously unrecorded habitat. The implementation of the previously mentioned alternative will result in permanent impact. The dredged channel where the Arroyo chub was observed, will be fully mitigated by another channel located to the east of the existing one. The permanent impact during construction will be coordinated with the Department of Fish and Game.

#### **4.3.5.4. COMPENSATORY MITIGATION**

Future re-evaluation of the project should consider any new occurrence information that may be available for this species. The permanent impact resulting from the implementation of Alternative 5 will be compensated through the replacement of the existing dredged channel with another channel located to its East.

#### **4.3.5.5. CUMULATIVE EFFECTS**

Because permanent impacts to this species are anticipated, for Alternative 5, they will be fully mitigated through the creation of an adjacent channel. No other projects are anticipated in the project area that will affect this species.

#### **4.3.6. Discussion of the California Red Legged Frog (*Rana draytonii*)**

The California red-legged frog ranges in size from 1.5 to 5.5 inches in length, making it the largest native frog in the Western United States (Wright and Wright 1949). Adult females are significantly longer than males, with an average snout to vent length (svl) of 5.4 inches versus 4.5 inches for adult males (Hayes and Miyamoto 1984). The hind legs and lower abdomen of adult frogs are often characterized by a reddish or salmon pink color, and the back is brown, gray, olive, or reddish brown and marked with small black flecks and larger irregular dark blotches (USFWS 2002; Stebbins 2003). Dorsal spots often have light centers, and in some individuals form a network of black lines (Stebbins 2003). Dorsolateral folds are prominent. Tadpoles range in length from 14 to 80 millimeters (mm), are a dark brown or olive, and are marked with darker spots (Storer 1925).

This species is found in humid forests, woodlands, grasslands, streams, wetlands, ponds, and lakes from sea level to 8,000 feet above mean sea level (msl) (Stebbins 2003). Preferred breeding habitat includes deep ponds and slow-moving streams where emergent vegetation is found on the bank edges (Jennings and Hayes 1994). Although primarily aquatic, it has been recorded in damp terrestrial places up to 302 feet from water for up to 50 consecutive days (Tatarian 2008) and using small mammal burrows and moist leaf litter as refugia during dry periods (Jennings and Hayes 1994b).

During the breeding season, typically from November through April, males call to females from the margins of ponds and slow streams (Jennings and Hayes 1994a). Actual mating most commonly occurs in March, but can vary depending on seasonal climatic patterns.

#### **4.3.6.1. SURVEY RESULTS**

The California red-legged frog is listed as a federally endangered species by the U.S. Fish and Wildlife Service (USFWS) as of May 23, 1996, and is considered a California Species of Special Concern. The search of the CNDDDB did not reveal any historic occurrences of this species within the project impact area. This species has been reported from San Antonio Creek, Matilija Creek, and Lion Creek near Ojai; Matilija Creek and Lower Rose Lake in the Los Padres National Forest; and Las Virgenes Creek in Agoura Hills (CDFG 2010). The nearest known locality is in the Las Virgenes Creek approximately 17 miles southeast of the study area.

The site assessment determined that portions of the project site provided potentially suitable breeding habitat for California red-legged frog and the entire project site provided potentially suitable foraging habitat. Along Alternative 5, lies 6.49 acres CRLF potential foraging habitat. Potential CRLF breeding and foraging habitat (0.09 acres) lies along the other alternatives. Surveys were conducted by Mr. Stewart and BonTerra Consulting Herpetologist Jason Mintzer according to the red-legged frog protocol (USFWS 2005) (Appendix G). A total of six surveys were conducted between March 8 and April 25, 2011. Nocturnal surveys were conducted during appropriate environmental conditions conducive to the activity patterns for the red-legged frog.

No red-legged frogs were observed during the focused amphibian surveys. More surveys are to be conducted prior to the project construction.

#### **4.3.6.2. AVOIDANCE AND MINIMIZATION EFFORTS**

The avoidance and the minimization measures will include pre-construction surveys. Depending on the results of the pre-construction surveys, translocation will be employed. The translocation technique will be used in accordance to the guidelines outlined by CDFG and USWS. The selection of Alternatives other than Alternative 5 will result in a minor permanent impact to the CRLF potential breeding and foraging habitat in the area contained to the south of the culvert located under the SR-118/34 intersection. Alternative 5 will result in a much larger habitat impact.

#### **4.3.6.3. PROJECT IMPACTS**

The site assessment determined that portions of the project site provided potentially suitable breeding habitat for California red-legged frog and the entire project site provided potentially suitable foraging habitat. No red-legged frogs were observed during the focused amphibian surveys. The potential foraging habitat lies all along

Alternative 5. The implementation of the previously mentioned alternative will result in permanent impact to the CRLF potential foraging habitat. The selection of Alternatives other than Alternative 5 will result in a minor permanent impact (0.09 acres) to the CRLF potential breeding and foraging habitat in the area contained to the south of the culvert located under the SR-118/34 intersection.

**4.3.6.4. COMPENSATORY MITIGATION**

Future re-evaluation of the project should consider any new occurrence information that may be available for this species. Because impacts to the potential and foraging habitats of CRLF are expected as a result of the project implementation, compensatory mitigation might be required with coordination with CDFG and USFWS.

**4.3.6.5. CUMULATIVE EFFECTS**

Because only minor permanent impact to this species are anticipated due to a small amount of habitat in the project area (with the exception of Alternative 5) and no future projects in this location are anticipated to result in any impact to the CRLF, there will be no cumulative effects to the California red legged frog as a result of this project.

## **Chapter 5. Results: Permits and Technical Studies for Special Laws or Conditions**

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### **5.1. Federal Endangered Species Act Consultation Summary**

Due to the presence of Least Bell's Vireo a federally endangered species consultation with Fish and Wild Service will be required for this project. A request for a species list was sent to the Fish and Wildlife Service on October 27, 2008. This request effectively starts the consultation process. Please refer to the attached list (Appendix C) of endangered, threatened, proposed, and candidate species provided by USFWS on December 9, 2008. Least Bell's Vireo protocol survey and the herpetology surveys were conducted in 2010. Results were sent to Steve Kirkland in USFWS. In February 2011, Steve Kirkland recommended conducting protocol surveys for Southwestern willow flycatcher (*Empidonax trillii extimus*) and California red-legged frog. In April 2011, after further discussion with Steve Kirkland, the need for SWWF was ruled out, and Steve Kirkland stated in an email dated 04/11/2011 at 10:58 a.m. "In retrospect, I don't think it's necessary to do the protocol SWWF surveys since the LBV protocol was completed and not even a migrant flycatcher was observed during those. It's likely they would have been detected if present". Please refer to the attached copy of the previously mentioned email. CRLF protocol surveys were conducted and results were shared with USFWS.

A Biological Assessment (BA) will be prepared and submitted to USFWS-Ventura Office, for concurrence. All Section 7 Consultation must be completed prior to the finalization of the environmental document. Section 7 Consultation is only anticipated to become formal with Alternative 5.

### **5.2. Wetlands and Other Waters Coordination Summary**

Coordination with the ACOE, RWQCB and CDFG was initiated on 09-10-2009. Veronica Chan (Project Manager, ACOE) is the contact for this project. The file # is 2009-00706-VC. Veronica Chan attended an onsite meeting with project district biologist on 1-26-2010. A wetland delineation was conducted in the project vicinity by BonTerra Consulting upon the recommendation of Veronica Chan. A jurisdictional delineation report was prepared. (Appendix I) It was concluded that the project will result in impacts to waters of the U.S. Therefore coordination with ACOE, RWQCB are anticipated.

A 1601 Streambed Alteration Agreement from the CDFG will be necessary since proposed construction activities will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake.

### **5.3. Invasive Species**

The Executive Order 13112 for Invasive Species (February 3, 1999) requires Federal agencies to work cooperatively to prevent and control the spread of invasive plants and animals. On August 10, 1999, FHWA issued implementing guidance on EO 13112. On October 22, 1999, Caltrans issued a memo to implement the FHWA guidance (found in SER Policy Memo Section). The guidance provides that a NEPA analysis for an action include an analysis of the probability of the action to cause or promote the introduction or spread of invasive species. If analysis indicates that disturbances caused by the action have the potential to promote the introduction or spread of invasive species, all feasible and prudent measures will be taken to minimize this likelihood. Mitigation measures will include onsite and offsite restoration. Onsite mitigation would include invasive control in Coyote Canyon, and a cowbird trapping program that will be beneficial for the riparian birds in the area.

### **5.4. Other**

Mitigation measures could include onsite and offsite restoration. Onsite mitigation could include invasive control within Coyote Canyon, as well as a cowbird trapping program along Alternative 5 that will benefit the Least bell's vireo and other riparian songbirds, and onsite vegetation replacement where space allows for removed trees, shrubs, groundcover and natives. Onsite mitigation will consider the enhancement of the wildlife crossing along Coyote Creek through improvements of the existing culvert under SR-118. Off-site mitigation will be established through presumably, Santa Monica Mountain Conservancy in Calleguas watershed. Once permits are issued from the resource agencies, onsite and offsite mitigation will be further detailed.

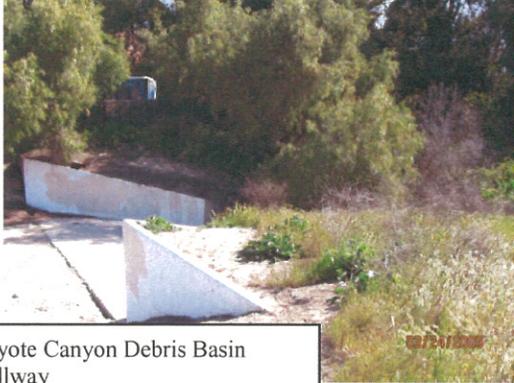
## Chapter 6. References

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- <http://www.cnps.org/>
- <http://www.calflora.org/>
- <http://www.CDFG.ca.gov/>
- <http://www.CDFG.ca.gov/lands/er/region5/crestridge/habitats.html>
- [http://www.fws.gov/ventura/speciesinfo/protocols\\_guidelines/docs/lbv/leastbellevireo\\_survey-guidelines.pdf](http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/lbv/leastbellevireo_survey-guidelines.pdf)
- <http://www.fws.gov/chesapeakebay/Newsletter/Fall07/2%20Monarch%20migration/Monarch.htm>
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- [http://en.wikipedia.org/wiki/Monarch\\_\(butterfly\)](http://en.wikipedia.org/wiki/Monarch_(butterfly))
- Monarch Butterfly USA.com
- <http://www.socalwetlands.com/website/main.htm>
- <http://pages.pomona.edu/~nj04747/woodrat/main.html>
- [http://www.aquariumofpacific.org/onlinelearningcenter/full\\_description/desert\\_woodrat/](http://www.aquariumofpacific.org/onlinelearningcenter/full_description/desert_woodrat/)
- [http://zipcodezoo.com/Animals/N/Neotoma\\_lepida\\_intermedia/](http://zipcodezoo.com/Animals/N/Neotoma_lepida_intermedia/)
- [http://water.usgs.gov/nswum/WSP2425/state\\_highlights\\_summary.html](http://water.usgs.gov/nswum/WSP2425/state_highlights_summary.html)
- <http://www.californiaherps.com/turtles/pages/a.m.pallida.html>
- <http://www.californiaherps.com/snakes/pages/t.s.infernalis.html>
- <http://californiaherps.com/frogs/pages/s.hammondii.html>
- <http://calfish.ucdavis.edu/calfish/ArroyoChub.htm>
- <http://www.cwnp.org/lichen/pgs/tesanctijacobi.html>
- California Department of Fish and Game. April 6, 2010 Natural Diversity Database. California Department of Fish and Game. Sacramento, CA.
- Fauzia Aziz and Indejit Dahliwal January 16, 2010, traffic Noise Study Report, Caltrans.
- Initial Study/Environmental Assessment Route 118 at Donlon Road/Somis road Intersection improvements December 1999, Federal Highway Administration, California Department of Transportation, and Ventura County Transportation Commission.
- Insects of the Los Angeles Basin (Second Edition 1993) By Charles L. Hogue. Page 204
- Hickman, J.C., ed. 1993. The Jepson Manual. University of California Press, Berkeley. 1399 pp.
- Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game.
- Robert J Dooling. and Arthur N. Popper. 2007. The Effects of Highway Noise on Birds. 47-49 pp.

- Roger Tory Peterson. Peterson Field Guide. Western Birds. 1990.
- Stokes, Donald W. and Lillian Q. 1996. Stokes Field Guide To Birds: Western Region. Little, Brown and Company, Boston.
- Sawyer, John O. and Todd Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento CA.
- Thomas Bros. Maps . 2000. Thomas Guide, Los Angeles and Ventura Counties, 2000 Edition. Thomas Bros. Maps. 561, 591, 631, 632 pp.
- U. S. Geological Survey. 1951, Santa Paula, and Moorpark California 7.5” Series Topographic Quadrangle.
- U. S. Geological Survey. 1950, Newbury Park and Camarillo California 7.5” Series Topographic Quadrangle.
- Western Society of Weeds Science , 5<sup>th</sup> edition, 1996, Weeds of the West.
- Ventura County Environmental Document-Donlon Rd Admin Draft ISMND-june 8.doc
- <http://calfish.ucdavis.edu/specie>
- [http://www.dot.ca.gov/hq/env/bio/files/caltrans\\_birds\\_10-7-2007b.pdf](http://www.dot.ca.gov/hq/env/bio/files/caltrans_birds_10-7-2007b.pdf)
- <http://www.usroads.com/journals/p/rej/9710/re971003.htm>
- Draft EIR for Donlon Road Realignment Project–County of Ventura.

# Appendix A Photos of Project Area



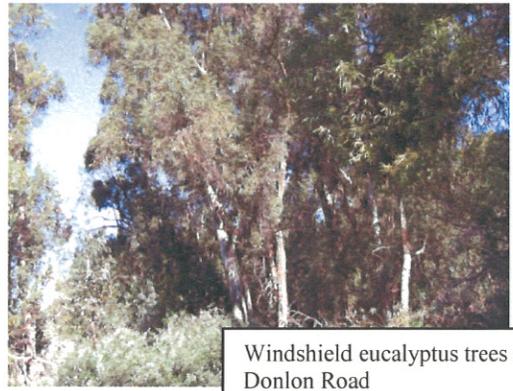
Coyote Canyon Debris Basin spillway



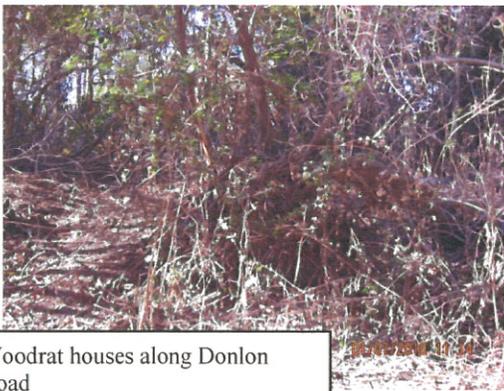
Culvert under SR-118 at Donlon Road



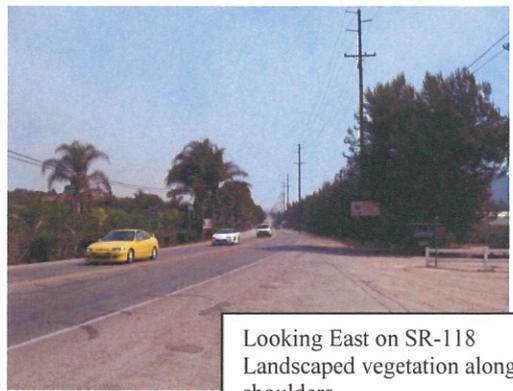
Coyote Canyon Creek vegetation



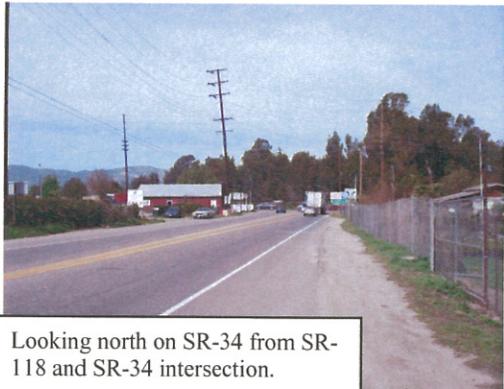
Windshield eucalyptus trees along Donlon Road



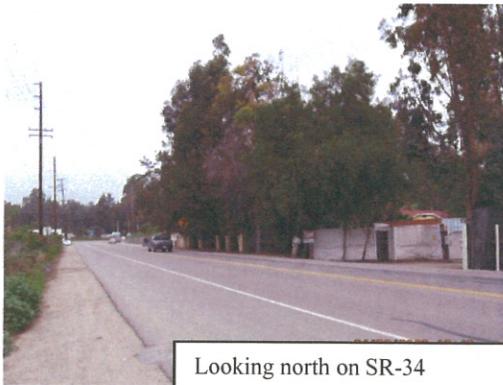
Woodrat houses along Donlon Road



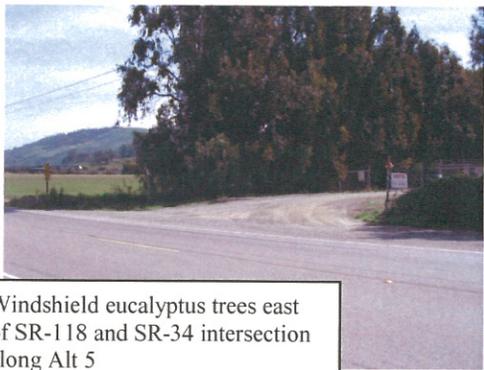
Looking East on SR-118 Landscaped vegetation along shoulders



Looking north on SR-34 from SR-118 and SR-34 intersection.



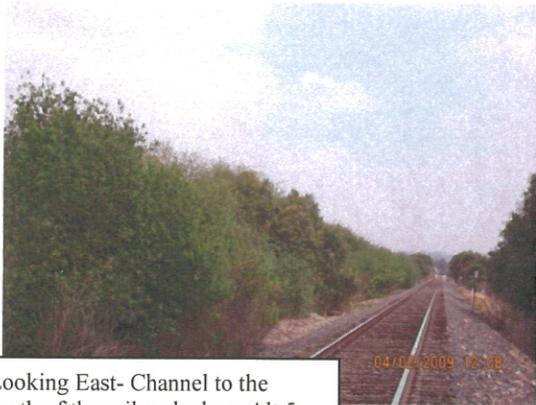
Looking north on SR-34



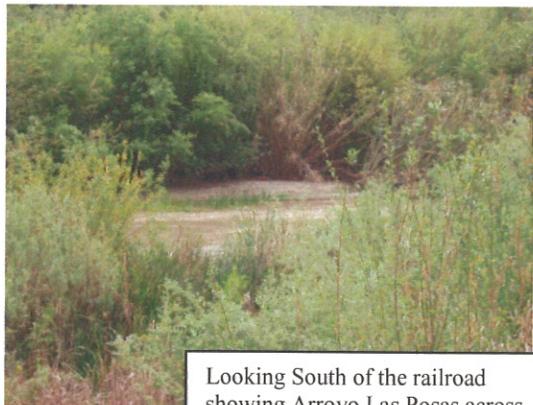
Windshield eucalyptus trees east of SR-118 and SR-34 intersection along Alt 5



Windshield eucalyptus trees east of SR-118 and SR-34 intersection along Alt 5- Drainage 2



Looking East- Channel to the north of the railroad where Alt 5 will be built.

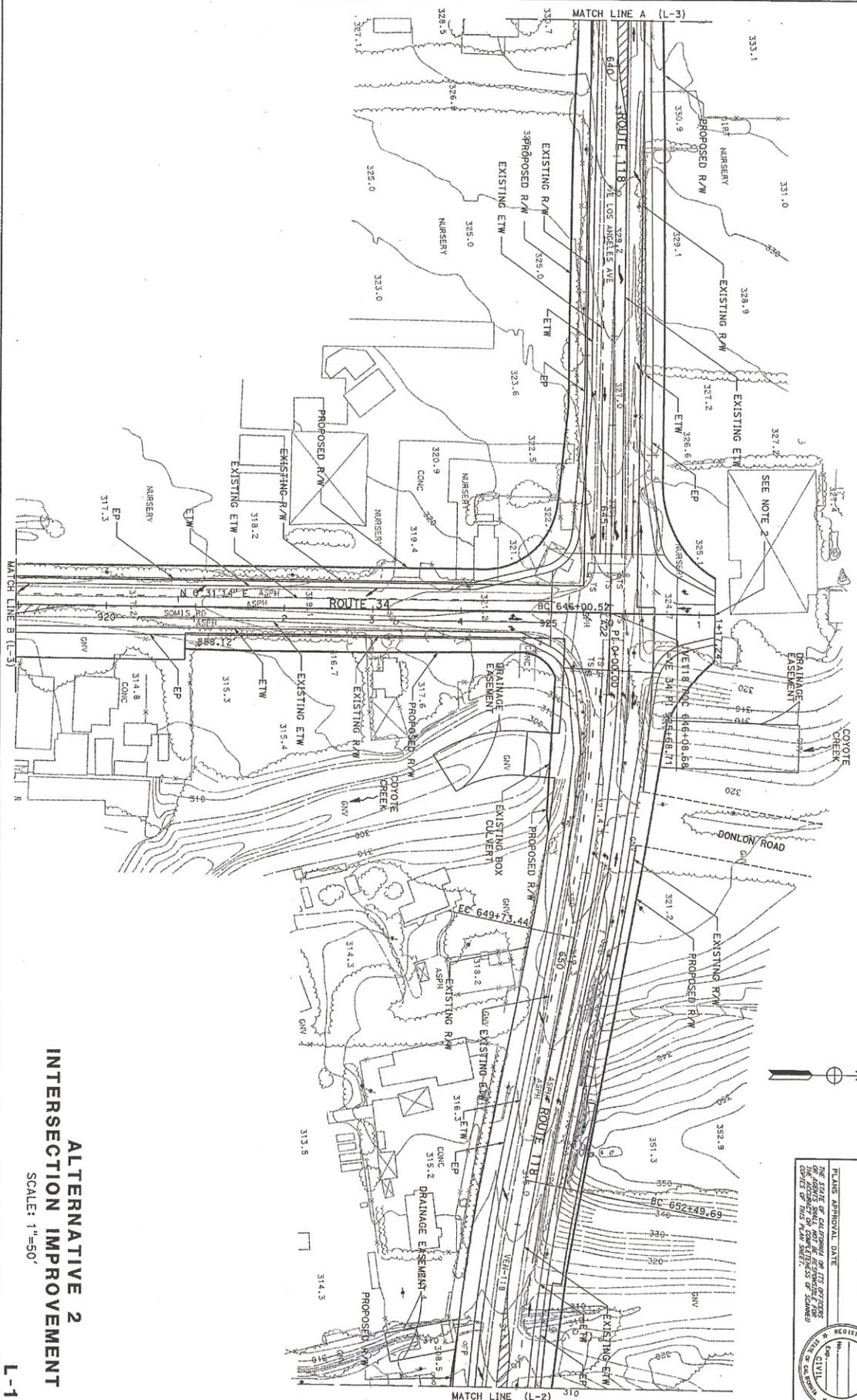


Looking South of the railroad showing Arroyo Las Posas across of where Alt 5 will be built.

# **Appendix B** Project Plans

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- NOTES:  
 1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.  
 2. FOR DONLON ROAD REALIGNMENT, SEE COUNTY OF VENTURA PLANS.



RELATIVE BORNER SCALE  
 15 IN INCHES

USBRIDGE #313204  
 DGN FILE # 01702.dgn

CU 07265

EA 105960

**ALTERNATIVE 2  
 INTERSECTION IMPROVEMENT**  
 SCALE: 1"=50'

L-1

DIR#	COUNTY	ROUTE	TOTAL SHEETS	SHEET TOTAL
07	Ven	118/34	10-72/11-8	10-72/11-8
			16-8/17-66	

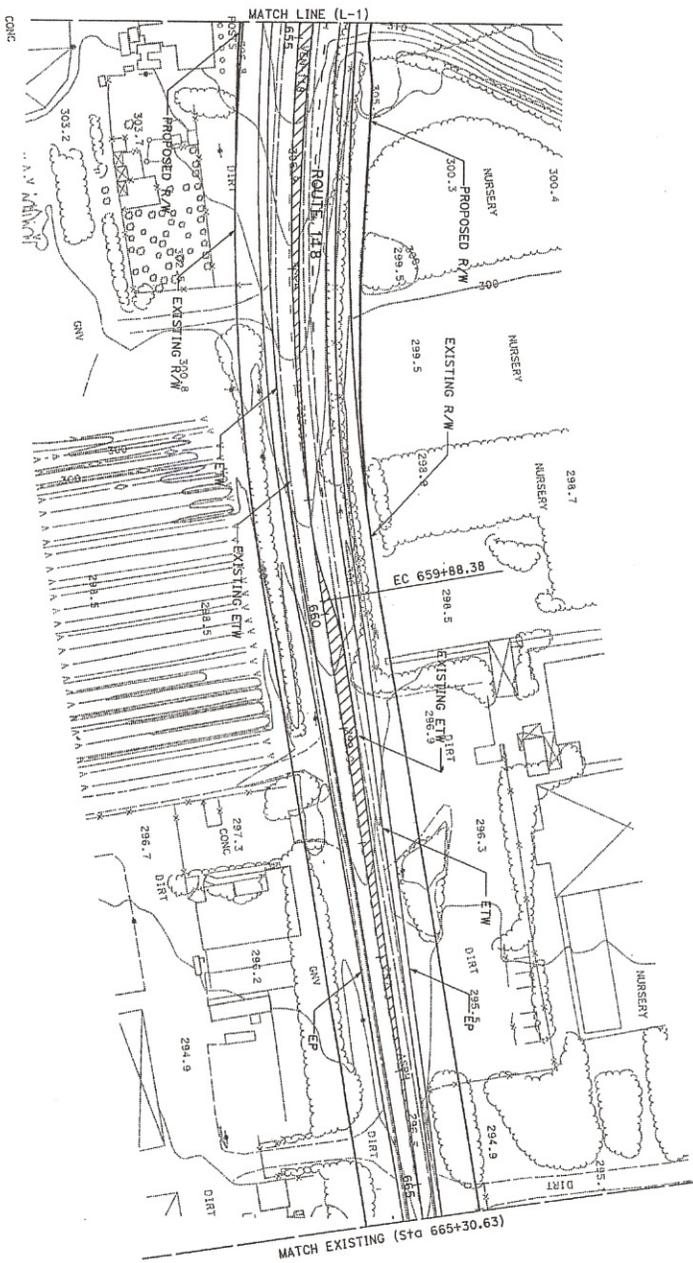
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

ONE STATE OF CALIFORNIA OR ITS OFFICER OR AGENT OR CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



**ALTERNATIVE 2  
INTERSECTION IMPROVEMENT**

SCALE: 1"=50'

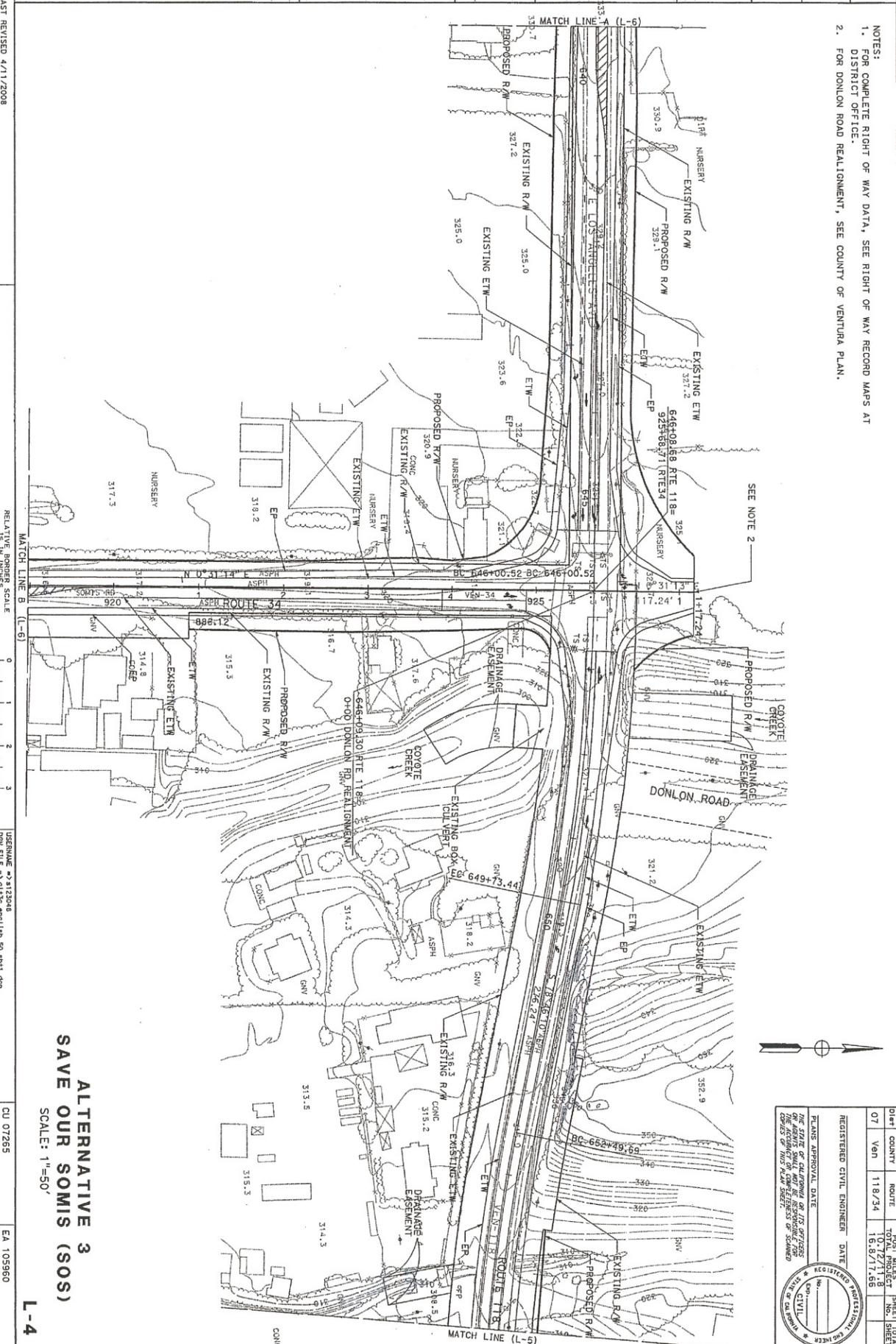
L-2

DIST	COUNTY	ROUTE	POST MILE	SHEET
07	Ven	118/24	10+72/11.8	16
			16.8/17.66	
REGISTERED CIVIL ENGINEER		DATE	REGISTERED PROFESSIONAL ENGINEER	
PLANS APPROVAL DATE			REGISTERED CIVIL ENGINEER	
<p>FOR AGENCIES: SHALL BE APPROVED BY THE DISTRICT ENGINEER OR HIS DEPUTY AND THE DISTRICT CIVIL ENGINEER OR HIS DEPUTY. FOR CONTRACTORS: SHALL BE APPROVED BY THE DISTRICT ENGINEER OR HIS DEPUTY AND THE DISTRICT CIVIL ENGINEER OR HIS DEPUTY.</p>				

BORDER LAST REVISED 4/11/2008  
RELATIVE BORDER SCALE  
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CU 07265  
EA105960



- NOTES:  
 1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.  
 2. FOR DONLON ROAD REALIGNMENT, SEE COUNTY OF VENTURA PLAN.



SEE NOTE 2



DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	Van	118/34	16.8/1.58	16.8/1.58

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL DATE	REGISTERED PROFESSIONAL ENGINEER

THE STATE OF CALIFORNIA AND ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR FACTS OF THIS PLAN SHEET OR OF ANY OTHER SHEETS OF THIS PROJECT.

RELATIVE BORDER SCALE  
 15 IN INCHES  
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 MATCH LINE B (L-6)  
 MATCH LINE A (L-6)  
 MATCH LINE B (L-6)  
 MATCH LINE A (L-5)

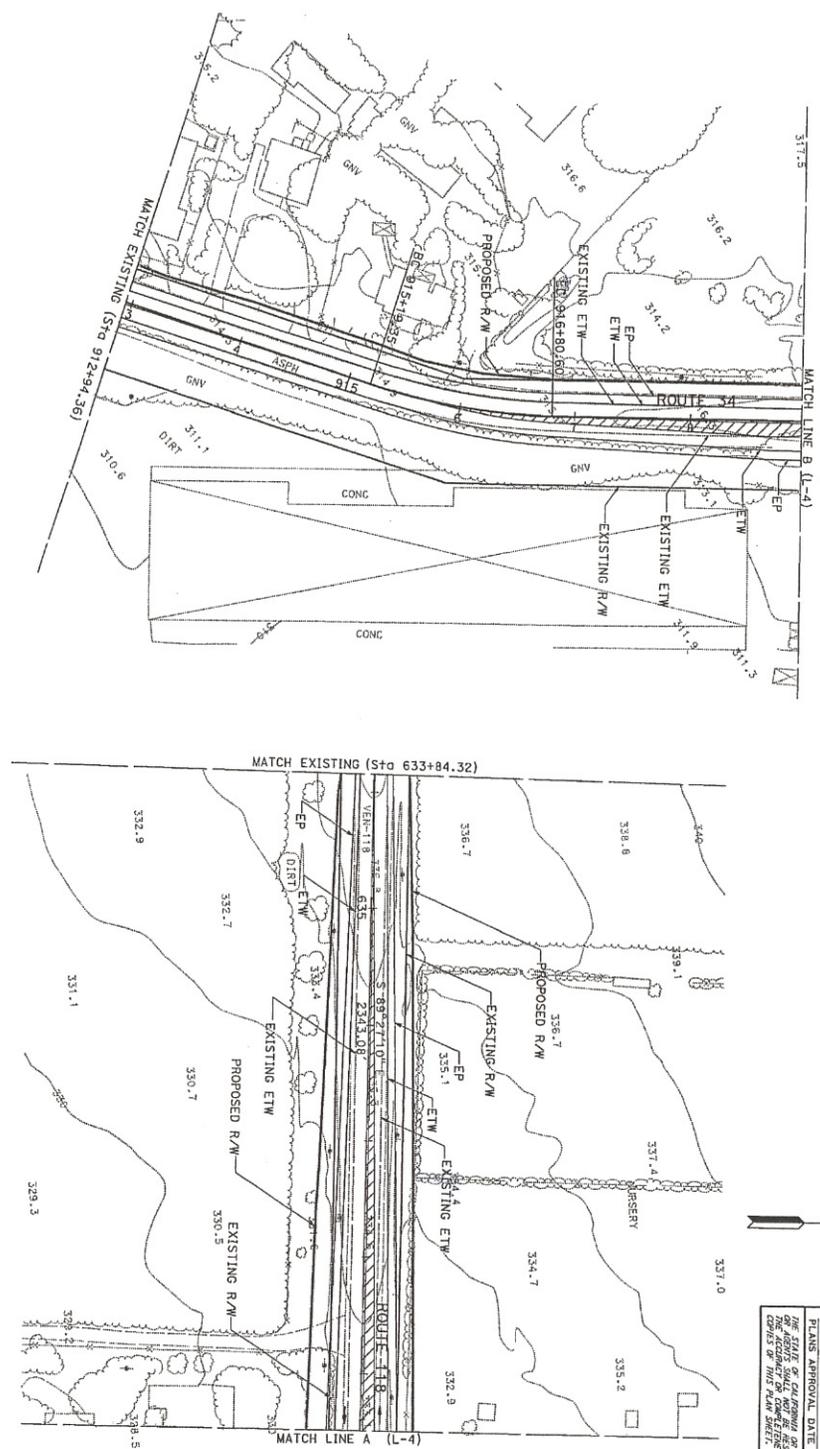
**ALTERNATIVE 3**  
**SAVE OUR SOMIS (SOS)**  
 SCALE: 1"=50'

BORDER LAST REVISED 4/11/2008

CU 07265 EA 105960



NOTES:  
 1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
 1/8" IN INCHES

0 1 2 3

USERNAME = 2132348  
 DGN FILE = 0132348.dgn

**ALTERNATIVE 3**  
**SAVE OUR SOMIS (SOS)**  
 SCALE: 1"=50'

CU 07265  
 EA 105960

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
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			15.8/17.66	

REGISTERED CIVIL ENGINEER DATE

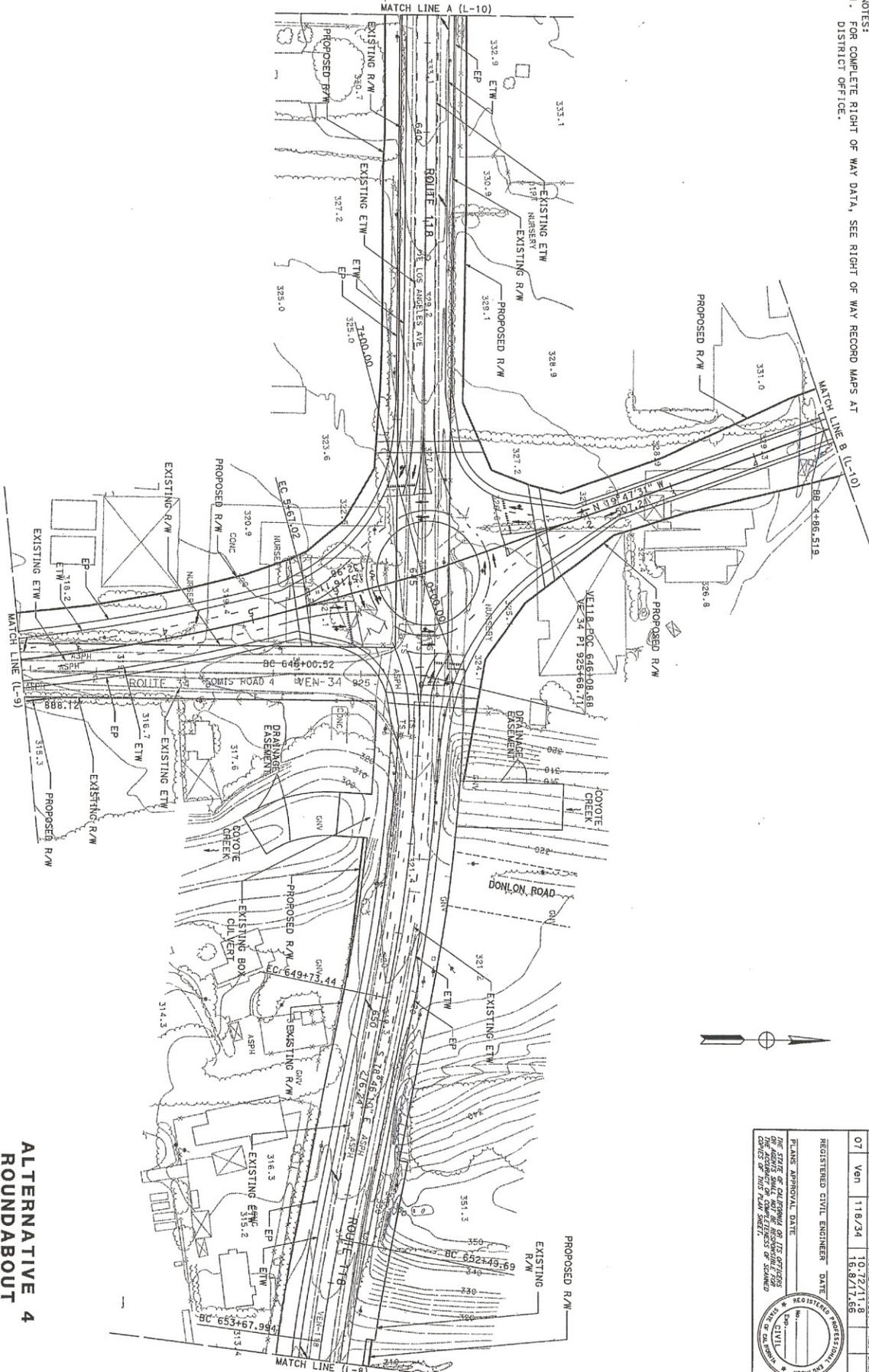
PLANS APPROVAL DATE

ONE STATE OF CALIFORNIA OF THE OFFICERS  
 THE RECORDING TO THE COMPLETION OF SAME  
 UNDER THE TITLE PLAN SHEET.

BORDER LAST REVISED 4/11/2008

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b>	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
1/8" = 10' INCHES

USERNAME: cu07265  
DGN FILE: >> d144c\_engl1.dgn

CU 07265  
EA 105960

**ALTERNATIVE 4  
ROUNDABOUT**  
SCALE: 1"=50'

L-7

LAST REVISION: 00-00-00  
DATE PLOTTED: 16-MAY-2011  
TIME PLOTTED: 13:59

Dist	COUNTY	ROUTE	POST MILES
07	Ven	118/34	10.72/11.8
			TOTAL PROJECT
			16.87/17.65

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

REGISTERED CIVIL ENGINEER

DATE

10/10/10

10/10/10

10/10/10

10/10/10





FUNCTIONAL SUPERVISOR

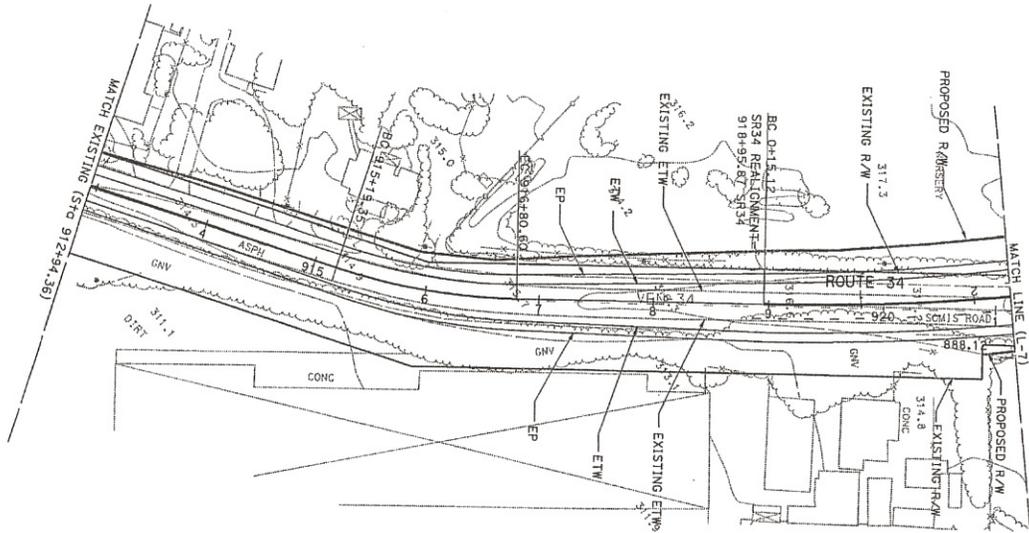
CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
1/8" = 10' HORIZONTAL



USERNAME => a133048  
JOB FILE => 01740.dwg | 01750.dwg | 01760.dwg

CU 07265

EA 105860

**ALTERNATIVE 4  
ROUNDABOUT**  
SCALE: 1"=50'

**L-9**

Dist	COUNTY	ROUTE	POST MILEST.	SHEET TOTAL
07	Ven	118/34	10.72/11.8	NO. SHEETS
			15.87/17.68	NO. SHEETS

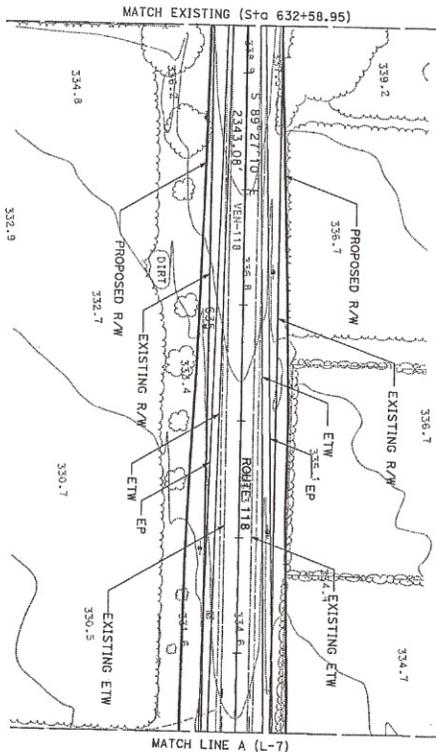
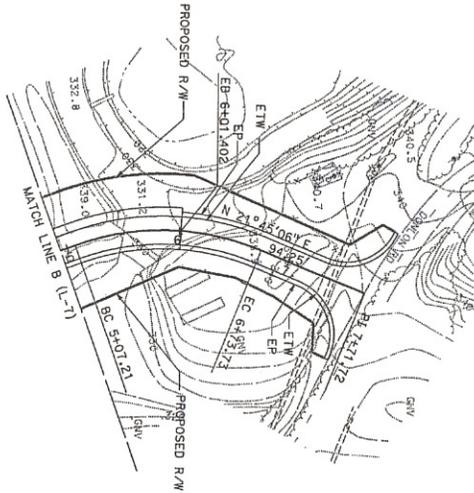
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA BY ITS DEPARTMENT OF TRANSPORTATION HAS REVIEWED THIS PLAN AND FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 18 OF TITLE 9, CALIF. VEH. CODE.



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



DIST COUNTY	ROUTE	POST MILES	SHEET TOTAL
07 Van	118/34	16.87/11.56	NO. SHEETS
REGISTERED CIVIL ENGINEER		DATE	NO. SHEETS
PLANS APPROVAL DATE		DATE	NO. SHEETS

THE STATE OF CALIFORNIA AND ITS OFFICERS AND EMPLOYEES SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS PLAN SHEET.

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE  
1/8" IN INCHES



USERNAME: c3132348  
DGN FILE: c:\1485\_eng\118\_50\_3M.dgn

CU 07265

EA 105960

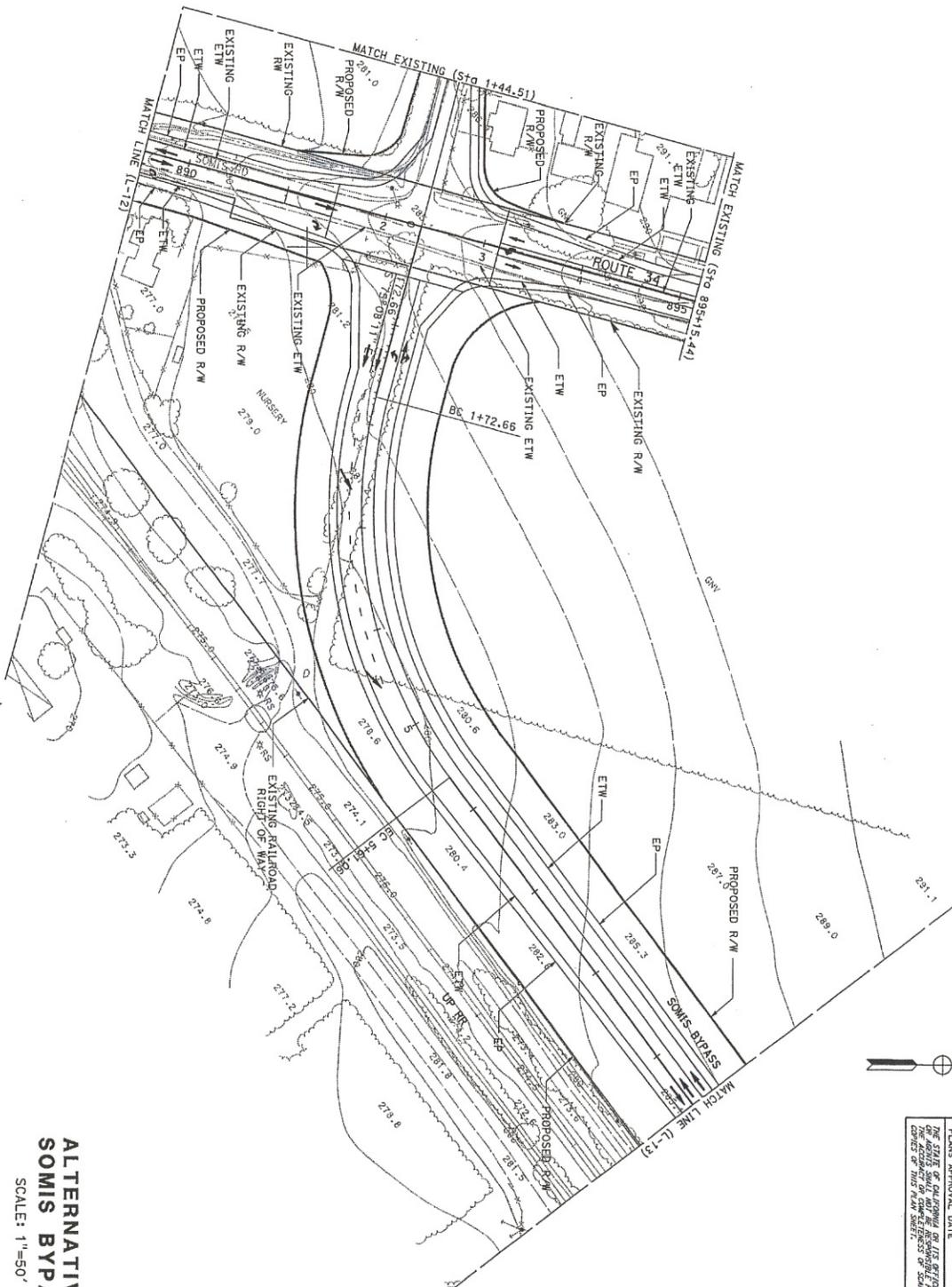
**ALTERNATIVE 4  
ROUNDAABOUT**

SCALE: 1"=50'

**L-10**



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
1/8" = 10' INCHES



ISSUING FILE # 113286  
DGN FILE # 0155\_003114N\_50\_0111.dgn

CU 07265

EA 105960

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

**L-11**



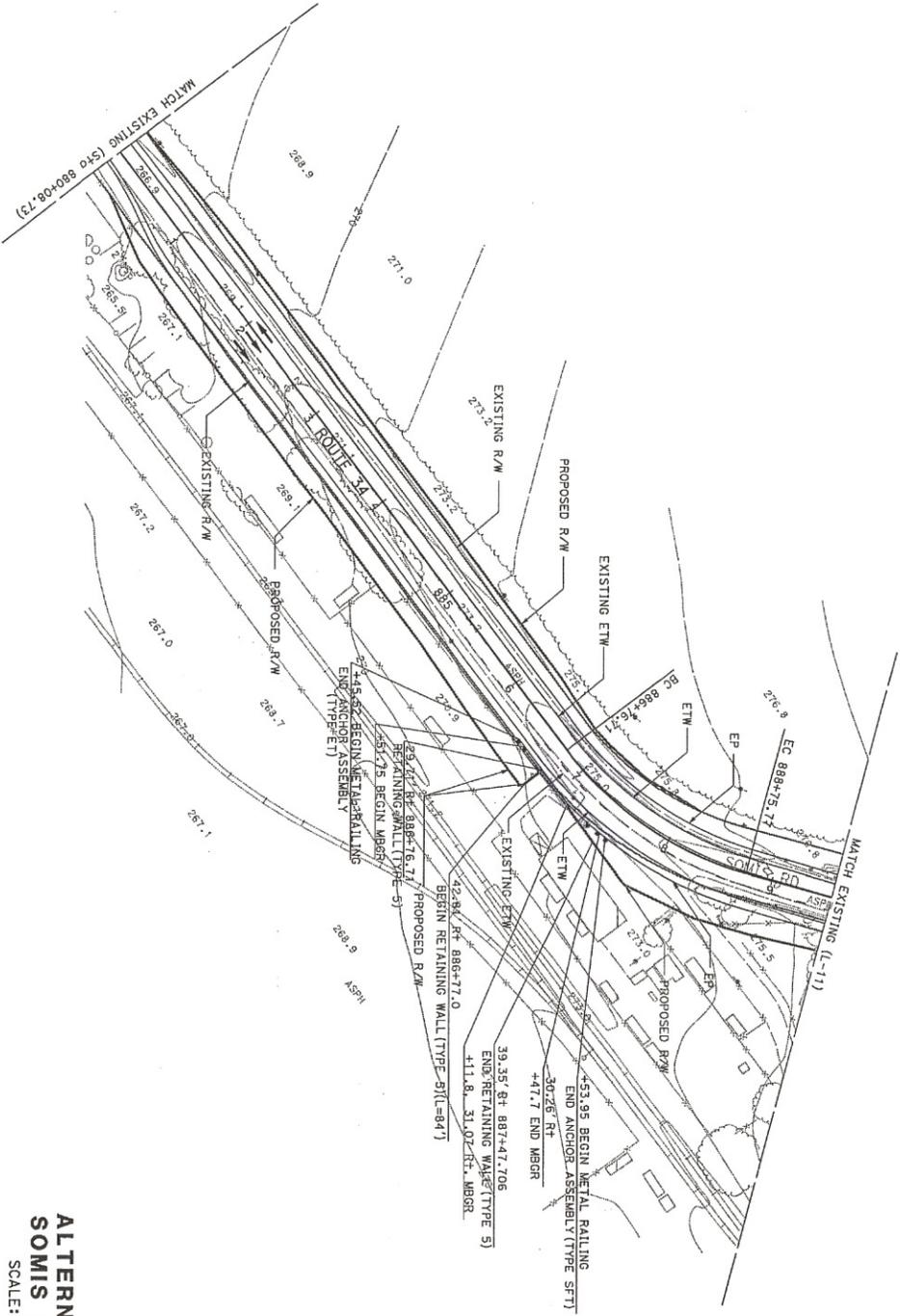
DIRT COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	Ven	118.2/4	10, 7/2/08
		18, 8/17, 68	NO. SHEETS
REGISTERED CIVIL ENGINEER	DATE	REGISTERED PROFESSIONAL ENGINEER	NO. SHEETS
PLANS APPROVAL DATE		NO. SHEETS	

THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION  
I, \_\_\_\_\_, REGISTERED CIVIL ENGINEER, NO. \_\_\_\_\_, DATE \_\_\_\_\_, AMENDMENT NO. \_\_\_\_\_, CERTIFICATE OF THIS PLAN SHEET.

BORDER LAST REVISED 4/11/2008

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b>	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR BY
		CHECKED BY	DATE REVISED

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
15 IN INCHES

CU 07265

EA 105960

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

**L-12**

LAST REVISION DATE PLOTTED => 10-AUG-2011  
00-00-00 TIME PLOTTED => 14:42

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	Ven	118/24	10.12/11.8	NO. SHEETS
			15.8/11.58	

REGISTERED CIVIL ENGINEER DATE

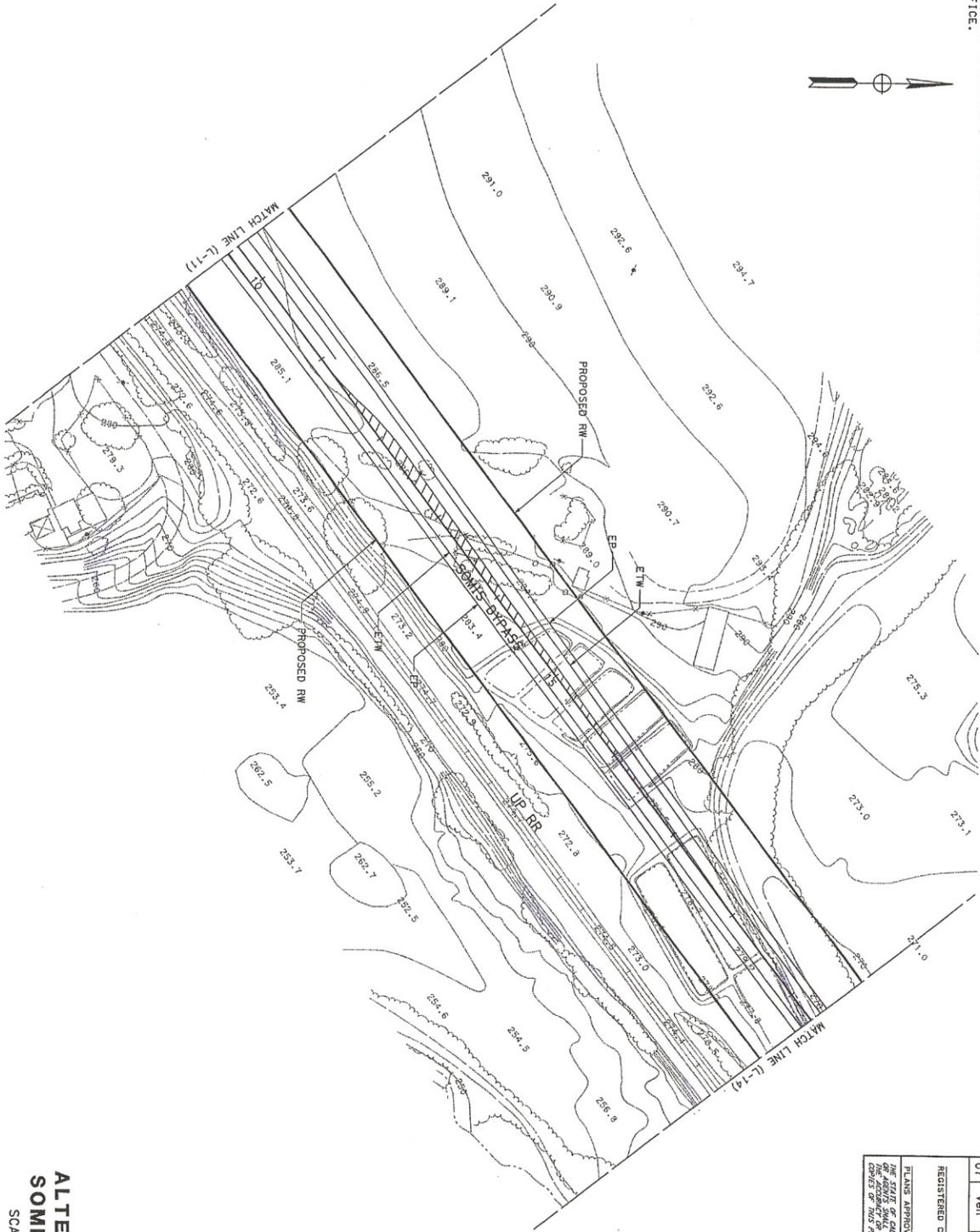
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL SURVEYORS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL LAND SURVEYORS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL ARCHITECTS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL GEODETIC ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL ELECTRICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL MECHANICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL CHEMISTS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL BIOLOGICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL AERONAUTICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL METALLURGICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL INDUSTRIAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL AGRICULTURAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL FORESTRY ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL CIVIL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL ELECTRICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL MECHANICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL CHEMISTS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL BIOLOGICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL AERONAUTICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL METALLURGICAL ENGINEERS  
THE STATE OF CALIFORNIA REGISTERED PROFESSIONAL INDUSTRIAL ENGINEERS

BORRER LAST REVISED 4/11/2008

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORRER SCALE  
1/8" = 10' INCHES



USERNAME: c313234  
DGN FILE: >> c:\isc\digital\50\_ah13.dgn

CU 07285

EA 105960

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

**L-13**

07	Van	11/8/34	10,727,11.8	16,877,656
01st	COUNTY	ROUTE	TOTAL MILES	SHEET TOTAL
07	Van	11/8/34	10,727,11.8	16,877,656

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	DATE
NO. _____	
EXP. _____	
CIVIL	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b>	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY	
		CHECKED BY	DATE REVISED	

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



BORDER LAST REVISED 4/7/2008

RELATIVE BORDER SCALE  
IS IN INCHES



USERNAME => sl32048  
DGN FILE => d150.dwg | RN\_S0\_BHT4.dgn

CU 07265

EA 105960

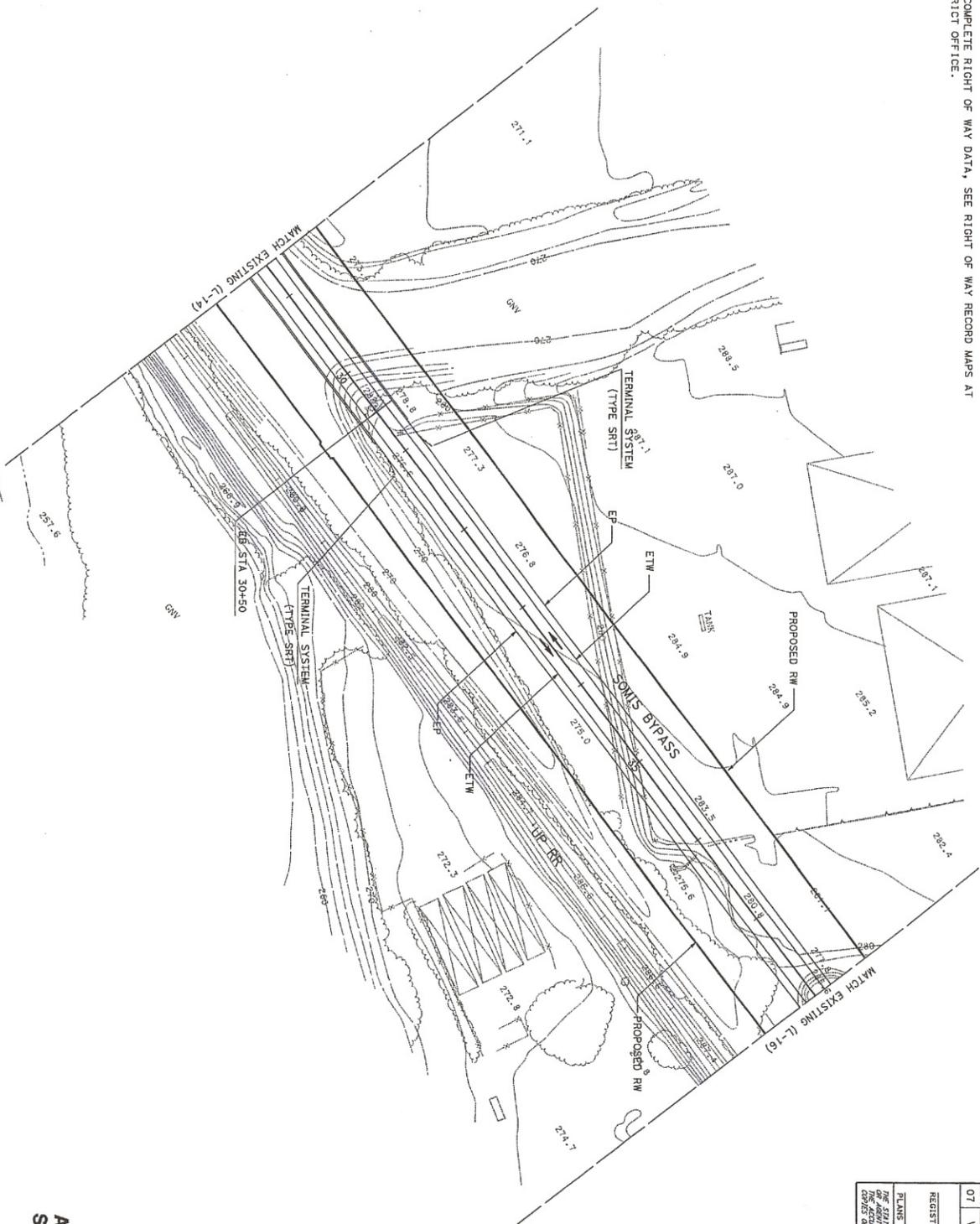
**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

L-14

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTALS
07	Ven	118/34	10.72/11.8	TOTAL PROJECT 18,871/86
				REGISTERED CIVIL ENGINEER DATE
				REGISTERED CIVIL ENGINEER DATE
THE STATE OF CALIFORNIA AND ITS OFFICERS AND AGENCIES SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED IN THIS PLAN SHEET.				



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
0 1 2 3  
DISTANCE 0+17500  
DPI: 114.0 7.251 (72.0) 114.0 50.0 5.0 5.0

CU 07265 EA 105960

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'  
**L-15**



DIST+ COUNTY	ROUTE	POST MILE	SHEET TOTAL
07 Van	118/34	10+72/11.8	105 SHEETS
		16.8/17.66	105 SHEETS

REGISTERED CIVIL ENGINEER DATE

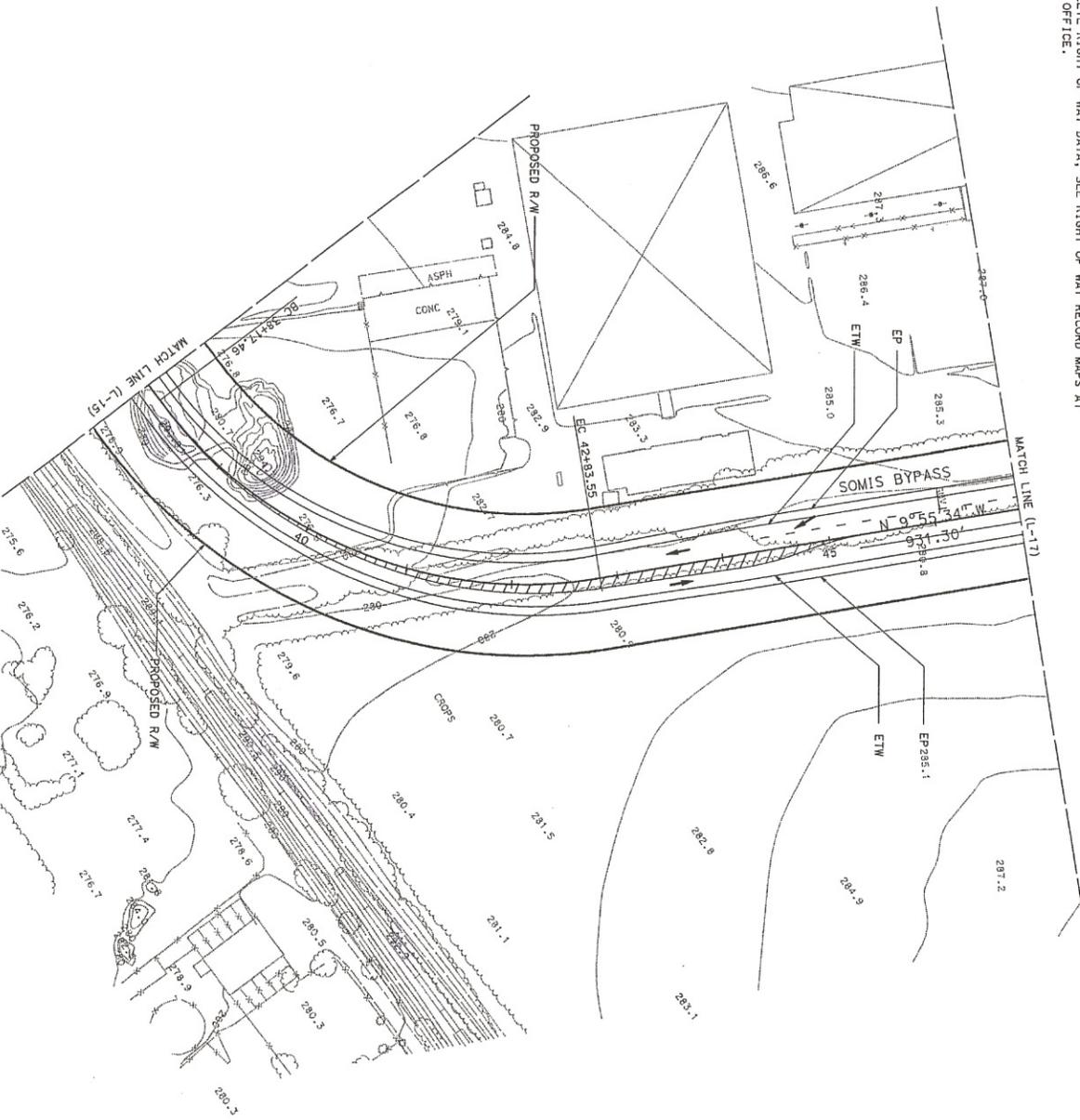
PLANS APPROVAL DATE

ONE STATE SEAL REQUIRED ON THE ORIGINAL THE APPROVAL OF THE COMPLETION OF DRAWING SPECIAL BY THIS FIRM SUBJECT.

BORDER LAST REVISED 4/11/2008



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE



USERNAME => R123048  
BIN FILE => Q113C.DWG\19A\_S0.dwg.dgn

CU 07265

EA 105960

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

**L-16**

DATE PLOTTED => 16-MAY-2011  
TIME PLOTTED => 14:10

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	VEN	118/34	TOTAL PROJECT	NO. SHEETS
			16.871756	

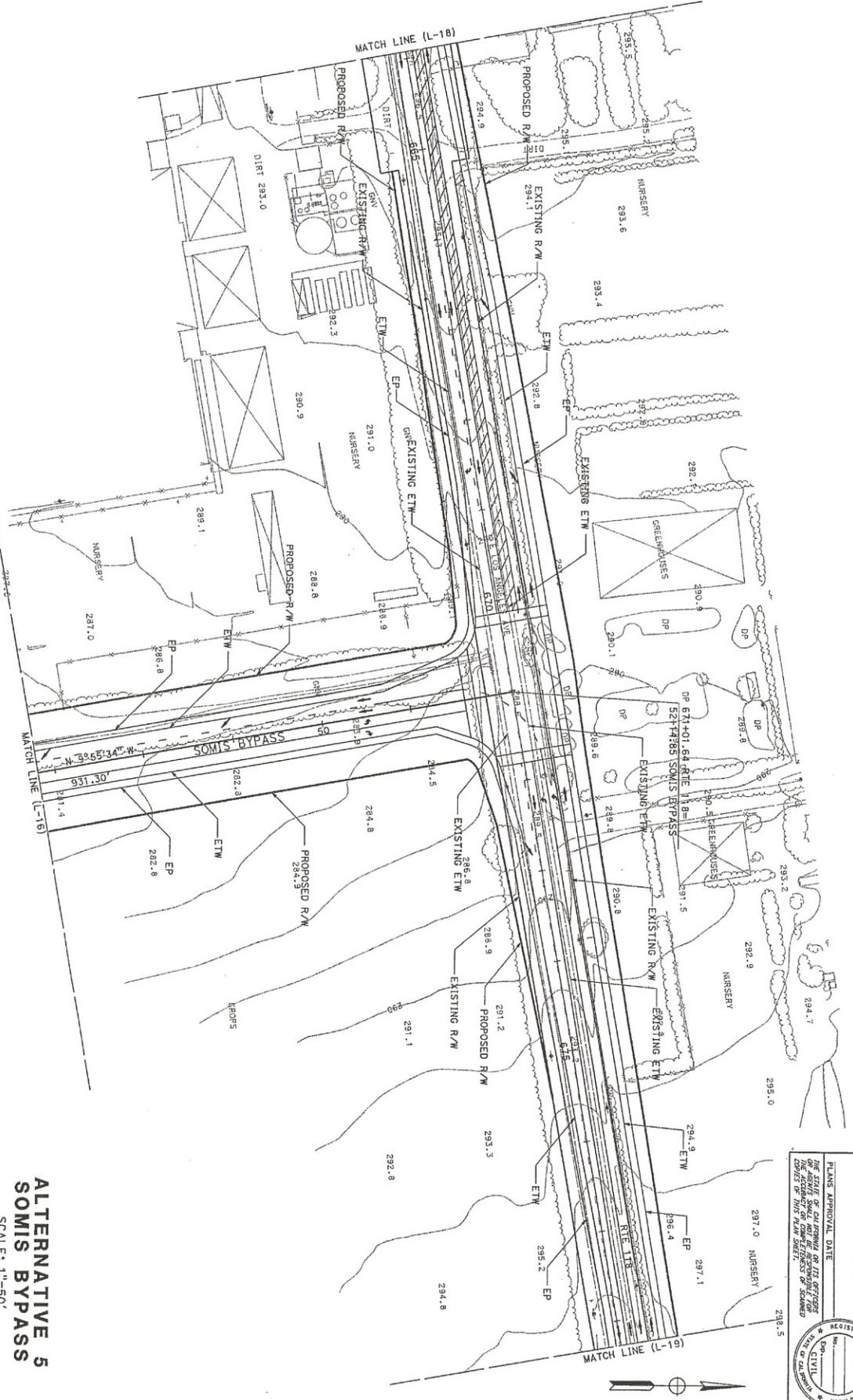
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA ON ITS OFFICIAL SEAL AND UNDER THE SEAL OF THE REGISTERED CIVIL ENGINEER HAS REVIEWED THIS PLAN SHEET AND APPROVES IT FOR CONSTRUCTION.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b>	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
1" = 50'  
0 1 2 3

USERNAME: 23123048  
CON FILE: 201250-ENR110N-30-DRVT-250

**ALTERNATIVE 5  
SOMIS BYPASS**  
SCALE: 1"=50'

**L-17**

CU 07265 EA 105960

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	Ven	119/24	10.72/11.8	15/25
			16.8/17.66	

REGISTERED CIVIL ENGINEER DATE

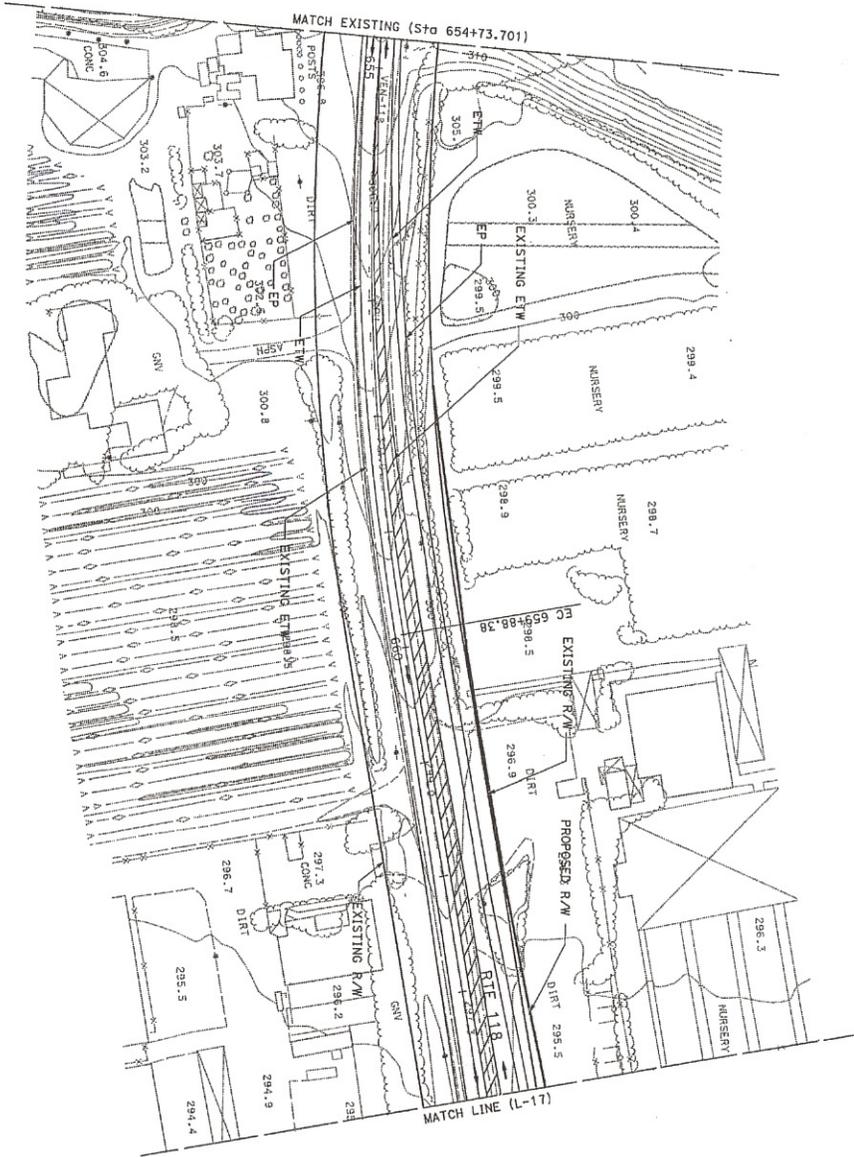
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICES  
THE ACCEPTANCE OF COMPETENCIES OF SKILLED  
PERSONS OF THIS STATE STREET.

REGISTERED PROFESSIONAL ENGINEER  
No. 105960  
CIVIL



NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



RELATIVE BORDER SCALE  
13 IN INCHES  
0 1 2 3  
USERNAME => 9123048  
DGN FILE => 01594.dgn\18L\_50.dwg

ALTERNATIVE 5  
SOMIS BYPASS  
SCALE: 1"=50'

CU 07265 EA 105960

L-18

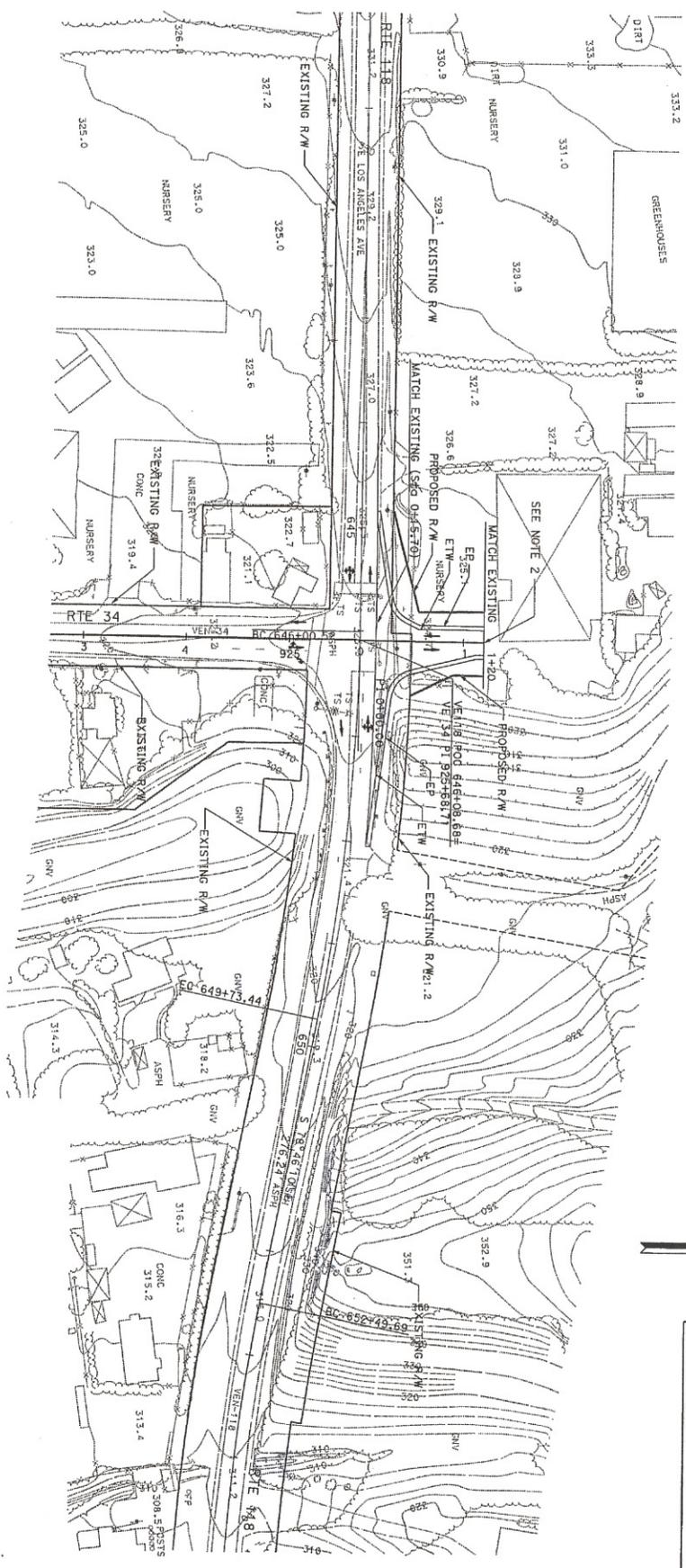
Dist	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.
07	Van	118/34	10,72/11,8	108/118
			15,87/17,66	109/118
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
REGISTERED PROFESSIONAL ENGINEER No. _____ Exp. _____ CIVIL State of California				
THE ABOVE SIGNED AND SEALED OFFICERS OF THE STATE ENGINEERING BOARD DO NOT GUARANTEE THE ACCURACY OF THE INFORMATION HEREON.				

BORDER LAST REVISED 4/11/2008



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Caltrans</b>	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY
		CHECKED BY	DATE REVISED

- NOTES:  
 1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.  
 2. FOR DOWNLON ROAD REALIGNMENT, SEE COUNTY OF VENTURA PLANS.



BORDER LAST REVISED 4/11/2008  
 RELATIVE BORDER SCALE  
 15 IN INCHES  
 0 1 2 3  
 DRAWING NO. 12304  
 DEN FILE # 014304.dwg (1/4, 50, 1110, 50)

**ALTERNATIVE 5  
 SOMIS BYPASS**  
 SCALE: 1"=50'

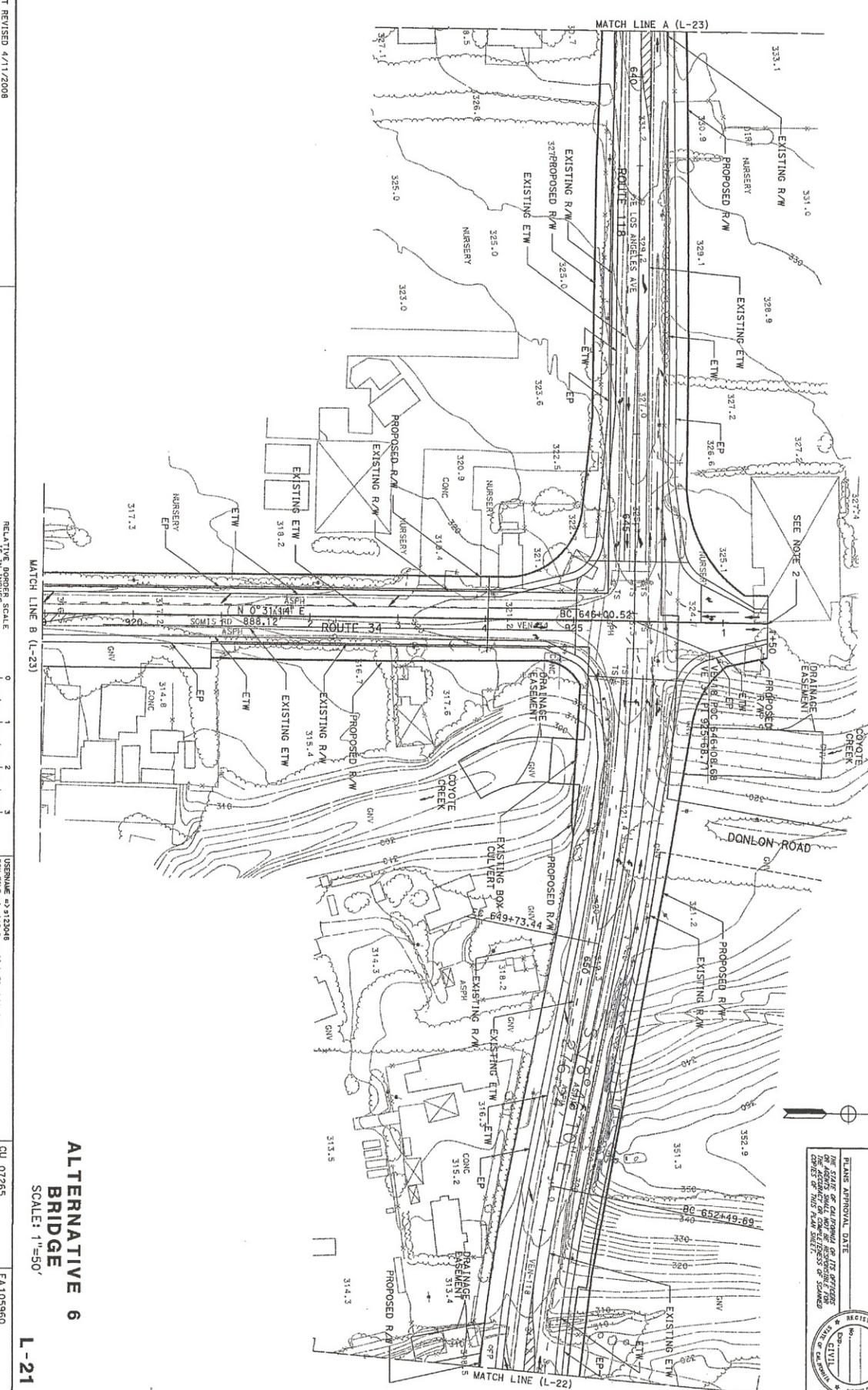
CU 00000 07265 EA 000000 105960

**L-20**

DATE PLOTTED => 16-MAY-2011  
 TIME PLOTTED => 14:32

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	Ven	118/34	10.727/11.8	NO. SHEETS
			18.871/1.66	
REGISTERED CIVIL ENGINEER				DATE
PLANS APPROVAL DATE				

NOTES:  
 1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.  
 2. FOR DONLON ROAD REALIGNMENT, SEE COUNTY OF VENTURA PLANS.



RELATIVE BORDER SCALE  
 1/8" = 10' INCHES

USERNAME => 0123048  
 DON FILE => 011602.dgn\1100.dgn

CU 07265  
 EA105960

**ALTERNATIVE 6  
 BRIDGE**  
 SCALE: 1"=50'  
**L-21**

PLAT COUNTY	ROUTE	POST MILEAGE	SHEET TOTAL
07 Ven	118/24	10.12/11.8	10 OF 10
REGISTERED CIVIL ENGINEER	DATE	16.8/17.68	10 OF 10

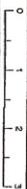
PLANS APPROVAL DATE  
 REGISTERED CIVIL ENGINEER  
 DATE

FOR STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION  
 THE ACCURACY OF THESE PLANS IS THE RESPONSIBILITY OF THE ENGINEER  
 WHO HAS DRAWN OR CHECKED THEM.



BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS 1 IN INCHES



ISSUANCE 20110304  
DWG FILE # 01160.dwg | 1:50, ahtc.dgn

CU 07265

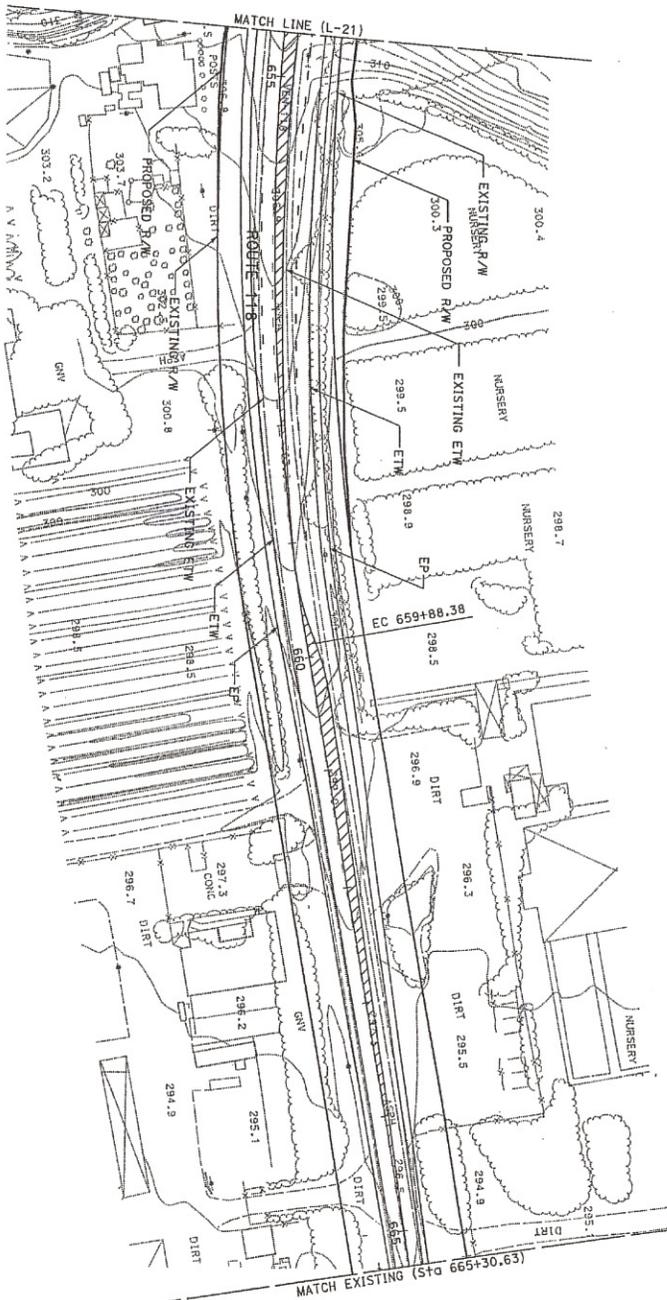
EA 105960

**ALTERNATIVE 6  
BRIDGE**  
SCALE: 1"=50'

**L-22**

DATE PLOTTED => 16-MAY-2011  
TIME PLOTTED => 14:33

NOTES:  
1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.



Dist	COUNTY	ROUTE	TOTAL PROJECT	SHEET TOTALS
07	Van	118/34	107/27/1-8 16,871,65	NO. SHEETS
REGISTERED CIVIL ENGINEER			DATE	NO. SHEETS
PLANS APPROVAL DATE			DATE	NO. SHEETS
THE STATE OF CALIFORNIA AND ITS OFFICERS DO NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF SHOWN INFORMATION ON THIS PLAN SHEET.				
REGISTERED PROFESSIONAL ENGINEER No. _____ Exp. _____ CIVIL LICENSED BY THE STATE OF CALIFORNIA				



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## Appendix C USFWS Species List

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IN REPLY REFER TO:  
2009-SL-0064

### United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003



December 9, 2008

Paul Caron, Senior District Biologist  
California Department of Transportation  
Division of Environmental Planning  
100 South Main Street  
Los Angeles, California 90012

Subject: Species List for the Proposed Donlon Road Realignment and Widening Project,  
Ventura County, California

Dear Mr. Caron:

We are responding to your request dated October 27, 2008, and received in our office on November 14, 2008, for a list of endangered, threatened, proposed, and candidate species which may be present in the vicinity of the subject project. The California Department of Transportation (Caltrans) proposes to realign Donlon Road from a dog-legged intersection on State Route (SR)-118 to become the north leg of the four-way intersection and widen SR-118 and SR-34 at the intersection to accommodate left turn pockets in all four directions. The proposed action is located in the Moorpark U.S. Geological Survey quadrangle at Township 2 North, Range 20 West between sections 8 and 14. Your request and our response are made pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (Act).

This letter fulfills our responsibility under section 7(c) of the Act. Caltrans, as the lead federal agency for the project, has the responsibility to review its proposed activities and determine whether listed species may be affected. Because the project is a construction project<sup>1</sup> which requires an environmental impact statement, Caltrans has the responsibility to prepare a biological assessment to make a determination of the effects of the action on listed species or critical habitat. If Caltrans determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, Caltrans may engage in planning efforts but may not make any irreversible commitment of resources. Such a

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<sup>1</sup> "Construction project" means any major federal action which significantly affects the quality of the human environment designed primarily to result in the building of structures such as dams, buildings, roads, pipelines, and channels. This includes federal actions such as permits, grants, licenses, or other forms of federal authorizations or approval which may result in construction.

---

Paul Caron

2

commitment could constitute a violation of section 7(d) of the Act.

Based upon our review of the proposed project location, we believe that the site could support the federally endangered least Bell's vireo (*Vireo bellii pusillus*). Least Bell's vireo are known to occur in Arroyo Simi. The proposed road widening site crosses Fox Barranca, which is approximately 0.5 mile upstream from Arroyo Simi. We recommend that you conduct surveys for least Bell's vireo according to U.S. Fish and Wildlife Service protocol. Furthermore, we do not believe that the site could support any other listed, proposed, or candidate species.

Only listed species receive protection under the Act; however, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Game's Natural Diversity Data Base. You can contact the California Department of Fish and Game at (916) 324-3812 for information on other sensitive species that may occur in this area.

Should you have any questions regarding this matter, please contact Andrea Adams of our staff at (805) 644-1766, extension 318.

Sincerely,

//s// Chris Dellith

Chris Dellith  
Senior Biologist

## **Appendix D** CNDDDB Species List

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[Print](#) [Export](#) [Expand](#) [Zoom](#)

Selected Set Results for California Natural Diversity Database (gov ed) [ds45] - 86 records selected [Clear](#)

ZOOM	SCIENTIFIC_NAME	COMMON_NAME	ELEMENT_CODE	OCC_NUMBER	MAPNDX	SONDx	KEY_QUAD_CODE	KEY_QUAD_NAME	KEY_COUNTY_CODE
1	Southern Riparian Scrub	Southern Riparian Scrub	CTT63300CA	25	00106	15318	3411848	Fillmore	VEN
2	Catostomus santeanae	Santa Ana sucker	AFCJ02190	9	00497	13484	3411847	Riru	VEN
3	Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	AFCPA03011	3	78887	1204	3411848	Fillmore	VEN
4	Calochortus plummerae	Plummer's mariposa-lily	FVLL00150	78	47988	47988	3411828	New bury Park	VEN
5	Antrozous pallidus	pallid bat	AMACC10010	310	66641	66786	3411931	Santa Paula	VEN
6	Coccyzus americanus occidentalis	w estern yellow-billed cuckoo	ABNR02022	70	84210	5480	3411931	Santa Paula	VEN
7	Riparia riparia	bank sw allow	ABPAU08010	106	84210	85229	3411931	Santa Paula	VEN
8	Polioptila californica californica	coastal California gnatcatcher	ABPB06081	97	15782	25060	3411931	Santa Paula	VEN
9	Dudleya verityi	Verity's dudleya	FDCRA040U0	2	15935	19584	3411921	Camarillo	VEN
10	Dudleya verityi	Verity's dudleya	FDCRA040U0	3	00036	19586	3411828	New bury Park	VEN
11	Dudleya parva	Conejo dudleya	FDCRA04016	7	00093	19659	3411828	New bury Park	VEN
12	Senecio aphanactis	chaparral ragw ort	FDAST8H060	5	35074	170	3411828	New bury Park	VEN
13	Eriogonum crocatum	conejo buckw heat	FDPGN081G0	16	00221	12742	3411828	New bury Park	VEN
14	Dudleya parva	Conejo dudleya	FDCRA04016	13	00221	19656	3411828	New bury Park	VEN
15	Eriogonum crocatum	conejo buckw heat	FDPGN081G0	15	00021	14169	3411828	New bury Park	VEN
16	Eryms marmorata	w estern pond turtle	ARAA02030	1070	34703	23150	3411828	New bury Park	VEN
17	Eriogonum crocatum	conejo buckw heat	FDPGN081G0	4	15904	14170	3411921	Camarillo	VEN
18	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	68	00206	15115	3411828	New bury Park	VEN
19	Gila orcuttii	arroyo chub	AFCJB13120	37	47975	47975	3411828	New bury Park	VEN
20	Senecio aphanactis	chaparral ragw ort	FDAST8H060	7	35084	169	3411921	Camarillo	VEN
21	Trimerotropis occidentalioides	Santa Monica grasshopper	IIORT36300	3	60414	60450	3411921	Camarillo	VEN
22	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	66	00135	12451	3411828	New bury Park	VEN
23	Oncorhynchus mykiss irideus	southern steelhead - southern California DFS	AFC-HA0209J	1	34071	29766	3411941	Santa Paula Peak	VEN
24	Southern Riparian Forest	Southern Riparian Forest	CTT61300CA	13	00134	16037	3411828	New bury Park	VEN
25	Vireo bellii pusillus	least Bell's vireo	ABFBW01114	123	15934	14263	3411931	Santa Paula	VEN
26	Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	33	00193	15521	3411828	New bury Park	VEN
27	Vireo bellii pusillus	least Bell's vireo	ABFBW01114	312	75708	76741	3411931	Santa Paula	VEN
28	Dudleya parva	Conejo dudleya	FDCRA04016	9	00184	13945	3411828	New bury Park	VEN
29	Gila orcuttii	arroyo chub	AFCJB13120	38	47968	47968	3411921	Camarillo	VEN
30	Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	30	00203	15524	3411828	New bury Park	VEN
31	Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	CTT62400CA	32	00107	15520	3411828	New bury Park	VEN
32	Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	CTT61310CA	20	15903	26544	3411921	Camarillo	VEN
33	Gila orcuttii	arroyo chub	AFCJB13120	39	47974	47974	3411921	Camarillo	VEN
34	Valley Needlegrass Grassland	Valley Needlegrass Grassland	CTT42110CA	45	00039	16278	3411828	New bury Park	VEN
35	Pentachaeta lyonii	Lyon's pentachaeta	FDAST6X060	45	72372	73308	3411828	New bury Park	VEN
36	Vireo bellii pusillus	least Bell's vireo	ABFBW01114	173	21212	19702	3411931	Santa Paula	VEN
37	Dudleya verityi	Verity's dudleya	FDCRA040U0	1	15899	29818	3411921	Camarillo	VEN
38	Delphinium parryi ssp. blochmaniae	dune larkspur	FDRAN0B1B1	2	15899	29817	3411921	Camarillo	VEN
39	Eriogonum crocatum	conejo buckw heat	FDPGN081G0	18	00011	21043	3411828	New bury Park	VEN
40	Thamnophis hammondi	tw o-striped garter snake	ARADB36160	40	27911	22660	3411828	New bury Park	VEN
41	Eriogonum crocatum	conejo buckw heat	FDPGN081G0	10	00024	21044	3411828	New bury Park	VEN
42	Finnonium crocatum	conejo buckw heat	FDPGN081G0	13	00057	21046	3411828	New bury Park	VEN

California Department of Fish and Game - IMAPS Viewer

<u>43</u>	Dudleya parva	Conejo dudleya	PDCRA04016	5	00077	19661	3411828	New bury Park	VEN
<u>44</u>	Eriogonum crocatum	conejo buckw heat	PDPGN081G0	12	00091	21045	3411828	New bury Park	VEN
<u>45</u>	Southern Riparian Scrub	Southern Riparian Scrub	CTT63300CA	18	00063	28814	3411838	Moorpark	VEN
<u>46</u>	Southern Riparian Scrub	Southern Riparian Scrub	CTT63300CA	19	00088	28812	3411838	Moorpark	VEN
<u>47</u>	Eriogonum crocatum	conejo buckw heat	PDPGN081G0	1	00140	21047	3411828	New bury Park	VEN
<u>48</u>	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	72	00142	28771	3411828	New bury Park	VEN
<u>49</u>	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA	67	00146	28772	3411828	New bury Park	VEN
<u>50</u>	Eriogonum crocatum	conejo buckw heat	PDPGN081G0	9	00182	12216	3411828	New bury Park	VEN

Next 36 Records

## **Appendix E** Results of the Least Bell's Vireo Surveys-BonTerra Consulting

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September 17, 2010

Rich Galvin  
GPA Environmental  
1611 South Pacific Coast Highway, Suite 104  
Redondo Beach, California 90277

**VIA EMAIL AND MAIL**  
**richard@gpaenv.com**

**Subject:** Results of the Least Bell's Vireo Survey for the State Route 118 at State Route 34 and Donlon Road Intersection Improvement Project Site, Community of Somis, Ventura County, California

Dear Mr. Galvin:

This Letter Report presents the results of focused surveys to determine the presence or absence of the least Bell's vireo (*Vireo bellii pusillus*) for the State Route (SR) 118 at SR-34 and Donlon Road Intersection Improvement project site in the community of Somis in Ventura County, California (Exhibit 1). The surveys were conducted according to U.S. Fish and Wildlife Service (USFWS) protocol.

### **PROJECT LOCATION AND DESCRIPTION**

The SR-118 and SR-34 Intersection is located at latitude 34.263745° and longitude -118.994674°. There are six alternatives under consideration for the proposed project. The alternatives are (1) "No-Build" Alternative, (2) Intersection Improvement Alternative, (3) Save Our Somis (SOS) Alternative, (4) Roundabout Alternative, (5) Somis Bypass Alternative, and (6) Bridge Alternative. The study area for the proposed project includes all riparian areas potentially impacted by any of the six project alternatives.

### **Survey Locations**

The study area is located on the U.S. Geological Survey's Moorpark 7.5-minute quadrangle map (Exhibit 2). The study area includes three unnamed tributaries to the Arroyo Simi, two north-south drainages, (Drainages 1 and 2) that flow into a third east-west drainage (Drainage 3) north of the railroad tracks that parallel Arroyo Las Posas (Exhibit 3). The study area also includes the northern edge of riparian habitat along Arroyo Las Posas. None of the project alternatives would directly impact Arroyo Las Posas; however, a portion of the arroyo was included in the study area to account for indirect impacts that would occur under the Somis Bypass Alternative, which would parallel the railroad tracks.

#### *Drainage 1*

Drainage 1 is a north-south drainage adjacent to Donlon Road from SR-118 upstream approximately 800 feet to a debris basin. This area is comprised primarily of gum trees (*Eucalyptus* spp.) with no appreciable understory habitat. This segment of the drainage was dry throughout the surveys. This segment (upstream of SR-118) is not considered suitable habitat for the least Bell's vireo.



Directly adjacent to where Drainage 1 crosses under SR-118, there are a few willows (*Salix* spp.) and Mexican elderberry (*Sambucus mexicana*); however, these species are limited to the portion of the drainage directly adjacent to SR-118. This segment of the drainage was also dry during the surveys.

This limited segment of the drainage (adjacent to SR-118) was considered marginally suitable for least Bell's vireo.

This drainage continues south of SR-118 and east of SR-34 through agricultural fields for approximately 2,700 linear feet where it joins with Drainage 3 located north of the railroad tracks. This segment of Drainage 1 is dominated by gum trees with an understory of invasive species, such as greater periwinkle (*Vinca major*), German ivy (*Senecio mikanioides*), and castor bean (*Ricinus communis*) with some (native) hoary nettle (*Urtica dioica*). Most of this segment contains slowly flowing water, which likely consists of runoff from the adjacent agricultural fields. This segment Drainage 1 (downstream of SR-118) does not contain suitable habitat for least Bell's vireo.

#### *Drainage 2*

Drainage 2 is a north-south drainage located 2,400 feet east of Donlon Road. This drainage extends from SR-118 downstream approximately 1,500 feet to its confluence with Drainage 3 north of the railroad tracks. Drainage 2 is a windrow of gum trees through an agricultural field. The understory of this narrow drainage is dominated by cattails (*Typha* sp) and poison hemlock (*Conium maculatum*) with other ruderal (weedy) species also occurring. Much of Drainage 2 generally contained standing water during the survey. Drainage 2 does not contain suitable habitat for the least Bell's vireo.

#### *Drainage 3*

Drainage 3 is an east-west drainage located north of the railroad tracks. The study area begins at Drainage 3's confluence with Drainage 2 (described above) and continues approximately 2,300 feet southwest along this drainage (i.e., where riparian habitat ends). Drainage 3 consists of dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock, castor bean, and hoary nettle. Other species commonly occurring along Drainage 3 include coyote brush (*Baccharis pilularis*), Mexican elderberry, California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. There are also patches of giant reed (*Arundo donax*) along this drainage. Drainage 3 contains suitable habitat for the least Bell's vireo.

#### *Arroyo Las Posas*

The study area also includes the northern edge of the riparian habitat of Arroyo Las Posas, which parallels the railroad tracks on their southern edge. The study area includes the Arroyo Las Posas from approximately 975 feet northeast of the second north-south drainage (described above) downstream to 2,300 feet southwest of the second north-south drainage. The Arroyo Las Posas consists of an extensive willow riparian forest dominated by arroyo willow and black willow (*Salix gooddingii*) with narrow-leaved willow (*Salix exigua*) and giant reed also commonly occurring. The study area only contains the northern edge of riparian habitat, which is located adjacent to a horse stable, a nursery, and the railroad tracks. The habitat along Arroyo Las Posas contains suitable habitat for the least Bell's vireo.

Attachment A includes representative photos of habitat along the drainages in the study area.

## **BACKGROUND**

The least Bell's vireo was formerly more common and widespread, but is now a rare, local summer resident of Southern California's lowland riparian woodlands (Grinnell and Miller 1944; Garrett and Dunn 1981). The substantial population declines of these this avian species over the latter half of the twentieth century is attributable to the loss and degradation of riparian habitats and brood parasitism by the brown-headed cowbird (*Molothrus ater*). As a result, the least Bell's vireo was listed by the California Department of Fish and Game (CDFG) as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986.

### Least Bell's Vireo

Bell's vireo is a Neotropical migrant that breeds in central and southwestern North America from northern Mexico to Southern California, Nevada, and Utah; east to Louisiana; and north to North Dakota, Wisconsin, and Indiana in the central U.S. (AOU 1998). Although not well known, the winter range of the Bell's vireo is believed to be the west coast of Central America from southern Sonora south to northwestern Nicaragua, including the cape region of Baja California, Mexico (Brown 1993). Of the four Bell's vireo subspecies, only two breed in California: the least Bell's vireo and the Arizona Bell's vireo (*V. b. arizonae*), which breed in the Colorado River Valley (Garrett and Dunn 1981; Rosenberg et al. 1991). Though the least Bell's vireo was formerly considered a common breeder in riparian habitats throughout the Central Valley and other low-elevation riverine systems in California and Baja California, Mexico (Franzreb 1989), presently, the least Bell's vireo has been eliminated from much of its historical range (Franzreb 1989; Brown 1993).

The breeding habitat of the least Bell's vireo is primarily riparian dominated by willows with dense understory vegetation; shrubs such as mule fat and California rose (*Rosa californica*) are often a component of the understory (Goldwasser 1981). The least Bell's vireo is often found in areas that include trees such as willow, western sycamore (*Platanus racemosa*), or cottonwood (*Populus* sp.) particularly where the canopy is within or immediately adjacent to an understory layer of vegetation (Salata 1983). The least Bell's vireo generally nests in early successional stages of riparian habitats, with nest sites frequently located in willows that are between four and ten years of age (RECON 1988; Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two to ten feet above ground (Goldwasser 1981; Salata 1983; Franzreb 1989).

On February 2, 1994, the USFWS issued their final determination of critical habitat for the least Bell's vireo (USFWS 1994), identifying approximately 37,560 acres as critical habitat in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties. The survey area is not located in the designated critical habitat area for this species.

### SURVEY METHODOLOGY

The USFWS protocol for the least Bell's vireo requires that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. BonTerra Consulting Senior Biologist Amber Oneal conducted surveys on April 30; May 10 and 26; June 7, 17, and 28; and July 8, and 19, 2010.

Ms. Oneal systematically surveyed the riparian habitats by walking slowly and methodically along the margins of riparian habitat. On the initial survey, meandering transects through riparian habitat were conducted to assess habitat quality and composition. However, due to the narrow configuration of the two north-south drainages and the east-west drainage in the study area, the riparian habitat could be adequately surveyed from the margins of the riparian habitat on subsequent surveys. Meandering transects were not conducted through the Arroyo Las Posas because only the northern edge of the riparian habitat was included in the study area to assess potential indirect project impacts.

As the least Bell's vireo survey protocol does not require the playback of least Bell's vireo vocalizations, recorded least Bell's vireo vocalizations were not used during the surveys. Ms. Oneal used "pishing" sounds to elicit responses from any least Bell's vireos present if none were heard. Ms. Oneal recorded vireo vocalizations and behavior and noted the time and distance between vireo observations to draw conclusions about the number and approximate extent of each vireo territory.

All surveys were conducted under optimal weather conditions (i.e., between 55 and 80 degrees Fahrenheit with wind speeds between 0 and 10 miles per hour) and during early morning hours when bird activity is at a peak. Ms. Oneal recorded all bird species detected during the survey (Attachment B).

**SURVEY RESULTS**

A complete list of wildlife species observed during the surveys is included in Attachment B.

*Drainage 1*

No least Bell's vireo were observed along Drainage 1.

*Drainage 2*

No least Bell's vireo were observed along Drainage 2.

*Drainage 3 and the Arroyo Las Posas*

A total of three least Bell's vireo territories were observed in the study area along Drainage 3 and the Arroyo Las Posas (Exhibit 3). Two territories were located along Drainage 3 north of the railroad tracks; however, the vireos at both these territories were observed crossing the railroad tracks and also using habitat within the Arroyo Las Posas. A third territory was located within the Arroyo Las Posas; this pair was also observed crossing the railroad tracks to use habitat along Drainage 3. A description of observations is summarized in the table below. Based on these observations, it appears that the vireo in Territory 1 remained unpaired throughout the season, while the vireos in Territories 2 and 3 were paired and raised young. It is likely that the vireos were not observed in the study area during the later surveys because they had completed nesting and were foraging more widely along the Arroyo Las Posas.

**TABLE 1  
 SUMMARY OF LEAST BELL'S VIREO OBSERVATIONS**

<b>Survey Date</b>	<b>Territory 1</b>	<b>Territory 2</b>	<b>Territory 3</b>
April 30, 2010	Male singing repeatedly <sup>1</sup> along Drainage 3.	Male singing intermittently <sup>1</sup> from within habitat along Arroyo Las Posas.	Not observed.
May 10, 2010	Male singing repeatedly along Drainage 3.	Male singing intermittently from within habitat along Arroyo Las Posas.	Pair observed foraging together; male sang from Drainage 3; pair spent most of their time in Drainage 3 but were observed crossing the tracks to forage along Arroyo Las Posas.
May 26, 2010	Male singing repeatedly from Drainage 3 and also edge of habitat in Arroyo Las Posas.	Male singing intermittently from within habitat along Arroyo Las Posas.	Male singing intermittently from both Drainage 3 and within habitat along Arroyo Las Posas.

**TABLE 1 (Continued)**  
**SUMMARY OF LEAST BELL'S VIREO OBSERVATIONS**

Survey Date	Territory 1	Territory 2	Territory 3
June 7, 2010	Male observed singing repeatedly from within the Drainage 3 (immediately after pair from Territory 2 flew across railroad tracks).	Male singing from within habitat along Arroyo Las Posas; pair observed flying across railroad tracks from Drainage 3 to Arroyo Las Posas.	Male singing from within habitat along Arroyo Las Posas.
June 17, 2010	Male observed singing in Drainage 3.	Male singing and calling from habitat along Arroyo Las Posas but close to railroad tracks.	Male singing and calling from Drainage 3; pair observed.
June 28, 2010	Male observed singing in Drainage 3.	Male singing from habitat along Arroyo Las Posas.	Not observed.
July 8, 2010	Not observed.	Not observed.	Not observed.
July 19, 2010	Not observed.	Not observed.	Not observed.
<sup>1</sup> Unpaired males often sing their phrases continuously in short succession while paired males often pause between phrases and songs.			

Two California Species of Special Concern were observed along Drainage 3 and the Arroyo Las Posas in the study area. A total of three yellow-breasted chat (*Icteria virens*) territories were consistently observed over the course of the surveys (Exhibit 3). Several yellow warblers (*Dendroica petechia*) were observed over the course of the surveys (with seven to nine individuals observed during each of the early spring surveys); however, the special status designation focuses on nesting habitat for yellow warblers. At least three yellow warblers were consistently observed in the same general location throughout the surveys and are presumed to have maintained territories in the study area. California Natural Diversity Database (CNDDDB) forms will be submitted to the CDFG for these species in addition to the least Bell's vireo (Attachment C).

Brown-headed cowbirds were also consistently observed throughout the survey period. An average of 11 individuals was observed during each survey visit, with a high count of 15 individuals observed on May 26, 2010. A high number of brown-headed cowbirds is not surprising considering the surrounding landscape of agricultural fields and a horse stable. Riparian bird species would likely benefit from implementation of a cowbird trapping program in the area, and one could be considered as a possible mitigation measure for the proposed project.

BonTerra Consulting appreciates the opportunity to assist on this project. If you have any comments or questions, please call me at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal  
 Senior Project Manager, Biological Services

Mr. Rich Galvin  
September 17, 2010  
Page 6

I certify that the information in this survey report and enclosed exhibits fully and accurately presents my work.

Amber S. Oneal  
Senior Project Manager, Biological Services

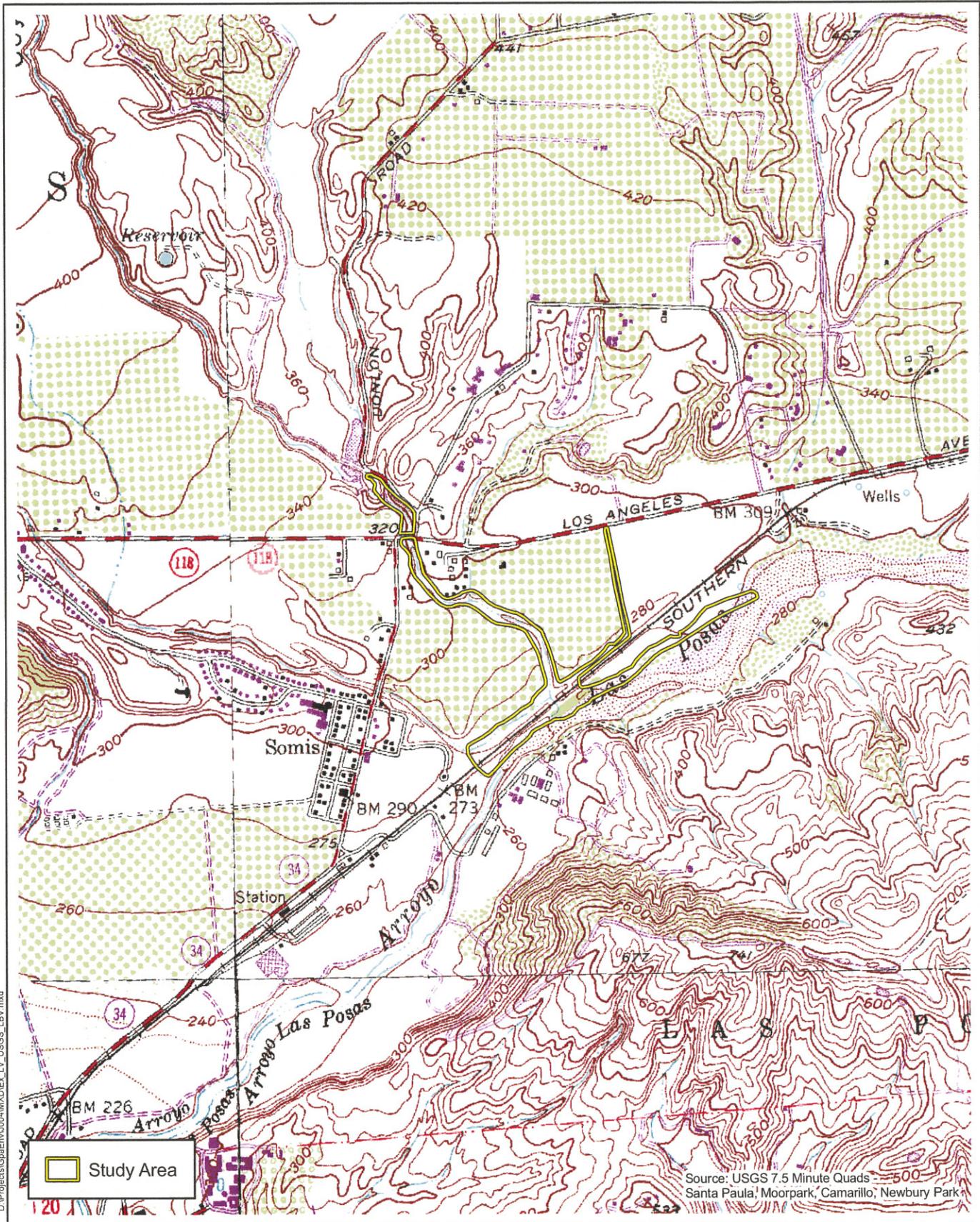
Enclosures: Exhibits 1, 2, and 3  
Attachment A – Site Photos  
Attachment B – Wildlife Compendium  
Attachment C – CNDDDB Forms

cc: Nayla El-Shammas, California Department of Transportation, Los Angeles  
Diane Noda, U.S. Fish and Wildlife Service

## REFERENCES

- American Ornithologists' Union (AOU). 1998. *Check-list of North American Birds* (7th ed). Shipman, VA: Buteo Books.
- Brown, B.T. 1993. Bell's Vireo (*Vireo bellii*). *The Birds of North America*, No. 35 (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia, PA and Washington, D.C.: The Academy of Natural Sciences and AOU (respectively).
- Franzreb, K.E. 1989. *Ecology and Conservation of the Endangered Least Bell's Vireo* (Biological Report 89[1]). Sacramento, CA: USFWS, Endangered Species Office.
- Garrett, K. and J. Dunn. 1981. *Birds of Southern California: Status and Distribution*. Los Angeles, CA: Los Angeles Audubon Society.
- Goldwasser, S. 1981. *Habitat Requirements of the Least Bell's Vireo* (Final Report, Job IV-38.1). Sacramento, CA: CDFG.
- Grinnell, J. and A.H. Miller. 1944. The Distribution of the Birds of California. *Pacific Coast Avifauna No.27*. Albuquerque, NM: Cooper Ornithological Society.
- RECON Regional Environmental Consultants (RECON). 1988. *Draft Comprehensive Species Management Plan for the Least Bell's Vireo* (Prepared for the San Diego Association of Governments). San Diego, CA: RECON.
- Rosenberg, K.V., R.D. Ohmart, W.C. Hunter, and B.W. Anderson. 1991. *Birds of the Lower Colorado River Valley*. Tucson, AZ: University of Arizona Press.
- Salata, L.R. 1983. *Status of the Least Bell's Vireo on Camp Pendleton, California: Report on Research Done in 1983*. Laguna Niguel, CA: USFWS.
- U.S. Fish and Wildlife Service (USFWS).. 1994 (February 2). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Least Bell's Vireo. *Federal Register* 59(22): 4845-4867. Washington, D.C.: USFWS.





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 Study Area

Source: USGS 7.5 Minute Quads - Santa Paula, Moorpark, Camarillo, Newbury Park

### Least Bell's Vireo Study Area

### Exhibit 2

SR-118 at SR-34 and Donlon Road Intersection Improvement Project



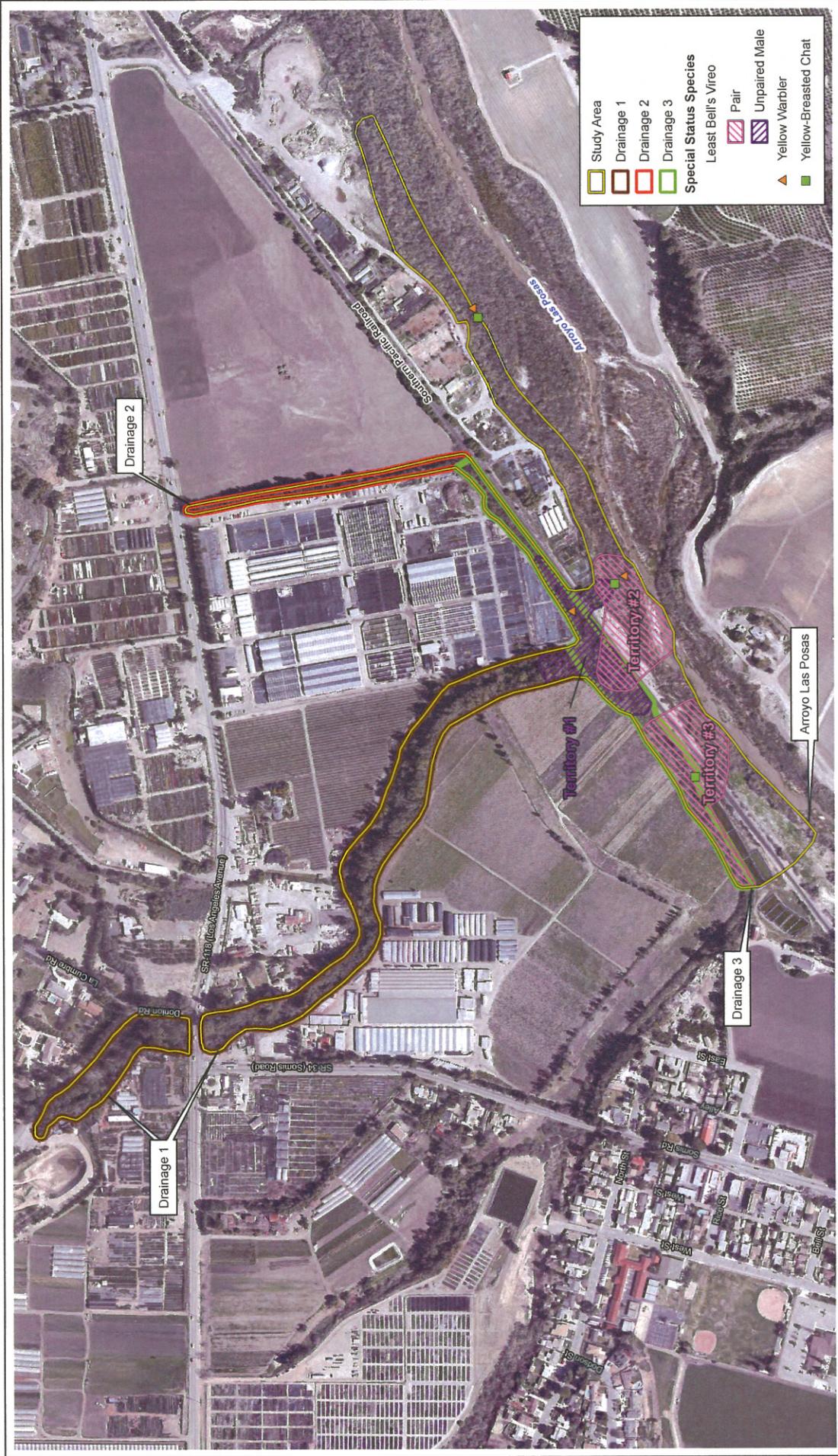


Exhibit 3

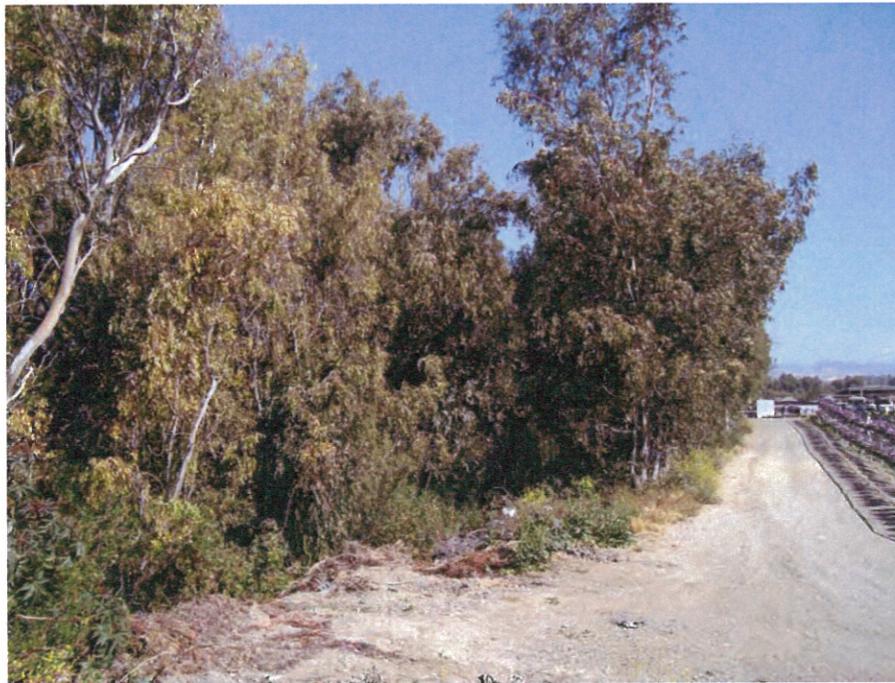
Special Status Species Observed  
 SR-118 at SR-34 and Donjon Road Intersection Improvement Project



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**ATTACHMENT A**

**SITE PHOTOS**



An overview of the Drainage 1 located between the SR-118/SR-34 and SR-118/Donlon Road intersections. Vegetation along this drainage consists of gum trees with an understory of invasive species such as German ivy and castor bean. This drainage was not considered habitat for least Bell's vireo. Photo taken from the south facing northwest toward SR-118.



An overview of the Drainage 2 located approximately 2,400 feet east of SR-118 and SR-34. Vegetation along this drainage consists of a windrow of gum trees with poison hemlock and cattails in the understory. This drainage was not considered suitable habitat for least Bell's vireo. Photo taken from the south facing northwest toward SR-118.

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## Site Photographs

Exhibit A-1

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



An overview of the habitat along the railroad tracks. Drainage 3 with southern willow scrub is located to the right (north) of the railroad tracks and Arroyo Las Posas is located to the left (south) of the railroad tracks. Photo taken from the east facing west.



An overview of the willow riparian forest habitat along Arroyo Las Posas in the eastern portion of the study area. A nursery and horse stable is located between the railroad tracks and Arroyo Las Posas. Photo taken from the north facing south.

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## Site Photographs

Exhibit A-2

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



An overview of the willow riparian forest habitat along Arroyo Las Posas in the middle portion of the study area. Photo taken from the north facing southeast.



A representative view of southern willow scrub habitat along Drainage 3 located north of the railroad tracks. Photo taken from the south facing northeast.

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## Site Photographs

Exhibit A-3

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



View of southern willow scrub habitat within Territory 1 where the unpaired male was typically observed (Drainage 3). Photo taken from the south facing northeast.



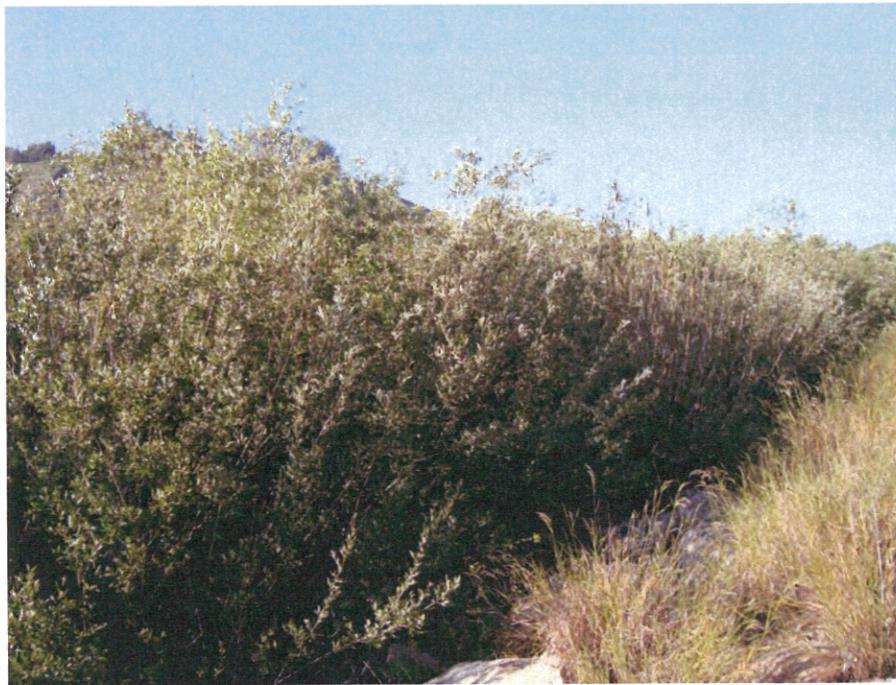
An overview of the willow riparian forest habitat along Arroyo Las Posas in the western portion of the study area. All three vireo territories included a portion of this area. Photo taken from the north facing southwest.

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## Site Photographs

Exhibit A-4

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



View of willow riparian forest habitat within Territory 2 (along the Arroyo Las Posas) where one of the pairs was typically observed. Photo taken from the east facing southwest.



View of southern willow scrub habitat within Territory 3 where one of the pairs was typically observed (Drainage 3). Photo taken from the west facing northeast.

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## Site Photographs

Exhibit A-5

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*

**ATTACHMENT B**  
**WILDLIFE COMPENDIUM**

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
SPRING/SUMMER 2010**

<b>Species</b>
<b>Amphibians</b>
<b>BUFONIDAE - TRUE TOADS</b>
<i>Bufo boreas</i> western toad
<b>HYLIDAE - TREEFROGS</b>
<i>Pseudacris [Hyla] cadaverina</i> California treefrog
<b>RANIDAE - TRUE FROGS</b>
<i>Rana catesbeiana</i> bullfrog*
<b>Reptiles</b>
<b>PHRYNOSOMATIDAE - ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, &amp; HORNED LIZARDS</b>
<i>Sceloporus occidentalis</i> western fence lizard
<b>ANGUIDAE - ALLIGATOR LIZARDS</b>
<i>Elgaria multicarinata</i> southern alligator lizard
<b>Birds</b>
<b>ANATIDAE - WATERFOWL</b>
<i>Anas platyrhynchos</i> mallard
<b>ODONTOPHORIDAE - QUAILS</b>
<i>Callipepla californica</i> California quail
<b>PHALACROCORACIDAE - CORMORANTS</b>
<i>Phalacrocorax auritus</i> double-crested cormorant
<b>ARDEIDAE - HERONS, BITTERNS, &amp; ALLIES</b>
<i>Ardea herodias</i> great blue heron
<b>ACCIPITRIDAE - HAWKS, KITES, EAGLES, &amp; ALLIES</b>
<i>Buteo lineatus</i> red-shouldered hawk
<i>Buteo jamaicensis</i> red-tailed hawk
<b>CHARADRIIDAE - PLOVERS</b>
<i>Charadrius vociferus</i> killdeer
<b>COLUMBIDAE - PIGEONS &amp; DOVES</b>
<i>Columba livia</i> rock pigeon*
<i>Zenaida macroura</i> mourning dove
* introduced species

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
SPRING/SUMMER 2010  
(Continued)**

Species
<i>Columbina passerina</i> common ground-dove
<b>TROCHILIDAE - HUMMINGBIRDS</b>
<i>Calypte anna</i> Anna's hummingbird
<i>Selasphorus sasin</i> Allen's hummingbird
<b>PICIDAE - WOODPECKERS</b>
<i>Picoides nuttallii</i> Nuttall's woodpecker
<i>Picoides pubescens</i> downy woodpecker
<b>TYRANNIDAE - TYRANT FLYCATCHERS</b>
<i>Empidonax difficilis</i> Pacific-slope flycatcher
<i>Sayornis nigricans</i> black phoebe
<i>Tyrannus vociferans</i> Cassin's kingbird
<b>VIREONIDAE - VIREOS</b>
<i>Vireo bellii pusillus</i> least Bell's vireo
<b>CORVIDAE - CROWS &amp; JAYS</b>
<i>Aphelocoma californica</i> western scrub-jay
<i>Corvus brachyrhynchos</i> American crow
<i>Corvus corax</i> common raven
<b>HIRUNDINIDAE - SWALLOWS</b>
<i>Stelgidopteryx serripennis</i> northern rough-winged swallow
<i>Petrochelidon pyrrhonota</i> cliff swallow
<i>Hirundo rustica</i> barn swallow
<b>AEGITHALIDAE - BUSHTITS</b>
<i>Psaltriparus minimus</i> bushtit
<b>TROGLODYTIDAE - WRENS</b>
<i>Thryomanes bewickii</i> Bewick's wren
<b>SYLVIIDAE - SYLVIID WARBLERS</b>
<i>Chamaea fasciata</i> wrentit
* introduced species

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
SPRING/SUMMER 2010  
(Continued)**

Species
<b>TURDIDAE - THRUSHES &amp; ROBINS</b>
<i>Catharus ustulatus</i> Swainson's thrush
<b>MIMIDAE - THRASHERS</b>
<i>Mimus polyglottos</i> northern mockingbird
<i>Toxostoma redivivum</i> California thrasher
<b>STURNIDAE - STARLINGS</b>
<i>Sturnus vulgaris</i> European starling*
<b>PARULIDAE - WARBLERS</b>
<i>Oreothlypis [Vermivora] celata</i> orange-crowned warbler
<i>Dendroica petechia</i> yellow warbler
<i>Geothlypis trichas</i> common yellowthroat
<i>Wilsonia pusilla</i> Wilson's warbler
<i>Icteria virens</i> yellow-breasted chat
<b>EMBERIZIDAE - SPARROWS &amp; JUNCOS</b>
<i>Pipilo maculatus</i> spotted towhee
<i>Melospiza [Pipilo] crissalis</i> California towhee
<i>Melospiza melodia</i> song sparrow
<b>CARDINALIDAE - CARDINALS &amp; ALLIES</b>
<i>Piranga ludoviciana</i> western tanager
<i>Pheucticus melanocephalus</i> black-headed grosbeak
<b>ICTERIDAE - BLACKBIRDS</b>
<i>Agelaius phoeniceus</i> red-winged blackbird
<i>Euphagus cyanocephalus</i> Brewer's blackbird
<i>Molothrus ater</i> brown-headed cowbird
<i>Icterus bullockii</i> Bullock's oriole
<b>FRINGILLIDAE - FINCHES</b>
<i>Carpodacus mexicanus</i> house finch
* introduced species

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
SPRING/SUMMER 2010  
(Continued)**

<b>Species</b>
<i>Spinus [Carduelis] psaltria</i> lesser goldfinch
<i>Spinus [Carduelis] tristis</i> American goldfinch
<b>PASSERIDAE - OLD WORLD SPARROWS</b>
<i>Passer domesticus</i> house sparrow *
<b>ESTRILDIDAE - MANNIKINS</b>
<i>Lonchura punctulata</i> nutmeg mannikin*
<b>Mammals</b>
<b>LEPORIDAE - HARES &amp; RABBITS</b>
<i>Sylvilagus audubonii</i> desert cottontail
<b>SCIURIDAE - SQUIRRELS</b>
<i>Spermophilus beecheyi</i> California ground squirrel
<b>MURIDAE - MICE, RATS, &amp; VOLES</b>
<i>Neotoma sp.</i> woodrat
<b>CANIDAE - WOLVES &amp; FOXES</b>
<i>Canis latrans</i> coyote
<b>PROCYONIDAE - RACCOONS</b>
<i>Procyon lotor</i> common raccoon
* introduced species

**ATTACHMENT C**

**CNDDDB FORMS**

Mail to:  
 California Natural Diversity Database  
 Department of Fish and Game  
 1807 13<sup>th</sup> Street, Suite 202  
 Sacramento, CA 95814  
 Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

*For Office Use Only*

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
 Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
 EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 04/30/2010

## California Native Species Field Survey Form

Scientific Name: *Vireo bellii pusillus*

Common Name: least Bell's vireo

Species Found?  Yes  No If not, why?

Total No. Individuals ~5 Subsequent Visit?  yes  no  
 Is this an existing NDDDB occurrence?  no  unk.  
Yes, Occ. #

Collection? If yes: \_\_\_\_\_  
Number Museum / Herbarium

Reporter: Amber Oneal BonTerra Consulting  
 Address: 151 Kalmus Drive, Ste E-200  
Costa Mesa, CA 92694  
 E-mail Address: aoneal@bonterraconsulting.com  
 Phone: (714) 444-9199

**Plant Information**

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

**Animal Information**

5  
 # adults # juveniles # larvae # egg masses # unknown

breeding  wintering  burrow site  rookery  nesting  other

**Location Description (please attach map AND/OR fill out your choice of coordinates, below)**  
 Arroyo Las Posas and along an unnamed east-west tributary north of the railroad tracks; southeast of the intersection of SR 118 (Los Angeles Avenue) at SR 34 (Somis Road) in the community of Somis

County: Ventura County Landowner / Mgr.: various  
 Quad Name: Moorpark, California Elevation: ~260 ft  
 T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ % of \_\_\_\_\_ %, Meridian:  H  M  S  W  
 Source of Coordinates (GPS, topo. map & type): GPS  
 T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ % of \_\_\_\_\_ %, Meridian:  H  M  S  W  
 GPS Make & Model Garmin eTrek Legend  
**DATUM:** NAD27  NAD83  WGS84  Horizontal Accuracy ~10-20 ft meters/feet  
 Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)   
 Coordinates: Three territories: 11S 036974, 3792710; 11S 0316953, 3792655; 11S 0316819, 3792565

**Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):**  
 Southern willow scrub dominated by *Salix lasiolepis* and *Baccharis salicifolia* along east-west drainage north of railroad tracks; also with *Juglans californica*, *Sambucus mexicana*, *Schinus mollee*, *Schinus terebinthifolius*, *Conium maculatum*, and *Ricinus communis*. Willow riparian forest dominated by *Salix lasiolepis* and *Salix gooddingii* with *Salix exigua* and *Arundo donax* along Arroyo Las Posas.

Other rare taxa seen at THIS site on THIS date: yellow warbler, yellow-breasted chat  
 (separate form preferred)

**Site Information** Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor  
 Immediate AND surrounding land use: Agricultural/nursery, horse stables, railroad  
 Visible disturbances: Invasive species common along drainages  
 Threats: Proposed road improvement  
 Comments: Three territories - one unpaired male, two pairs. All three pairs used both the east-west drainage north of the railroad tracks and Arroyo Las Posas south of the railroad tracks

**Determination:** (check one or more, and fill in blanks)

Keyed (cite reference): \_\_\_\_\_  
 Compared with specimen housed at: \_\_\_\_\_  
 Compared with photo / drawing in: \_\_\_\_\_  
 By another person (name): \_\_\_\_\_  
 Other: Familiarity with species, visually and aurally

**Photographs:** (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes  no

Mail to:  
 California Natural Diversity Database  
 Department of Fish and Game  
 1807 13<sup>th</sup> Street, Suite 202  
 Sacramento, CA 95814  
 Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

**For Office Use Only**

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
 Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
 EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 04/30/2010

**California Native Species Field Survey Form**

Scientific Name: *Icteria virens*

Common Name: yellow-beasted chat

Species Found?  Yes  No \_\_\_\_\_ If not, why?  
 Total No. Individuals 3 Subsequent Visit?  yes  no  
 Is this an existing NDDDB occurrence?  no  unk.  
 Yes, Occ. # \_\_\_\_\_  
 Collection? If yes: \_\_\_\_\_  
 Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Amber Oneal BonTerra Consulting  
 Address: 151 Kalmus Drive, Ste E-200  
Costa Mesa, CA 92694  
 E-mail Address: aoneal@bonterraconsulting.com  
 Phone: (714) 444-9199

**Plant Information**

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

**Animal Information**

3  
 # adults # juveniles # larvae # egg masses # unknown  
 breeding  wintering  burrow site  rookery  nesting  other

**Location Description (please attach map AND/OR fill out your choice of coordinates, below)**

Arroyo Las Posas and along an unnamed east-west tributary north of the railroad tracks; southeast of the intersection of SR 118 (Los Angeles Avenue) at SR 34 (Somis Road) in the community of Somis

County: Ventura County Landowner / Mgr.: various  
 Quad Name: Moorpark, California Elevation: ~260 ft  
 T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  Source of Coordinates (GPS, topo. map & type): GPS  
 T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  GPS Make & Model Garmin eTrek Legend  
**DATUM:**  NAD27  NAD83  WGS84  Horizontal Accuracy ~10-20 ft meters/feet  
 Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)   
 Coordinates: Three territories: 11S 0316991, 3792627; 11S 0316732, 3792522; 11S 0317348, 3792807

**Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):**

Southern willow scrub dominated by *Salix lasiolepis* and *Baccharis salicifolia* along east-west drainage north of railroad tracks; also with *Juglans californica*, *Sambucus mexicana*, *Schinus mollee*, *Schinus terebinthifolius*, *Conium maculatum*, and *Ricinus communis*. Willow riparian forest dominated by *Salix lasiolepis* and *Salix gooddingii* with *Salix exigua* and *Arundo donax* along Arroyo Las Posas.

Other rare taxa seen at THIS site on THIS date: yellow warbler, least Bell's vireo  
 (separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use: Agricultural/nursery, horse stables, railroad

Visible disturbances: Invasive species common along drainages

Threats: Proposed road improvement

Comments: At least three territories consistently observed; seven locations observed over the course of the surveys. Chats used both the east-west drainage north of the railroad tracks and Arroyo Las Posas south of the railroad tracks

**Determination: (check one or more, and fill in blanks)**

- Keyed (cite reference): \_\_\_\_\_
- Compared with specimen housed at: \_\_\_\_\_
- Compared with photo / drawing in: \_\_\_\_\_
- By another person (name): \_\_\_\_\_
- Other: familiarity with species, visuality and auralty

**Photographs: (check one or more)**

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense?  yes  no

Mail to:  
 California Natural Diversity Database  
 Department of Fish and Game  
 1807 13<sup>th</sup> Street, Suite 202  
 Sacramento, CA 95814  
 Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

**For Office Use Only**

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
 Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
 EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mmdd/yyyy): 04/30/2010



## California Native Species Field Survey Form



**Scientific Name:** *Dendroica petechia brewsteri*

**Common Name:** yellow warbler

**Species Found?**  Yes  No \_\_\_\_\_ If not, why? \_\_\_\_\_

Total No. Individuals 3 Subsequent Visit?  yes  no  
 Is this an existing NDDDB occurrence? \_\_\_\_\_  no  unk.  
 Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_  
 Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

**Reporter:** Amber Oneal BonTerra Consulting  
**Address:** 151 Kalmus Drive, Ste E-200  
 Costa Mesa, CA 92694  
**E-mail Address:** aoneal@bonterraconsulting.com  
**Phone:** (714) 444-9199

**Plant Information**

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

**Animal Information**

3  
 # adults # juveniles # larvae # egg masses # unknown  
 breeding  wintering  burrow site  rookery  nesting  other

**Location Description (please attach map AND/OR fill out your choice of coordinates, below)**

Arroyo Las Posas and along an unnamed east-west tributary north of the railroad tracks; southeast of the intersection of SR 118 (Los Angeles Avenue) at SR 34 (Somis Road) in the community of Somis

County: Ventura County Landowner / Mgr.: various

Quad Name: Moorpark, California Elevation: ~260 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  W Source of Coordinates (GPS, topo. map & type): GPS

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian:  H  M  S  W GPS Make & Model Garmin eTrek Legend

**DATUM:** NAD27  NAD83  WGS84  Horizontal Accuracy ~10-20 ft meters/feet

Coordinate System: UTM Zone 10  UTM Zone 11  OR Geographic (Latitude & Longitude)

Coordinates: At least three territories: 11S 0316955, 3792686; 11S 0317001, 3792615; 11S 0317360, 3792815

**Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):**

Southern willow scrub dominated by *Salix lasiolepis* and *Baccharis salicifolia* along east-west drainage north of railroad tracks; also with *Juglans californica*, *Sambucus mexicana*, *Schinus mollee*, *Schinus terebinthifolius*, *Conium maculatum*, and *Ricinus communis*. Willow riparian forest dominated by *Salix lasiolepis* and *Salix gooddingii* with *Salix exigua* and *Arundo donax* along Arroyo Las Posas.

Other rare taxa seen at THIS site on THIS date: yellow-breasted chat, least Bell's vireo (separate form preferred)

**Site Information** Overall site/occurrence quality/viability (site + population):  Excellent  Good  Fair  Poor

Immediate AND surrounding land use: Agricultural/nursery, horse stables, railroad

Visible disturbances: Invasive species common along drainages

Threats: Proposed road improvement

Comments: At least three territories observed in June/July; nine locations observed but most presumed to be migrants. Yellow warblers used both the east-west drainage north of the railroad tracks and Arroyo Las Posas south of the railroad tracks

**Determination:** (check one or more, and fill in blanks)

Keyed (cite reference): \_\_\_\_\_  
 Compared with specimen housed at: \_\_\_\_\_  
 Compared with photo / drawing in: \_\_\_\_\_  
 By another person (name): \_\_\_\_\_  
 Other: Familiarity with species, visually and aurally

**Photographs:** (check one or more) Slide Print Digital

Plant / animal     
 Habitat     
 Diagnostic feature

May we obtain duplicates at our expense? yes  no

**Appendix F** Results of the Habitat Assessment  
for Arroyo Toad and California  
Red Legged Frog- BonTerra  
Consulting

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September 17, 2010

Rich Galvin  
GPA Environmental  
1611 South Pacific Coast Highway, Suite 104  
Redondo Beach, California 90277

**VIA EMAIL AND MAIL**  
**richard@gpaenv.com**

Subject: Results of a Habitat Assessment for Arroyo Toad and California Red-legged Frog for the State Route 118 at State Route 34 and Donlon Road Intersection Improvement Project Site, Community of Somis, Ventura County, California

Dear Mr. Galvin:

This Letter Report presents the results of a habitat assessment for the arroyo toad (*Bufo californicus*) and California red-legged frog (*Rana draytonii*) for the State Route 118 (SR-118) at State Route 34 (SR-34) and Donlon Road Intersection Improvement project in the community of Somis in Ventura County, California (Exhibit 1). BonTerra Consulting Herpetologist Samuel Stewart conducted the survey on July 1, 2010.

The California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB) (CDFG 2010) was reviewed prior to the survey to identify any occurrences of these species in the vicinity of the proposed project. The database search included the U.S. Geological Survey (USGS) Moorpark, Santa Paula, Camarillo, and Newbury Park 7.5-minute quadrangles. No arroyo toad or California red-legged frog were reported from this 4-quadrangle search.

### **PROJECT LOCATION AND DESCRIPTION**

The SR-118 and SR-34 Intersection is located at latitude 34.263745° and longitude -118.994674°. There are six alternatives under consideration for the proposed project: (1) the "No-Build" Alternative; (2) the Intersection Improvement Alternative; (3) the Save Our Somis (SOS) Alternative; (4) the Roundabout Alternative; (5) the Somis Bypass Alternative; and (6) the Bridge Alternative. The study area for the proposed project includes all riparian areas potentially impacted by any of the six project alternatives.

### **SURVEY LOCATIONS**

The study area is located on the USGS Moorpark 7.5-minute quadrangle map (Exhibit 2). The study area includes three unnamed tributaries to the Arroyo Simi; two north-south drainages (Drainages 1 and 2) that flow into a third east-west drainage (Drainage 3) north of the railroad tracks that parallel Arroyo Las Posas (Exhibit 3). The study area also includes the northern edge of riparian habitat along Arroyo Las Posas. None of the project alternatives would directly impact Arroyo Las Posas; however, a portion of the arroyo was included in the study area to account for indirect impacts of the Somis Bypass Alternative, which would parallel the railroad tracks.



#### *Drainage 1*

Drainage 1 is a north-south drainage adjacent to Donlon Road from SR-118 upstream approximately 800 feet to a debris basin. This area is comprised primarily of gum trees (*Eucalyptus* spp.) with no appreciable understory habitat. This segment of the drainage was dry throughout the surveys.

Directly adjacent to the location where Drainage 1 crosses under SR-118, there are a few willows (*Salix* spp.) and Mexican elderberry (*Sambucus mexicana*); however, these species are limited to the portion of the drainage directly adjacent to SR-118. This segment of Drainage 1 was also typically dry during the surveys.

Drainage 1 continues south of SR-118 and east of SR-34 through agricultural fields for approximately 2,700 linear feet where it joins with Drainage 3 located north of the railroad tracks. This segment of Drainage 1 is dominated by gum trees with an understory of invasive species, including greater periwinkle (*Vinca major*), German ivy (*Senecio mikanioides*), and castor bean (*Ricinus communis*); some (native) hoary nettle (*Urtica dioica*) also occurs. Most of this segment contains slowly flowing water and pools, which likely consisted of runoff from the adjacent agricultural fields.

#### *Drainage 2*

Drainage 2 is a north-south drainage located 2,400 feet east of Donlon Road. This drainage extends from SR-118 downstream approximately 1,500 feet to its confluence with Drainage 3 north of the railroad tracks. Drainage 2 is a windrow of gum trees through an agricultural field. The understory of this narrow drainage was dominated by cattails (*Typha* sp.) and poison hemlock (*Conium maculatum*) with other ruderal (weedy) species also occurring. Drainage 2 generally contained standing water along much of the drainage.

#### *Drainage 3*

Drainage 3 is an east-west drainage located north of the railroad tracks. The study area begins at Drainage 3's confluence with Drainage 2 (described above) and continues for approximately 2,300 feet southwest along Drainage 3 (i.e., where riparian habitat ends). Drainage 3 consists of dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock, castor bean, and hoary nettle. Other species commonly occurring along this drainage include coyote brush (*Baccharis pilularis*), Mexican elderberry, California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. Patches of giant reed (*Arundo donax*) are also present.

#### *Arroyo Las Posas*

The study area also includes the northern edge of the riparian habitat of Arroyo Las Posas, which parallels the railroad tracks on its southern edge. The study area includes the Arroyo Las Posas from approximately 975 feet northeast of Drainage 2 (described above) downstream to 2,300 feet southwest of Drainage 2. The Arroyo Las Posas consists of an extensive willow riparian forest dominated by arroyo willow and black willow (*Salix gooddingii*), with narrow-leaved willow (*Salix exigua*) and giant reed also commonly occurring. The study area only includes the northern edge of riparian habitat, which was adjacent to a horse stable, a nursery, and the railroad tracks.

Site photos showing representative views of each drainage in the study area are included in Attachment A.

## **BACKGROUND**

### **Arroyo Toad**

The arroyo toad was listed as a federally Endangered species by the U.S. Fish and Wildlife Service (USFWS) on December 16, 1994, and is considered a California Species of Special Concern (USFWS 1994a). This rather uniformly warty, stocky toad has a light-colored stripe across the head between and including the eyelids. The parotid glands are oval-shaped, widely separated, and pale toward the front. The underside of the arroyo toad is usually buff-colored and unspotted, and the cranial crests are absent or weak. Reproductive adult toad snout to vent length typically ranges from 2 to 2.6 inches for males and from 2.6 to 3.1 inches for females (Sweet 1992, 1993). Tadpoles reach an average maximum length of 1.3 inches (maximum of 1.6 inches) and are black in coloration at hatching, developing tan dorsum and crossbars on the tail and an opaque, white venter before metamorphosing (Sweet 1992).

This toad only occurs in streams of southwestern California and northwestern Baja California, Mexico (USFWS 1994a). In California, it primarily occurs along the Coast Ranges from San Luis Obispo County south to San Diego County, but also occurs at a few locations on the western edge of the desert (Jennings and Hayes 1994). The arroyo toad is generally found in semi-arid regions near washes or intermittent streams (Zeiner et al. 1988).

Early descriptions of the habitat requirements for the arroyo toad are based on detailed life history studies conducted over a period of years by Dr. Samuel Sweet (1992, 1993). Much of that work was conducted in the Los Padres National Forest in Santa Barbara County. Subsequent to this work, additional studies of populations in other portions of the range have resulted in a somewhat broader habitat description (e.g., Griffin et al. 1999; Ramirez 1999, 2000, 2001, 2002a, 2002b, 2002c). It can generally be said that the arroyo toad frequents third order washes, streams, and arroyos in semiarid parts of the southwest. Stream substrates range from sands to small cobble, with sandy banks supporting mule fat, willows (*Salix* spp.), cottonwoods (*Populus* spp.), or sycamores (*Platanus racemosa*). The arroyo toad breeds both within streams and in small backwater pools that form along the stream margins, usually in relatively shallow water (four inches).

Arroyo toads are nocturnal and will move extensively in upland habitats and seasonally. Adult males will sometimes travel 1.2 to 1.9 miles along a stream course, often becoming more sedentary once reaching a large size (Sweet 1992). Females are more sedentary, typically maintaining an area of movement less than 330 feet in diameter (Sweet 1992). Adults feed primarily on ants, particularly nocturnal, trail-forming tree ants (*Liometopum occidentale*), but will also consume other invertebrates (Sweet 1992). Tadpoles are substrate gleaners, feeding on detritus and microbial mats from just beneath the surface layer of fine sediments or within the interstices of gravel deposits (Sweet 1992).

During the breeding season, typically from February to July, males will make advertisement vocalizations above water from shallow areas along the creek margins. The advertisement call is a whistling trill that lasts from 4 to 9 seconds in duration and is audible up to 300 meters under ideal conditions (Gergus 1998). Egg strings of 2,000 to 10,000 eggs are deposited in shallow water (less than 4 inches in depth) on fine sediment with very low current and hatch 4 to 6 days later (Sweet 1992). Larval stage length ranges from 65 to 80 days post-hatching (Sweet 1992).

On February 7, 2001, the USFWS published a final rule designating 182,360 acres of land in Monterey, Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties, California as critical habitat for the arroyo toad (USFWS 2001). Following the designation of critical habitat, several lawsuits were filed challenging various aspects of the designation. In response to these lawsuits, the critical habitat designation was vacated and the USFWS was instructed by the court to re-evaluate its previous position.

On April 13, 2005, the USFWS published a final rule designating 11,695 acres of critical habitat for the arroyo toad in portions of Santa Barbara, Ventura, Los Angeles, Riverside, and San Bernardino Counties, California (USFWS 2005). In its final critical habitat designation, the USFWS reduced the acreage from 182,360 in February 2001 to 11,695 acres. The final critical habitat designation reflects the exclusion of 13 units totaling 67,584 acres based solely on economic considerations. These units are located in Santa Barbara, Ventura, Los Angeles, Orange, Riverside, San Bernardino and San Diego Counties. Portions of two other units in Orange and San Diego Counties were excluded from critical habitat based on economic considerations and a combination of other factors. All proposed critical habitat in Monterey, Orange and San Diego Counties was excluded in the final rule.

Following a challenge of the 2005 critical habitat designation by the Centers for Biological Diversity (CBD) on December 19, 2007, a settlement agreement was reached in which the USFWS would reconsider the designation and submit a proposed revised critical habitat rule for the arroyo toad to the Federal Register by October 1, 2009. A proposed rule revising the critical habitat designation was issued on October 13, 2009 (USFWS 2009). This proposed rule increased the final critical habitat designation by 97,415 acres for a new total of approximately 109,110 acres of lands designated as critical habitat in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties. The comment period on the proposed critical habitat closed on July 29, 2010. A final rule is expected by October 2010 (USFWS 2010a). The study area is not within proposed critical habitat for this species.

Within the project region, the arroyo toad has been reported from Sespe Creek and Piru Creek in the Los Padres National Forest (CDFG 2010). The nearest known locality is in Sespe Creek approximately 21 miles north of the study area.

### **California Red-legged Frog**

The California red-legged frog was federally listed as an Endangered species by the USFWS on May 23, 1996, and is considered a California Species of Special Concern. This frog has been extirpated from approximately 70 percent of its historic range (USFWS 2006). At the time of listing, the red-legged frog was comprised of two subspecies, the California red-legged frog (*R. aurora draytonii*) and the northern red-legged frog (*R. aurora aurora*) until genetic studies (Shaffer et al. 2004) determined that *R. aurora* is actually two separate species, northern red-legged frog (*R. aurora*) and California red-legged frog (*R. draytonii*). The ranges of these two species overlap in Mendocino County. Only the California red-legged frog occurs within the project region.

The California red-legged frog ranges in size from 1.5 to 5.5 inches in length, making it the largest native frog in the Western United States (Wright and Wright 1949). Adult females are significantly longer than males, with an average snout to vent length of 5.4 inches versus 4.5 inches for adult males (Hayes and Miyamoto 1984). The hind legs and lower abdomen of adult frogs are often characterized by a reddish or salmon pink color, and the back is brown, gray, olive, or reddish brown, marked with small black flecks and larger, irregular dark blotches (USFWS 2002; Stebbins 2003). Dorsal spots often have light centers, and in some individuals form a network of black lines (Stebbins 2003). Dorsolateral folds are prominent. Tadpoles range in length from 14 to 80 millimeters and are a dark brown or olive, marked with darker spots (Storer 1925).

This species is found in humid forests, woodlands, grasslands, streams, wetlands, ponds, and lakes from sea level to 8,000 feet above mean sea level (Stebbins 2003). Preferred breeding habitat includes deep ponds and slow-moving streams where emergent vegetation is found on the bank edges (Jennings and Hayes 1994). Although primarily aquatic, it has been recorded in damp

terrestrial places up to 302 feet from water for up to 50 consecutive days (Tatarian 2008) and using small mammal burrows and moist leaf litter as refugia during dry periods (Jennings and Hayes 1994b).

California red-legged frog adults tend to be primarily nocturnal, while juveniles can be active at any time of day (Hayes and Tennant 1985). Adults feed on a wide range of prey, having been recorded feeding on at least 42 different taxa in a single study (Hayes and Tennant 1985), the majority of which were terrestrial invertebrates, but also included fish, other amphibians, and small rodents. The diet of red-legged tadpoles has not been studied but is expected to be similar to other ranid frogs that feed on algae, diatoms, and detritus by grazing the surface of rocks and vegetation (Kupferberg 1997).

During the breeding season, typically from November through April, males call to females from the margins of ponds and slow streams (Jennings and Hayes 1994a). Unlike northern red-legged frogs, which lack vocal sacs and call underwater, California red-legged frogs have paired vocal sacs and call above the water surface (Hayes and Krempels 1986), though vocalizations are relatively weak and difficult to detect. Actual mating most commonly occurs in March, but can vary depending on seasonal climatic patterns. The female lays a jellylike mass of 2,000 to 5,000 reddish brown eggs attached to emergent vegetation, twigs, or other structures in still or slow moving water. The resulting tadpoles typically require about 3 weeks to hatch and another 11 to 20 weeks to metamorphose into juvenile frogs. Metamorphosis typically occurs from July to September, although some tadpoles have been observed to delay metamorphosis until the following March or April (Bobzien et al. 2000; Fellers et al. 2001). Red-legged frogs typically reach sexual maturity at 2 years (for males) and 3 years (for females) from metamorphosis (Jennings and Hayes 1985).

On April 13, 2006, the USFWS reissued the final critical habitat designation for the California red-legged frog, greatly reducing the approximately 4.1 million acres which had previously been proposed in 2000 (USFWS 2000) and designated in 2001. The 2006 critical habitat designation includes approximately 450,288 acres located in Alameda, Butte, Contra Costa, El Dorado, Kern, Los Angeles, Marin, Merced, Monterey, Napa, Nevada, San Benito, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Ventura, and Yuba Counties, California. However, the USFWS reviewed the 2006 critical habitat designation in response to questions raised about the integrity of the scientific information used for this designation and its consistency with appropriate legal standards. On September 16, 2008, the USFWS proposed to revise the critical habitat boundaries to better reflect lands containing essential features for this species. The current proposal designates approximately 1,804,856 acres of critical habitat in 28 California counties, which reflects an increase of approximately 1,354,577 acres (USFWS 2008). On March 17, 2010, the USFWS published a final critical habitat designating 1,626,609 acres of critical habitat in 27 counties. The survey area is not located within designated or proposed critical habitat for this species.

Within the project region, the California red-legged frog has been reported from San Antonio Creek, Matilija Creek, and Lion Creek near Ojai; Matilija Creek and Lower Rose Lake in the Los Padres National Forest; and Las Virgenes Creek in Agoura Hills (CDFG 2010). The nearest known locality is in the Las Virgenes Creek approximately 17 miles southeast of the study area.

## **SURVEY RESULTS**

### **Arroyo Toad**

The arroyo toad typically occurs in slow moving, meandering alluvial washes with sandy and/or gravelly substrate and benches of upland habitat adjacent to the stream. The three drainages tributary to Arroyo Las Posas are too small and do not contain the appropriate stream morphology

for the arroyo toad. While the Arroyo Las Posas is a large enough streamcourse, much of the adjacent upland habitat in the Las Posas Valley has been heavily modified for agriculture and residential development, making it unsuitable for arroyo toad aestivation and/or brumation (period of amphibian or reptile inactivity associated with seasonal temperature drops). Erosion from surrounding agricultural operations has resulted in deposition of silty fine sediment in the creek and its tributaries, and likely in the accumulation of contaminants associated with soil amendments, fertilizers, and insecticides. Introduced aquatic wildlife detected during the site visit, including red-swamp crayfish (*Procambarus clarkii*), mosquitofish (*Gambusia affinis*), and American bullfrog (*Rana catesbeiana*), represent a predatory threat to native amphibians and their eggs and reduce their potential to occur and persist. There is also a notable lack of historic records for the arroyo toad in the Calleguas Watershed, which extends from Port Hueneme north to Oxnard and east to the County line. Therefore, the arroyo toad is not expected to occur in the study area due to low aquatic habitat suitability, lack of suitable upland habitat, and lack of historic occurrence throughout the Calleguas Watershed.

### **California Red-legged Frog**

The California red-legged frog typically occurs in perennial watercourses or pools. Most of the study area contains habitat that would be considered potentially suitable or marginally suitable foraging habitat for this species (Exhibit 3). A few deep pools (i.e., potential breeding habitat) were noted along Drainage 1 between SR-118 and the railroad tracks (Exhibit 3). As previously mentioned, American bullfrog and red-swamp crayfish were both noted along drainages in the study area. These species are known predators of California red-legged frog in all life stages; therefore, the potential for California red-legged frog in drainages with these predators is reduced. Nevertheless, the California red-legged frog is considered to have low potential to occur in perennial water within the study area. The California Red-legged Frog Habitat Site Assessment Data Sheet is included in Attachment B.

A focused survey following USFWS protocol would be necessary to determine the presence or absence of this species in the study area. The protocol for this species requires up to eight surveys conducted over a minimum of six weeks between January 1 and September 30. Two daytime surveys and four nighttime surveys are required during the breeding season (January 1 to June 30) with the best survey period for egg masses in Southern California being February 25 to April 30. One day and one night survey are required during the non-breeding season (July 1 to September 30). At least one survey must be conducted prior to August 15.

### **Other Species**

Although no special status aquatic species were noted during the survey, some have potential to occur in portions of the study area. These species include the arroyo chub (*Gila orcutti*), western pond turtle (*Actinemys marmorata pallida*), and two-striped garter snake (*Thamnophis hammondi*). These species would have the highest potential to occur along Arroyo Las Posas; however, they could also occur in Drainages 1, 2, and 3.

A complete list of wildlife species observed during the surveys is included in Attachment C.

Mr. Rich Galvin  
September 17, 2010  
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BonTerra Consulting appreciates the opportunity to assist with this project. If you have any comments or questions, please call Amber Oneal at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal  
Associate, Senior Project Manager

Samuel C. Stewart IV  
Project Manager

Enclosures: Exhibits 1, 2, and 3  
Attachment A – Site Photos  
Attachment B – Red-legged Frog Site Assessment Datasheet  
Attachment C – Wildlife Compendium

cc: Nayla El-Shammas, California Department of Transportation, Los Angeles  
Diane Noda, U.S. Fish and Wildlife Service

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## REFERENCES

- Bobzien, S., J.E. DiDonato, P.J. Alexander. 2000. Status of the California Red-Legged Frog in the East Bay Regional Park District, California (Unpublished report for the City of Oakland).
- California Department of Fish and Game (CDFG). 2010. California Natural Diversity Database. Records of Occurrence for Moorpark, Santa Paula, Camarillo, and Newbury Park 7.5-minute quadrangles. Sacramento, CA: CDFG, Natural Heritage Division.
- Fellers, G.M., A. Launer, G.B. Rathbun, S. Bobzien, J. Alvarez, D. Sterner, R.B. Seymour, and M. Westphal. 2001. Overwintering tadpoles in the California red-legged frog (*Rana aurora draytonii*). *Herpetological Review* 32(3):156-157. Salt Lake City, UT: Society for the Study of Amphibians and Reptiles.
- Gergus, E.W.A. 1998. Systematics of the *Bufo microscaphus* complex: allozyme evidence. *Herpetologica* 54:317–325. Salt Lake City, UT: Society for the Study of Amphibians and Reptiles.
- Griffin, P.C., T. Case, and R. Fisher. 1999. Radio Telemetry Study of *Bufo californicus*, Arroyo Toad Movement Patterns and Habitat Preferences (Contract Report to the California Department of Transportation Southern Biology Pool).
- Hayes, M.P. and D.M. Kremples. 1986. Vocal sac variation among frogs of the genus *Rana* (Anura: Ranidae) from western North America. *Copeia* 1986:927–936. Miami, FL: American Society of Ichthyologists and Herpetologists.

- Hayes, M.P. and M.M. Miyamoto. 1984. Biochemical, behavioral and body size difference between *Rana aurora aurora* and *R. a. draytonii*. *Copeia* 1984(4):1018–1022. Miami, FL: American Society of Ichthyologists and Herpetologists.
- Hayes, M.P. and M.R. Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *Southwestern Naturalist* 30(4): 601-605. Lubbock, TX: Southwestern Association of Naturalists.
- Jennings, M.R. and M.P. Hayes. 1985. Pre-1900 overharvest of the California red-legged frog (*Rana aurora draytonii*): the inducement for bullfrog (*Rana catesbeiana*) introduction. *Herpetologica* 41:94–103. Salt Lake City, UT: Society for the Study of Amphibians and Reptiles.
- 1994a. *Amphibian and Reptile Species of Special Concern in California* (Final report to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California). Cordova, CA: CDFG.
- 1994b. Decline of native ranid frogs in the desert Southwest *in* Herpetology of the North American deserts: Proceedings of a symposium (P.R. Brown and J.W. Wright [Eds.]). *Southwestern Herpetologists Society Special Publication No. 5*. Van Nuys, CA: Southwestern Herpetologists Society.
- Kupferberg, S.J. 1997. The role of larval diet in anuran metamorphosis. *American Zoologist* 37:146–159.<sup>1</sup> Cary, NC: Oxford Univeristy Press.
- Ramirez, Jr., R.S. 2002a. *Arroyo Toad (Bufo californicus) Radio Telemetry Study, Little Rock Creek, Los Angeles County, California*. (Unpublished Final Report for the USDA Forest Service, Angeles National Forest, Arcadia, California).
- 2002b. *Arroyo Toad (Bufo californicus) Radio Telemetry, San Juan Creek, Orange/Riverside Counties, California*. (Unpublished Interim Report for the USDA Forest Service, Cleveland National Forest, Rancho Bernardo, California).
- 2002c. *Arroyo Toad (Bufo californicus) Radio Telemetry & Pitfall Trapping Studies, Little Horsethief Canyon, Summit Valley Ranch, San Bernardino County, California*. (Unpublished Final Report for Caltrans, District 8, San Bernardino County, California).
- 2001. *Arroyo Toad (Bufo californicus) Radio Telemetry Study, Little Rock Creek, Los Angeles County, California*. (Unpublished Iterim Report 2 for the USDA Forest Service, Angeles National Forest, Arcadia, California).
- 2000. *Arroyo Toad (Bufo californicus) Radio Telemetry Study, Little Rock Creek, Los Angeles County, California*. (Unpublished Interim Report for the USDA Forest Service, Angeles National Forest, Arcadia, California).
- 1999. Results of Focused California Red-legged Frog Surveys at Ahmanson Ranch, Ventura County, California (Unpublished report for the County of Ventura).
- Shaffer, H.B., G.M. Fellers, S. R. Voss, J.C. Oliver, and G.B. Pauly. 2004. Species Boundaries, Phylogeography and Conservation Genetics of the Red-legged Frog (*Rana aurora/draytonii*) Complex. *Molecular Ecology* 13:2667–2677. Boston, MA: Blackwell Publishing Ltd.

<sup>1</sup> *American Zoologist* is now known as *Integrative and Comparative Biology*.

- Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians* (3<sup>rd</sup> ed.). Boston, MA: Houghton-Mifflin Company.
- Storer, T.I. 1925. A Synopsis of the Amphibia of California. *University of California Publications in Zoology* 27: 1–342. Berkeley, CA: University of California Press.
- Sweet, S.S. 1993. *Second Report on the Biology and Status of the Arroyo Toad (Bufo microscaphus californicus), on the Los Padres National Forest of Southern California.* (Report to United States Department of Agriculture [USDA], Forest Service, Los Padres National Forest). Goleta, CA: USDA.
- . 1992. Ecology and Status of the Arroyo Toad (*Bufo microscaphus californicus*) on the Los Padres National Forest of Southern California, with Management Recommendations. (Contract report to United States Department of Agriculture, Forest Service, Los Padres National Forest). Goleta, CA: USDA.
- Tatarian, P.J. 2008. Movement patterns of California red-legged frogs (*Rana draytonii*) in an inland California environment. *Herpetological Conservation and Biology* 3:155–169.
- U.S. Fish and Wildlife Service (USFWS). 2010a (June 29). Endangered and Threatened Wildlife and Plants: Revised Critical Habitat for the Arroyo Toad (*Anaxyrus californicus*). *Federal Register* 50(17): (37358-37370): Washington, D.C.: USFWS.
- . 2010b (March 17). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog; Final Rule. *Federal Register* 75(51): 12815–12959.
- . 2009 (October 13). Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Arroyo Toad (*Anaxyrus californicus*); Proposed Rule. *Federal Register* 74(196): 52611–52664. Washington, D.C.: USFWS.
- . 2008 (September 16). Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*). *Federal Register* 73(180): 53491–53680. Washington, D.C.: USFWS.
- . 2006 (April 13). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Red-legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities; Final Rule. *Federal Register* 71(71): 19243–19346. Washington, D.C.: USFWS.
- . 2005 (April 13). Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arroyo Toad (*Bufo californicus*); Final Rule. *Federal Register* 70(70): 19561–19633. Washington, D.C.: USFWS.
- . 2002. *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii)*. Portland, OR: USFWS.
- . 2001 (February 7). Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arroyo Toad; Final Rule. *Federal Register* 66(26): 9413–9474. Washington, D.C.: USFWS.

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- . 2000 (September 11). Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*); Proposed Rule. *Federal Register* 65(176): 54891–54932. Washington, D.C.: USFWS.
- . 1994a (December 16). Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Arroyo Southwestern Toad. *Federal Register* 59(241): 64859-64867. Washington, D.C.: USFWS.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, M. White (Eds.). 1988. *California's Wildlife, Vol. 1: Amphibians and Reptiles*. Sacramento, CA: CDFG, The Resources Agency.



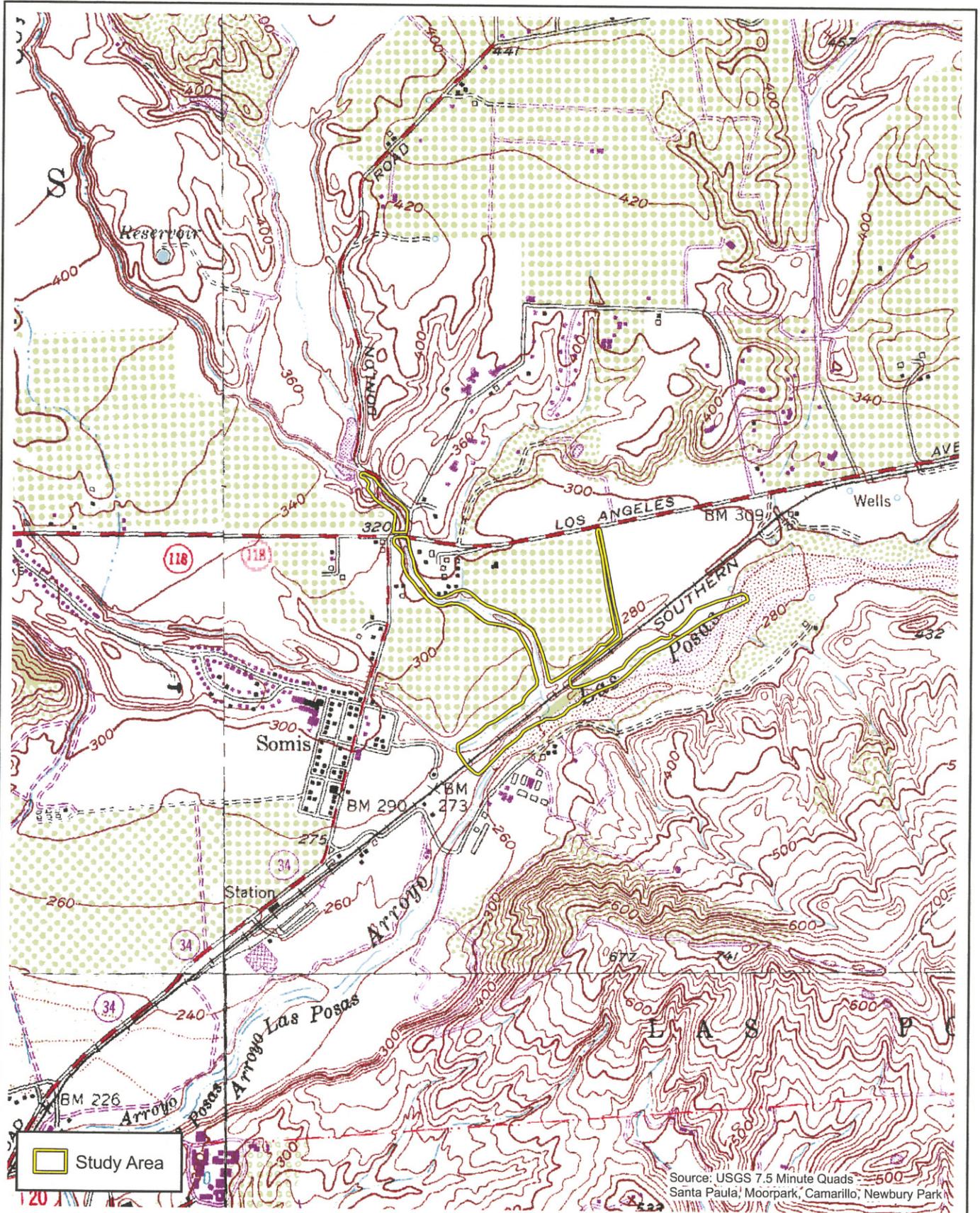
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### Regional Location

Exhibit 1

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*





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### Habitat Assessment Study Area

### Exhibit 2

SR-118 at SR-34 and Donlon Road Intersection Improvement Project





**ATTACHMENT A**

**SITE PHOTOS**



One of the pools along Drainage 1, southeast of the intersection of SR-118 and SR-34. This drainage is dominated by gum trees with an understory of invasive non-native species; the upland habitat outside this drainage consists of agricultural fields. Photo taken from the north facing south.



Another pool along Drainage 1 described above. Photo taken from the north facing south.

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## Site Photographs

Exhibit A-1

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



A small pool at the culvert under SR-118 along Drainage 2 (2,400 feet east of Donlon road). This drainage is dominated by gum trees with an understory of cattails and poison hemlock. Photo taken from the east facing west.



Another view of Drainage 2. Photo taken from the north facing south along the drainage.

## Site Photographs

Exhibit A-2

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



A red-swamp crayfish in one of the drainages. This is a non-native species and a known predator of several native aquatic species.



A view of Drainage 3 north of the railroad tracks. This drainage consists of southern willow scrub.

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## Site Photographs

Exhibit A-3

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



An overview of the willow riparian forest habitat along Arroyo Las Posas in the middle portion of the study area. Photo taken from the north facing southeast.



An overview of the willow riparian forest habitat along Arroyo Las Posas in the western portion of the study area. Photo taken from the north facing southwest.

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## Site Photographs

Exhibit A-4

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*

**ATTACHMENT B**

**RED-LEGGED FROG SITE ASSESSMENT DATASHEET**

**Appendix D.  
California Red-legged Frog Habitat Site Assessment Data Sheet**

Site Assessment reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 7-1-2010  
(mm/dd/yyyy)

Site Assessment Biologists: STEWART, SAMUEL  
(Last name) (first name) (Last name) (first name)

\_\_\_\_\_  
(Last name) (first name) (Last name) (first name)

Site Location: VENTURA COUNTY, ARROYO LAS POSAS AND 3 TRIBUTARIES; 11S 036974, 3792710  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR-118 AT SR-34 AND DONLON RD INTERSECTION IMPROVEMENT  
 Brief description of proposed action:  
 THERE ARE SIX ALTERNATIVES UNDER CONSIDERATION: 1) NO BUILD; 2) INTERSECTION IMPROVEMENT; 3) SAVE OUR SOMIS (SOS); 4) ROUNDABOUT; 5) SOMIS BYPASS; 6) BRIDGE. THE STUDY AREA INCLUDES ALL RIPARIAN AREAS POTENTIALLY IMPACTED BY ANY OF THE SIX ALTERNATIVES.

- 1) Is this site within the current or historic range of the CRF (circle one)? YES  NO
- 2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES  NO   
 If yes, attach a list of all known CRF records with a map showing all locations.

**GENERAL AQUATIC HABITAT CHARACTERIZATION**  
(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

**POND:**  
 Size: \_\_\_\_\_ Maximum depth: \_\_\_\_\_  
 Vegetation: emergent, overhanging, dominant species: \_\_\_\_\_  
 \_\_\_\_\_  
 Substrate: \_\_\_\_\_  
 \_\_\_\_\_

**Perennial or Ephemeral** (circle one). If ephemeral, date it goes dry: \_\_\_\_\_

**Appendix D.**  
**California Red-legged Frog Habitat Site Assessment Data Sheet**

**STREAM:**

Bank full width: 3 METERS  
Depth at bank full: ~ 1 METER  
Stream gradient: LOW

Are there pools (circle one)? YES  NO

If yes,

Size of stream pools: > 10 METERS  
Maximum depth of stream pools: 2 METERS

Characterize non-pool habitat: run, riffle, glide, other: RUNS AND GLIDES WITH SOME RIFFLE BETWEEN POOLS

Vegetation: emergent, overhanging, dominant species: SOME EMERGENT (CATTAILS); CANOPY OF ORNAMENTAL SPECIES (INCLUDING EUCALYPTUS AND PEPPER); NATIVE RIPARIAN TREES (WILLOW); ARUNDO PRESENT; MEXICAN ELDERBERRY  
Substrate: SILTY LOAM

Bank description: GRADUAL SLOPES DOMINATED BY ~~NONNATIVE~~ GRASSES AND ORNAMENTAL SPECIES AND FLANKED BY AGRICULTURAL OPERATIONS

**Perennial or Ephemeral** (circle one). If ephemeral, date it goes dry: \_\_\_\_\_

Other aquatic habitat characteristics, species observations, drawings, or comments:

NO NATIVE AMPHIBIANS OBSERVED DURING ASSESSMENT.  
RED SWAMP CRAYFISH (*PROCAMBARUS CLARKII*) AND MOSQUITOFISH (*GAMBUSIA AFFINIS*) OBSERVED.

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

**ATTACHMENT C**  
**WILDLIFE COMPENDIUM**

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
JULY 2010**

Species
<b>Crustaceans</b>
<b>CAMBARIDAE - FRESHWATER CRAYFISH</b>
<i>Procambarus clarkii</i> red-swamp crayfish
<b>Fish</b>
<b>POECILIDAE - LIVEBEARERS</b>
<i>Gambusia affinis</i> western mosquitofish
<b>Reptiles</b>
<b>PHRYNOSOMATIDAE - ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, &amp; HORNED LIZARDS</b>
<i>Sceloporus occidentalis</i> western fence lizard
<b>ANGUIDAE - ALLIGATOR LIZARDS</b>
<i>Elgaria multicarinata</i> southern alligator lizard
<b>Birds</b>
<b>ANATIDAE - WATERFOWL</b>
<i>Anas platyrhynchos</i> mallard
<b>ACCIPITRIDAE - HAWKS, KITES, EAGLES, &amp; ALLIES</b>
<i>Buteo lineatus</i> red-shouldered hawk
<i>Buteo jamaicensis</i> red-tailed hawk
<b>COLUMBIDAE - PIGEONS &amp; DOVES</b>
<i>Columba livia</i> rock pigeon*
<i>Zenaidura macroura</i> mourning dove
<b>TROCHILIDAE - HUMMINGBIRDS</b>
<i>Calypte anna</i> Anna's hummingbird
<b>PICIDAE - WOODPECKERS</b>
<i>Picoides nuttallii</i> Nuttall's woodpecker
<b>TYRANNIDAE - TYRANT FLYCATCHERS</b>
<i>Empidonax difficilis</i> Pacific-slope flycatcher
<i>Sayornis nigricans</i> black phoebe
<b>CORVIDAE - CROWS &amp; JAYS</b>
<i>Corvus brachyrhynchos</i> American crow
* introduced species

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
JULY 2010  
(Continued)**

Species
<i>Corvus corax</i> common raven
<b>HIRUNDINIDAE - SWALLOWS</b>
<i>Stelgidopteryx serripennis</i> northern rough-winged swallow
<i>Hirundo rustica</i> barn swallow
<b>AEGITHALIDAE - BUSHTITS</b>
<i>Psaltriparus minimus</i> bushtit
<b>TROGLODYTIDAE - WRENS</b>
<i>Thryomanes bewickii</i> Bewick's wren
<b>MIMIDAE - THRASHERS</b>
<i>Mimus polyglottos</i> northern mockingbird
<b>STURNIDAE - STARLINGS</b>
<i>Sturnus vulgaris</i> European starling*
<b>PARULIDAE - WARBLERS</b>
<i>Dendroica petechia</i> yellow warbler
<i>Geothlypis trichas</i> common yellowthroat
<b>EMBERIZIDAE - SPARROWS &amp; JUNCOS</b>
<i>Pipilo maculatus</i> spotted towhee
<i>Melospiza crissalis</i> [ <i>Pipilo</i> ] California towhee
<i>Melospiza melodia</i> song sparrow
<b>ICTERIDAE - BLACKBIRDS</b>
<i>Agelaius phoeniceus</i> red-winged blackbird
<i>Euphagus cyanocephalus</i> Brewer's blackbird
<i>Molothrus ater</i> brown-headed cowbird
<b>FRINGILLIDAE - FINCHES</b>
<i>Carpodacus mexicanus</i> house finch
<i>Spinus [Carduelis] psaltria</i> lesser goldfinch
<b>PASSERIDAE - OLD WORLD SPARROWS</b>
<i>Passer domesticus</i> house sparrow *

**WILDLIFE SPECIES OBSERVED IN THE SR 118 AT SR 34  
AND DONLON ROAD STUDY AREA  
JULY 2010  
(Continued)**

<b>Species</b>
* introduced species
<b>Mammals</b>
<b>LEPORIDAE - HARES &amp; RABBITS</b>
<i>Sylvilagus audubonii</i> desert cottontail
<b>SCIURIDAE - SQUIRRELS</b>
<i>Spermophilus beecheyi</i> California ground squirrel
<b>PROCYONIDAE - RACCOONS</b>
<i>Procyon lotor</i> common raccoon
* introduced species

**Appendix G** Results of Focused Surveys for  
California Red-Legged Frog—  
BonTerra Consulting

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June 10, 2011

Mrs. Nayla El-Shammas  
Associate Environmental Planner/Natural Science  
Division of Environmental Planning  
California Department of Transportation  
100 S. Main Street, Mail Stop 16A  
Los Angeles, California 90012

**VIA EMAIL AND U.S. MAIL**  
**nayla\_el-shammas@dot.ca.gov**

Subject: Results of Focused Surveys for California Red-legged Frog for the State Route 118/State Route 34 Intersection Improvement Project, Somis, Ventura County, California.

Dear Mrs. El-Shammas:

This Letter Report presents the results of focused diurnal and nocturnal surveys to determine the presence or absence of the California red-legged frog (*Rana draytonii*) for the State Route (SR) 118 at SR-34 and Donlon Road Intersection Improvement project in the community of Somis in Ventura County, California (Exhibit 1).

### **Project Location and Description**

The SR-118 and SR-34 Intersection is located at latitude 34.263745° and longitude 118.994674°. There are six alternatives under consideration for the proposed project: (1) the No Build Alternative; (2) the Intersection Improvement Alternative; (3) the Save Our Somis (SOS) Alternative; (4) the Roundabout Alternative; (5) the Somis Bypass Alternative; and (6) the Bridge Alternative. The study area for the proposed project includes all riparian areas potentially impacted by any of the six project alternatives as represented on the attached U.S. Geological Survey (USGS) Moorpark 7.5-minute quadrangle map (Exhibit 2).

### **Survey Locations**

The study area includes the northern edge of riparian habitat along Arroyo Las Posas and three unnamed tributaries to it. The tributaries consist of two north-south drainages (Drainages 1 and 2) that flow into a third east-west drainage (Drainage 3) north of the railroad tracks that parallel Arroyo Las Posas (Exhibit 3). None of the project alternatives would directly impact Arroyo Las Posas; however, a portion of the arroyo was included in the study area to account for indirect impacts of the Somis Bypass Alternative, which would parallel the railroad tracks.

### **Drainage 1**

Drainage 1 is a north-south drainage adjacent to Donlon Road from SR-118 upstream approximately 800 feet to a debris basin. This area is comprised primarily of gum trees (*Eucalyptus* spp.) with no appreciable understory habitat. This segment of the drainage was dry throughout the surveys.



Directly adjacent to the location where Drainage 1 crosses under SR-118, there are a few willow (*Salix* spp.) and Mexican elderberry (*Sambucus mexicana*) trees; these species are limited to the portion of the drainage directly adjacent to SR-118. This segment of Drainage 1 was also typically dry during the surveys.

Drainage 1 continues south of SR-118 and east of SR-34 through agricultural fields for approximately 2,700 linear feet where it joins with Drainage 3 located north of the railroad tracks. This segment of Drainage 1 is dominated by gum trees with an understory of invasive species, including greater periwinkle (*Vinca major*), German ivy (*Senecio mikanioides*), and castor bean (*Ricinus communis*); some (native) hoary nettle (*Urtica dioica*) also occurs. Most of this segment contains slowly flowing water and pools, which likely consisted of runoff from the adjacent agricultural fields.

#### Drainage 2

Drainage 2 is a north-south drainage located 2,400 feet east of Donlon Road. This drainage extends from SR-118 downstream approximately 1,500 feet to its confluence with Drainage 3 north of the railroad tracks. Drainage 2 is a windrow of gum trees through an agricultural field. The understory of this narrow drainage was dominated by cattails (*Typha* sp.) and poison hemlock (*Conium maculatum*), with other ruderal (weedy) species also occurring. Drainage 2 generally contained standing water along much of the drainage.

#### Drainage 3

Drainage 3 is an east-west drainage located north of the railroad tracks. The study area begins at Drainage 3's confluence with Drainage 2 (described above) and continues for approximately 2,300 feet southwest along Drainage 3 (i.e., where riparian habitat ends). Drainage 3 consists of dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock, castor bean, and hoary nettle. Other species commonly occurring along this drainage include coyote brush (*Baccharis pilularis*), Mexican elderberry, California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. Patches of giant reed (*Arundo donax*) are also present.

#### Drainage 4

Drainage 4 is a north-south drainage located between Drainages 1 and 2 and is adjacent to the Underwood Family Farm. It is a small drainage that carried very little water or was dry for the duration of the surveys. It is primarily unvegetated but contains a few scattered mule fat.

#### Arroyo Las Posas

The study area also includes the northern edge of the riparian habitat of Arroyo Las Posas, which parallels the railroad tracks on its southern edge. The study area includes the Arroyo Las Posas from approximately 975 feet northeast of Drainage 2 (described above) downstream to 2,300 feet southwest of Drainage 2. The Arroyo Las Posas consists of an extensive willow riparian forest dominated by arroyo willow and black willow (*Salix gooddingii*), with narrow-leaved willow (*Salix exigua*) and giant reed also commonly occurring. The study area only includes the northern edge of riparian habitat, which is adjacent to a horse stable, a nursery, and the railroad tracks.

Site photos showing representative views of the drainages in the study area are included in Attachment A.

## **Background Information**

### ***California red-legged frog***

The California red-legged frog was federally listed as an Endangered species by the U.S. Fish and Wildlife Service (USFWS) on May 23, 1996, and is considered a California Species of Special Concern. This frog has been extirpated from approximately 70 percent of its historic range (USFWS 2006). At the time of listing, the red-legged frog (*Rana aurora*) was comprised of two subspecies, the California red-legged frog (*R. aurora draytonii*) and the northern red-legged frog (*R. aurora aurora*) until genetic studies (Shaffer et al. 2004) determined that *R. aurora* is actually two separate species, northern red-legged frog (*R. aurora*) and California red-legged frog (*R. draytonii*). The ranges of these two species overlap in Mendocino County. Only the California red-legged frog (*R. draytonii*) occurs within the project region.

The California red-legged frog ranges in size from 1.5 to 5.5 inches in length, making it the largest native frog in the Western United States (Wright and Wright 1949). Adult females are significantly longer than males, with an average snout to vent length (svl) of 5.4 inches versus 4.5 inches for adult males (Hayes and Miyamoto 1984). The hind legs and lower abdomen of adult frogs are often characterized by a reddish or salmon pink color, and the back is brown, gray, olive, or reddish brown and marked with small black flecks and larger irregular dark blotches (USFWS 2002; Stebbins 2003). Dorsal spots often have light centers, and in some individuals form a network of black lines (Stebbins 2003). Dorsolateral folds are prominent. Tadpoles range in length from 14 to 80 millimeters (mm), are a dark brown or olive, and are marked with darker spots (Storer 1925).

This species is found in humid forests, woodlands, grasslands, streams, wetlands, ponds, and lakes from sea level to 8,000 feet above mean sea level (msl) (Stebbins 2003). Preferred breeding habitat includes deep ponds and slow-moving streams where emergent vegetation is found on the bank edges (Jennings and Hayes 1994). Although primarily aquatic, it has been recorded in damp terrestrial places up to 302 feet from water for up to 50 consecutive days (Tatarian 2008) and using small mammal burrows and moist leaf litter as refugia during dry periods (Jennings and Hayes 1994b).

California red-legged frog adults tend to be primarily nocturnal, while juveniles can be active at any time of day (Hayes and Tennant 1985). Adults feed on a wide range of prey, having been recorded feeding on at least 42 different taxa in a single study (Hayes and Tennant 1985), the majority of which were terrestrial invertebrates, but also included fish, other amphibians, and small rodents. The diet of red-legged tadpoles has not been studied, but is expected to be similar to other ranid frogs that feed on algae, diatoms, and detritus by grazing the surface of rocks and vegetation (Kupferberg 1997).

During the breeding season, typically from November through April, males call to females from the margins of ponds and slow streams (Jennings and Hayes 1994a). Unlike northern red-legged frogs, which lack vocal sacs and call underwater, California red-legged frogs have paired vocal sacs and call above the water surface (Hayes and Krempels 1986), though vocalizations are relatively weak and difficult to detect. Actual mating most commonly occurs in March, but can vary depending on seasonal climatic patterns. The female lays a jellylike mass of 2,000 to 5,000 reddish brown eggs attached to emergent vegetation, twigs, or other structures in still or slow moving water. The resulting tadpoles typically require about 3 weeks to hatch, and another 11 to 20 weeks to metamorphose into juvenile frogs. Metamorphosis typically occurs from July to September, although some tadpoles have been observed to delay metamorphosis until the following March or April (Bobzien et al. 2000; Fellers et al. 2001).

Red-legged frogs typically reach sexual maturity about 2 years (for males) and 3 years (for females) from metamorphosis (Jennings and Hayes 1985).

On April 13, 2006, the USFWS reissued the final Critical Habitat designation for the California red-legged frog, greatly reducing the approximately 4.1 million acres which had previously been proposed in 2000 (USFWS 2000) and designated in 2001. The 2006 Critical Habitat designation includes approximately 450,288 acres located in Alameda, Butte, Contra Costa, El Dorado, Kern, Los Angeles, Marin, Merced, Monterey, Napa, Nevada, San Benito, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Ventura, and Yuba Counties, California. However, the USFWS reviewed the 2006 Critical Habitat designation in response to questions raised about the integrity of the scientific information used for this designation and its consistency with appropriate legal standards. On September 16, 2008, the USFWS proposed to revise the Critical Habitat boundaries to better reflect lands containing essential features for this species. On March 17, 2010, the USFWS issued the final critical habitat, which designates approximately 1,636,609 acres of critical habitat in 27 California counties. The survey area is not located within designated or proposed Critical Habitat for this species.

Within the project region, the California red-legged frog has been reported from San Antonio Creek, Matilija Creek, and Lion Creek near Ojai; Matilija Creek and Lower Rose Lake in the Los Padres National Forest; and Las Virgenes Creek in Agoura Hills (CDFG 2010). The nearest known locality is in the Las Virgenes Creek approximately 17 miles southeast of the study area.

### **Survey Methodology**

An initial site assessment was conducted by BonTerra Consulting Senior Herpetologist Sam Stewart on July 1, 2010, to determine the extent of potentially suitable habitat for the California red-legged frog. The site assessment determined that portions of the project site provided potentially suitable breeding habitat for California red-legged frog and the entire project site provided potentially suitable foraging habitat and should be surveyed (Exhibit 3). Prior to conducting the focused surveys, a search of the most recent California Natural Diversity Data Base (CDFG 2010, 2011) and other relevant available documents (Jennings and Hayes 1994a, 1994b; Campbell et al. 1996; USFWS 2002, 2006, 2008) was conducted to determine if and to what extent the California red-legged frog was known to occur in the project vicinity.

Surveys were conducted by Mr. Stewart and BonTerra Consulting Herpetologist Jason Mintzer according to the red-legged frog protocol (USFWS 2005). Surveyor qualifications are presented in Attachment B of this Letter Report. California red-legged frog survey data sheets are provided in Attachment C. Surveyors were accompanied by Caltrans observers, including Associate Environmental Planners Nayla El-Shammas, Peter Champion, Newton Wong, and Skylar Feltman.

Mr. Stewart was the Principal Investigator and was present during all surveys. A total of six surveys were conducted between March 8 and April 25, 2011. This included (1) four nocturnal surveys conducted during the breeding season and the best egg survey period as specified by the protocol for the Southern California region (i.e., between February 25 and April 30) and (2) two diurnal surveys.

Diurnal surveys were conducted from between 10:00 AM and 11:00 AM to dusk; nocturnal surveys were conducted from one hour after dusk to survey completion. Surveys focused on the detection of frogs by visual identification and checking potentially suitable breeding habitat for tadpoles and/or eggs. Mr. Stewart and Mr. Mintzer scanned pools for eggs, larvae, juveniles, and breeding and/or calling adults in potentially suitable breeding locations along the stream. They also scanned for foraging individuals in the adjacent riparian and upland areas. Egg

masses and strings, and/or larvae observed during surveys were identified to species in the field. Headlamps (Black Diamond Icon – 100 lumens), flashlights (Surefire E2L Outdoorsman – 60 lumens), and binoculars (Pentax DCF SP 8x42) were used to visually identify toads, frogs, and their larvae detected at night.

Nocturnal surveys were conducted during appropriate environmental conditions conducive to the activity patterns for the red-legged frog. Generally, these conditions are night time temperatures in excess of 50 degrees Fahrenheit (°F), with low winds (less than 10 miles per hour), and avoiding nights with a full or nearly full moon. If the preferred environmental conditions were not met, surveys were conducted under conditions that were determined to be the most favorable for the species. Survey dates, times, and weather data are shown in Table 1.

**TABLE 1  
 SUMMARY OF AMPHIBIAN SURVEY CONDITIONS**

Survey	Surveying Biologists/Observers	Survey Date	Start/End Time		Wind (miles/hour)		Temperature (°F)		Relative Humidity (%)		Cloud Cover
			Start	End	Start	End	Start	End	Start	End	
1	S. Stewart, J. Mintzer, P. Champion, N. Wong	3/8/2011	2:20 PM	5:50 PM	2-5	1-2	77	65	32	54	Clear
2	S. Stewart, J. Mintzer, P. Champion, N. Wong, N. El-Shammas	3/8/2011	7:30 PM	10:30 PM	Calm	1-2	57	64	69	54	Clear
3	S. Stewart, J. Mintzer, P. Champion, N. Wong, S. Feltman	4/5/2011	3:45 PM	6:38 PM	1-4	0-1	68	65	32	45	Clear
4	S. Stewart, J. Mintzer, P. Champion, N. Wong, S. Feltman	4/5/2011	8:15 PM	11:46 PM	1-4	Calm	62	60	45	50	Clear
5	S. Stewart, J. Mintzer	4/12/2011	8:30 PM	11:41 PM	Calm	Calm	59	57	47	47	50%
6	S. Stewart, J. Mintzer	4/25/2011	8:37 PM	11:55 PM	0-2	Calm	64	60	50	62	Clear

**Survey Results**

No red-legged frogs were observed during the focused amphibian surveys. Native amphibian species observed during surveys include California toad (*Anaxyrus boreas halophilus*), Baja California treefrog (*Pseudacris hypochondriaca*), and black-bellied slender salamander (*Batrachoseps nigriventris*). One special status species, the arroyo chub (*Gila orcutti*), a CDFG Species of Special Concern, was observed in Drainage 2 during the surveys (Exhibit 3). A list of all wildlife species observed within the survey area is included in Attachment D to this letter report.

During the focused surveys, two introduced amphibian species were observed, American bullfrog (*Lithobates catesbeianus*) and African clawed frog (*Xenopus laevis*). Other non-native aquatic species commonly observed during surveys include red swamp crayfish (*Procambarus clarkii*) and mosquitofish (*Gambusia affinis*).

Mrs. Nayla El-Shammas  
June 10, 2011  
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BonTerra Consulting has appreciated the opportunity to assist with this project. Please contact Amber Oneal at (714) 444-9199 or Sam Stewart at (626) 351-2000 if you have questions or comments.

Sincerely,

BONTERRA CONSULTING

Amber S. Oneal  
Senior Project Manager, Biological Services

Sam C. Stewart IV  
Senior Herpetologist

Enclosures: Exhibits 1, 2, and 3  
Attachment A – Site Photos  
Attachment B – Surveyor Qualifications  
Attachment C – California Red-legged Frog Survey Data Sheets  
Attachment D – Wildlife Compendium

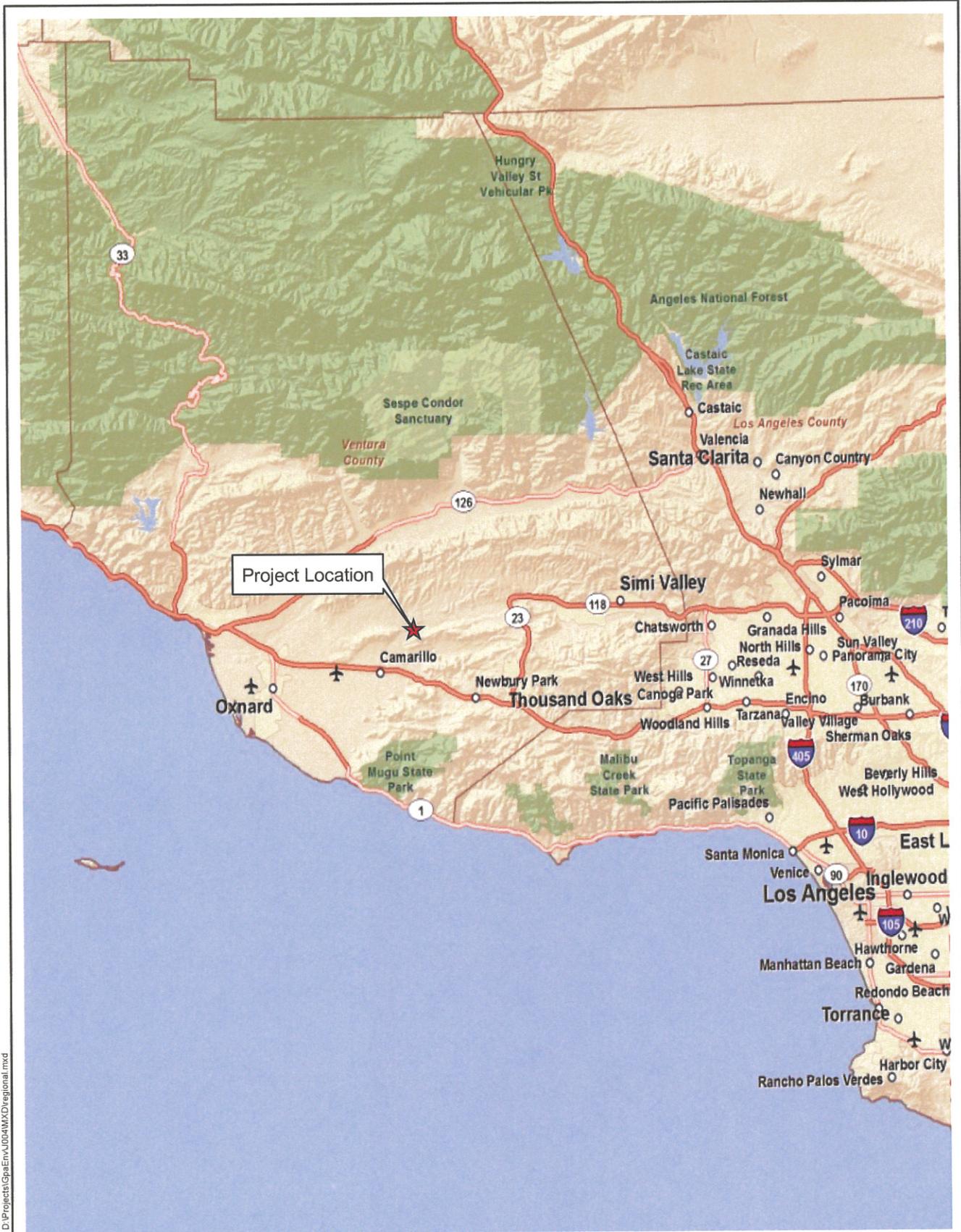
cc: Chris Kofron, USFWS, Ventura Field Office  
Rich Galvin, richard@gpaenv.com

## REFERENCES

- Bobzien, S., J.E. DiDonato, P.J. Alexander. 2000. *Status of the California Red-Legged Frog in the East Bay Regional Park District, California*. Oakland, CA. (Unpublished report for the City of Oakland).
- California Department of Fish and Game (CDFG). 2011. California Natural Diversity Database (CNDDDB). Records of Occurrence for the USGS Moorpark 7.5-minute quadrangles. Sacramento, CA: CDFG, Natural Heritage Division.
- . 2010. California Natural Diversity Database (CNDDDB). Records of Occurrence for the USGS Moorpark 7.5-minute quadrangles. Sacramento, CA: CDFG, Natural Heritage Division. Fellers, G.M., A. Launer, G.B. Rathbun, S. Bobzien, J. Alvarez, D. Sterner, R.B. Seymour, and M. Westphal. 2001. Overwintering tadpoles in the California red-legged frog (*Rana aurora draytonii*). *Herpetological Review* 32(3):156–157. Salt Lake City, UT: Society for the Study of Amphibians and Reptiles.
- Hayes, M.P. and D.M. Kremples. 1986. Vocal sac variation among frogs of the genus *Rana* (Anura: Ranidae) from western North America. *Copeia* 1986:927–936. Miami, FL: American Society of Ichthyologists and Herpetologists.
- Hayes, M. P. and Miyamoto, M. M. (1984). Biochemical, behavioral and body size difference between *Rana aurora aurora* and *R. a. draytonii*. *Copeia* 1984(4): 1018–1022. Miami, FL: American Society of Ichthyologists and Herpetologists.
- Hayes, M.P. and Tennant, M.R. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *Southwestern Naturalist* 30(4): 601–605. Lubbock, TX: Southwestern Association of Naturalists.
- Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California* (Contract No. 8023). Sacramento, CA: CDFG, Inland Fisheries Division.
- . 1994b. Decline of native ranid frogs in the desert Southwest In. *Herpetology of the North American deserts: Proceedings of a symposium* (Pages 183–211, P.R. Brown and J.W. Wright, Eds.). Southwestern Herpetologists Society Special Publication No. 5.
- . 1985. Pre-1900 overharvest of the California red-legged frog (*Rana aurora draytonii*): the inducement for bullfrog (*Rana catesbeiana*) introduction. *Herpetologica* 41:94–103. Salt Lake City, UT: Society for the Study of Amphibians and Reptiles.
- Kupferberg, S.J. 1997. The role of larval diet in anuran metamorphosis. *American Zoologist* 37:146–159. McLean, VA: Society for Integrative and Comparative Biology.
- Shaffer, H.B., G.M. Fellers, S.R. Voss, J.C. Oliver, and G.B. Pauly. 2004. Species boundaries, phylogeography and conservation genetics of the red-legged frog (*Rana aurora draytonii*) complex. *Molecular Ecology* 13:2667–2677. Boston, MA: Blackwell Publishing Ltd.
- Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians* (3<sup>rd</sup> ed.). Boston, MA: Houghton-Mifflin Company.
- Storer, T.I. 1925. A Synopsis of the Amphibia of California. *University of California Publications in Zoology* 27: 1–342. Berkeley, CA: University of California Press.

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June 10, 2011  
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- U.S. Fish and Wildlife Service (USFWS). 2010 (March 17). Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog; Final Rule. *Federal Register* 75(51): 12815–12959. Washington, D.C.: USFWS.
- . 2008 (September 16). Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*). *Federal Register* 73(180): 53491–53680. Washington, D.C.: USFWS.
- . 2006 (April 13). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Red-legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities; Final Rule. *Federal Register* 71(71): 19243–19346. Washington, D.C.: USFWS.
- . 2005. *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog*. Washington, D.C.: USFWS.
- . 2002 *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii)*. Portland, OR: USFWS.
- . 2000 (September 11). Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*); Proposed Rule. *Federal Register* 65(176): 54891–54932. Washington, D.C.: USFWS.
- United States Forest Service (USFS). 2009 (September). *Wildlife and Fish Technical Specialist Report: Burned Area Emergency Rehabilitation for the Station Fire*. Arcadia, CA: USFS. [http://www.fs.fed.us/r5/angeles/station/BAER/SpecialistReports/WildlifeAssessmentReport\\_PublicRelease\\_StationBAER.pdf](http://www.fs.fed.us/r5/angeles/station/BAER/SpecialistReports/WildlifeAssessmentReport_PublicRelease_StationBAER.pdf)
- Wright, A. H. and Wright, A. A. (1949). *Handbook of Frogs and Toads of the United States and Canada*. Ithaca, NY: Comstock Publishing Company, Inc.



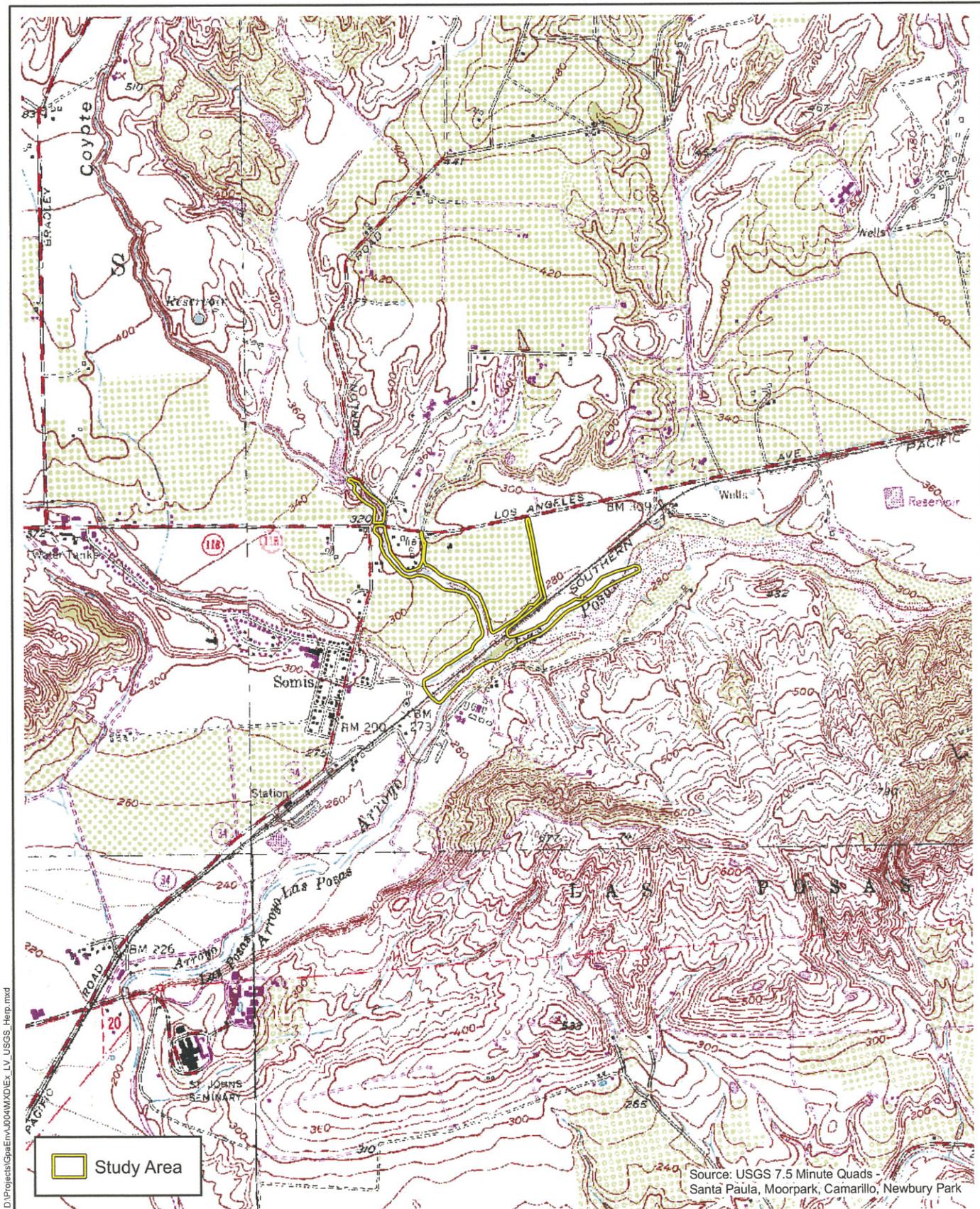
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## Regional Location

Exhibit 1

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



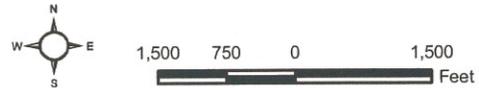


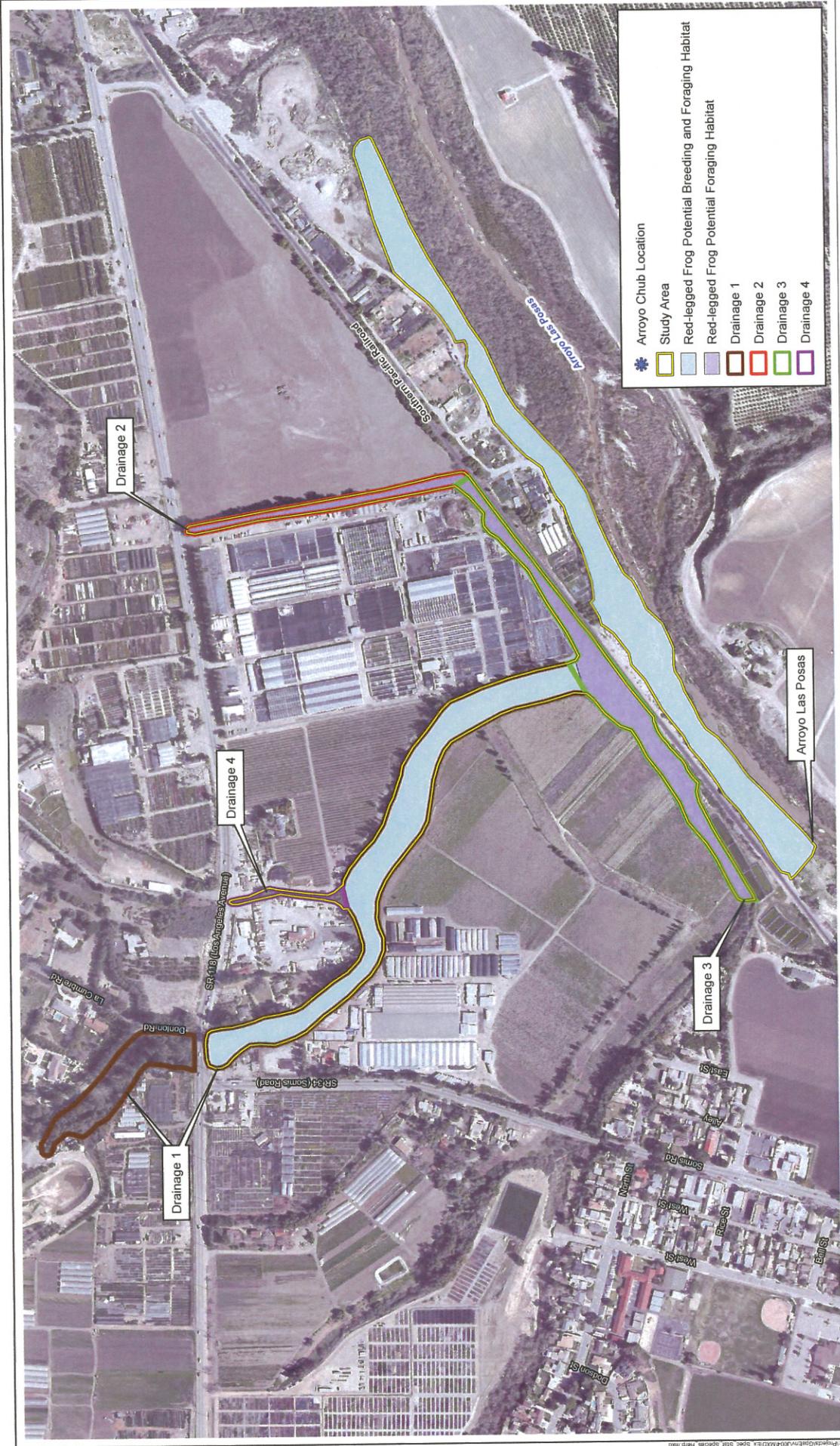
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### Habitat Assessment Study Area

### Exhibit 2

SR-118 at SR-34 and Donlon Road Intersection Improvement Project





**Exhibit 3**

**Red-legged Frog Survey Area**  
 SR-118 at SR-34 and Donlon Road Intersection Improvement Project



**ATTACHMENT A**  
**SITE PHOTOGRAPHS**



One of the pools along Drainage 1, southeast of the intersection of SR-118 and SR-34. This drainage is dominated by gum trees with an understory of invasive non-native species; the upland habitat outside this drainage consists of agricultural fields. Photo taken from the north facing south.



Another pool along Drainage 1 described above. Photo taken from the north facing south.

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## Site Photographs

Exhibit A-1

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



A small pool at the culvert under SR-118 along Drainage 2 (2,400 feet east of Donlon road). This drainage is dominated by gum trees with an understory of cattails and poison hemlock. Photo taken from the east facing west.



Another view of Drainage 2. Photo taken from the north facing south along the drainage.

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## Site Photographs

Exhibit A-2

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



Arroyo chub, a California Species of Special Concern, observed along Drainage 2 during the survey.



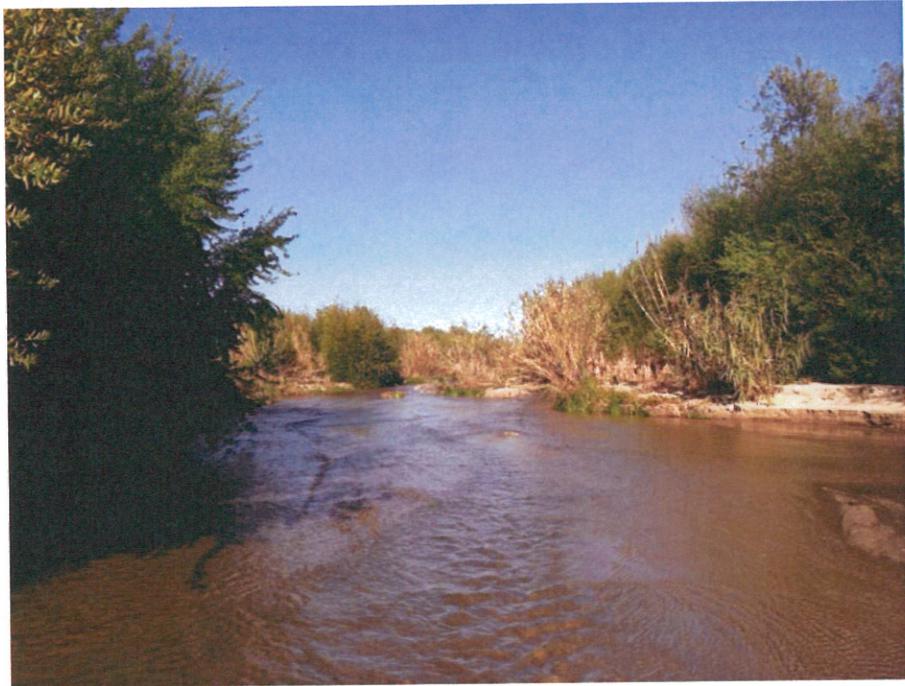
A view of Drainage 3 north of the railroad tracks. This drainage consists of southern willow scrub.

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## Site Photographs

Exhibit A-3

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*



A view of the Arroyo Las Posas facing upstream.



An overview of the willow riparian forest habitat along Arroyo Las Posas in the western portion of the study area. Photo taken from the north facing southwest.

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## Site Photographs

Exhibit A-4

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*

**ATTACHMENT B**  
**SURVEYOR QUALIFICATIONS**

## SAM C. STEWART IV – LEAD SURVEYOR

Mr. Sam Stewart has been working in the field of environmental consulting for 11 years conducting focused surveys for amphibian and reptile species throughout southern California. Mr. Stewart has observed all life stages of California red-legged frog (*Rana draytonii*) in the field in Pescadero Marsh, San Mateo County, including at least 22 adults; observed and photographed more than 20 juvenile and adult California red-legged frog in the field in San Francisquito Creek, Los Angeles County in 2009 and 2011; and conducted focused surveys and monitored a newly discovered population of red-legged frog in Aliso Canyon, Los Angeles County in 2010 and 2011. Mr. Stewart has observed and photographed adult Sierra Madre yellow-legged frog (*Rana muscosa*) in the field in City Creek, San Bernardino County. He has also observed all life stages of arroyo toad (*Anaxyrus californicus*) in the Santa Clara River and San Juan Creek, including more than five years of monitoring the population in San Juan Creek, Orange County. Given Mr. Stewart's field experience with native and introduced ranids and his familiarity with anuran morphology and anatomy, he is capable of visually identifying southern California toad and frog species with 100% certainty. He has surveyed for arroyo toad in Los Angeles, Orange, Riverside, and San Bernardino counties with positive findings in the Castaic/Santa Clara River area in 2003 and annually in San Juan Creek since 2007.

Mr. Stewart has been on-call biological services contractor to Caltrans since 2007 when the Ortega Highway Safety Improvement project was initiated. Mr. Stewart and Dr. Mike Robson developed a methodology for additional data collection on the arroyo toad population found along the 3-mile stretch of San Juan Creek adjacent to the segment of Ortega Highway undergoing safety improvements. Data collected included a GPS point, determination of sex, measurement of mass and snout-vent length, and a dorsal/ventral photographic record of each toad observed. Furthermore, during initial arroyo toad surveys, the presence of invasive species (bullfrog, African clawed frog, & red swamp crayfish) became apparent and an invasives control program was proposed and approved by USFWS staff to be carried out concurrent with focused surveys. Data was collected on over 1,500 reproductive adult bullfrogs taken from the creek, including sex, mass, snout-vent length (svl), and stomach contents. Mr. Stewart has been the lead biologist for biological monitoring, focused arroyo toad surveys, and the invasives control program in the San Juan Creek adjacent to the Ortega Highway project site from the second half of 2007 to present. The invasives control program resulted in the successful removal of all life stages of bullfrog from the San Juan Creek within the Cleveland National Forest and the ongoing effort is now concentrated on bullfrogs in downstream areas within Casper's Regional Park. Mr. Stewart has handled over 100 adult and subadult arroyo toads, taken 3 years of data on this population and utilized the photographic data to determine growth rates and movement patterns within the canyon. Data was summarized in a comprehensive report that was submitted to USFWS and will potentially support proposed articles for publication in scientific journals.

### Other Relevant Work Experience

Since 2009, Mr. Stewart has served as lead herpetologist for the Southern California Edison (SCE) Tehachapi Renewable Transmission Project (TRTP) Work Package 2. This segment of the project crosses the Angeles National Forest (ANF) through areas occupied by red-legged frog, arroyo toad, Coast Range newt, western pond turtle, and two-stripe garter snake. Mr. Stewart has conducted focused surveys, monitored populations, and monitored work activities to avoid impacts to these species.

Since 2005 Mr. Stewart has served as an on-call biological surveyor for the Los Angeles County Department of Public Works, conducting constraints analyses and focused surveys for special status amphibian species, including coast range newt, spadefoot toad, arroyo toad, and Sierra

Madre yellow-legged frog, in storm water basins and soft-bottom channel reaches throughout Los Angeles County.

From 2005 to 2008 Mr. Stewart conducted amphibian focused surveys, and prepared and implemented a CDFG approved relocation plan for the western spadefoot, which included the construction of mitigation pools, relocation of western spadefoot toads and larvae, and long-term monitoring of spadefoot toad populations at the mitigation pools.

From 2003 to 2006, Mr. Stewart conducted focused surveys for amphibian species, including the arroyo toad and western spadefoot toad, on an approximately 1,200-acre survey area, including breeding habitat within 1 kilometer of the project impact boundary and portions of Castaic Creek. Surveys determined presence of western spadefoot and a mitigation program was developed to avoid and/or reduce project impacts to the species.

From 2002 to 2004, Mr. Stewart installed and operated reptile and amphibian pitfall trap arrays, and hand-captured reptile and amphibian species on a project site in Santa Clarita. Sensitive species on the project site included coastal western whiptail, silvery legless lizard, and spadefoot toad. Mr. Stewart developed a protocol, consulted with the local California Department of Fish and Game (CDFG) office to obtain a Memorandum of Understanding, and collected and relocated sensitive species from pitfall trap arrays and transported them to predetermined appropriate on- and/or off-site habitat.

From 1999 to 2000 Mr. Stewart assisted Robert Goodman with focused surveys, implementation of a relocation plan, and monitoring of a relocated population of southwestern pond turtle in the San Gabriel River. Turtles were caught in funnel traps and by hand and moved to a tributary location above the Cogswell Dam. Some turtles were fitted with telemetry in order to monitor the population and determine program success. As part of the same project, Mr. Stewart assisted Dr. Noel Davis with fish and macroinvertebrate sampling (kick-netting, seining, and electrofishing) at several sampling locations in the San Gabriel River.

#### Education

B.A., Bachelor of Arts, Social Ecology, University of California, Irvine, CA, 1998

#### Additional Course Work

Reptiles and Amphibians of the Joshua Tree National Park, UCR Extension, 2000

#### Relevant Graduate Experience

Camp Cady Bird Study (1999 to 2000) - conducted point counts of migratory and resident birds to determine impacts or benefits to bird populations and diversity resulting from removal of an invasive plant species (i.e., *Tamarix chinensis ramosissima*).

Cooper's Hawk Movement Study (2002) - Tracked and observed Coopers Hawk paired males fitted with backpack radio telemetry for a Sea & Sage Audubon sponsored raptor study, 2002

#### Other Workshops/Classes

Identification and Ecology of Sensitive Amphibians and Reptiles of Southern California, Wildlife Society Western Section, 2003

## **JASON MINTZER – ASSISTANT SURVEYOR**

Mr. Jason Mintzer has been an active field herpetologist for more than 10 years, searching for native amphibian and reptiles throughout southern California. Mr. Mintzer has observed and photographed juvenile and adult California red-legged frog in the field in San Francisquito Creek and Aliso Canyon, Los Angeles County. He has conducted focused surveys for red-legged frog in Aliso Creek, Los Angeles County, and has surveyed for arroyo toad in Santa Clara River, Upper Big Tujunga Creek, and Alder Creek, Los Angeles County, all with positive results. Mr. Mintzer is familiar with native and introduced anuran species and he is capable of visually identifying southern California toad and frog species.

### Education

Master of Arts, Education, Vanguard University of Southern California, Costa Mesa, CA, 2009

### Relevant Certifications

California General Science Teaching Credential  
California Biology/Life Science Teaching Credential  
California Earth Science Teaching Credential

**ATTACHMENT C**  
**CALIFORNIA RED-LEGGED FROG DATA SHEETS**

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 3/8/2011 Survey Biologist: Stewart Sam  
(mm/dd/yyyy) (Last name) (first name)  
Survey Biologist: Mintzer Jason  
(Last name) (first name)

Site Location: Ventura, Somis, 34.263745°/-118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR 116 / SR-34 Intersection Improvements  
Brief description of proposed action:  
Roadway & intersection improvements in Somis, CA.

Type of Survey (circle one) DAY NIGHT

BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 14:20

End Time: 17:50

Cloud cover: CLEAR

Precipitation: 0

Air Temperature: 25°C / 77°F

Water Temperature: 19.4°C / 67°F

Wind Speed: 5 MPH

Visibility Conditions: CLEAR

Moon phase: WAXING < 1/4

Humidity: 32%

Description of weather conditions: CLEAR CALM WARM

Brand name and model of light used to conduct surveys: Black Diamond Icon

Were binoculars used for the surveys (circle one)? YES NO  
Brand, model, and power of binoculars: Pentax DCF SP 6X42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<i>Pseudacris hypochondriaca</i>	5	H	adult		100%
<i>Pseudacris hypochondriaca</i>	1	O	adult		100%
<i>Batrachoseps nigriventris</i>	2	O	adult		100%
<i>Anaxyrus boreas halophilus</i>	2	O	adult		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: Bullfrogs, crayfish  
observed in Arroyo Las Posas & tributaries. Poor water  
quality from agricultural runoff.

Other notes, observations, comments, etc.

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species locations

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 3-8-11 Survey Biologist: STEWART SAW  
(mm/dd/yyyy) (Last name) (first name)

Survey Biologist: MINTZER JASON  
(Last name) (first name)

Site Location: VENTURA, SOMIS, 34.263745° / -118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR-118 / SR-34 INTERSECTION IMPROVEMENTS  
Brief description of proposed action:  
ROADWAY AND INTERSECTION IMPROVEMENTS IN SOMIS  
CA

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 19:30 End Time: 22:30

Cloud cover: CLEAR Precipitation: Ø

Air Temperature: 14°C / 57°F Water Temperature: 17.6°C / 64°F

Wind Speed: CALM Visibility Conditions: CLEAR

Moon phase: NEW MOON / 1ST QUARTER Humidity: 69%

Description of weather conditions: CLEAR CALM COOL

Brand name and model of light used to conduct surveys: BLACK DIAMOND ICON

Were binoculars used for the surveys (circle one)? YES NO

Brand, model, and power of binoculars: PENTAX DCF SP 8x42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
PSEUDACIS HYPOCHONDRIACA	10	H	ADULT		100%
LITHOBATES CATESBEIANA	12	O	ADULT	300-800g	100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: BULLFROGS OBSERVED IN  
ARROYO LAS POSAS

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Other notes, observations, comments, etc.

**Necessary Attachments:**

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 4/5/2011 Survey Biologist: Stewart Sam  
(mm/dd/yyyy) (Last name) (first name)  
Survey Biologist: Mintzer Jason  
(Last name) (first name)

Site Location: Ventura, Somis, 34.263745° / -118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR 118 / SR - 34 Intersection Improvements  
Brief description of proposed action:  
Roadway & intersection improvements in Somis, CA

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING  
Survey number (circle one): 1 2 3 4 5 6 7 8  
Begin Time: 15:45 End Time: 1855  
Cloud cover: CLEAR Precipitation: ∅  
Air Temperature: 20°C / 68°F Water Temperature: 19°C / 66°F  
Wind Speed: 1-4 MPH Visibility Conditions: CLEAR  
Moon phase: NEW MOON Humidity: 32%  
Description of weather conditions: CLEAR WARM CALM

Brand name and model of light used to conduct surveys: Black Diamond Icon

Were binoculars used for the surveys (circle one)? YES NO  
Brand, model, and power of binoculars: Pentax DCF SP 8X42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<i>Pseudacris hypochondriaca</i>	5	H	adult		100%
<i>Pseudacris hypochondriaca</i>	1	0	adult		100%
<i>Batrachoseps nigriventris</i>	2	0	adult		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: BULLFROGS OBSERVED IN ARROYO LAS POSAS. POOR WATER QUALITY IN AGRICULTURAL RUNOFF.

Other notes, observations, comments, etc.

ARROYO CHUB OBSERVED IN DRAINAGE 2

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species locations

**Appendix E.**  
**California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 4/5/2011 Survey Biologist: Stewart Sam  
(mm/dd/yyyy) (Last name) (first name)

Survey Biologist: Mintzer Jason  
(Last name) (first name)

Site Location: Ventura, Somis, 34.263745°/-118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR 118 / SR-34 Intersection Improvements  
Brief description of proposed action:  
Roadway @ intersection improvements in Somis, CA

Type of Survey (circle one): DAY  NIGHT  BREEDING NON-BREEDING

Survey number (circle one): 1 2 3  4 5 6 7 8

Begin Time: 20:15

End Time: 23:46

Cloud cover: 0

Precipitation: 0

Air Temperature: 19°C / 62°F

Water Temperature: 18.2°C / 65°F

Wind Speed: 1-4 MPH

Visibility Conditions: CLEAR

Moon phase: NEW MOON

Humidity: 45%

Description of weather conditions: COOL CALM CLEAR

Brand name and model of light used to conduct surveys: Black Diamond Icon

Were binoculars used for the surveys (circle one)?  YES NO

Brand, model, and power of binoculars: Pentax DCF SP 8x42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<i>Pseudacris hyperchoerota</i>	4	0	adult		100%
<i>Pseudacris hyperchoerota</i>	40	H	adult		100%
<i>Lithobates catesbeianus</i>	1	0	adult		100%
<i>Xenopus laevis</i>	3	0	adult		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: Bullfrogs, crayfish observed in Arroyo Las Posas & tributaries. Poor water quality from agricultural runoff.

Other notes, observations, comments, etc.

AFRICAN CLAWED FROG OBSERVED IN FISH  
PONDS IN WESTERN PORTION OF SURVEY AREA

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species locations

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 4-12-2011 Survey Biologist: Stewart Sam  
(mm/dd/yyyy) (Last name) (first name)  
Survey Biologist: Mintzer Jason  
(Last name) (first name)

Site Location: Ventura, Somis, 34,263745 / -118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR-118/SR-34 INTERSECTION IMPROVEMENTS  
Brief description of proposed action: ROADWAY AND INTERSECTION IMPROVEMENTS IN SOMIS, CA.

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING  
Survey number (circle one): 1 2 3 4 5 6 7 8  
Begin Time: 20:30 End Time: 23:41  
Cloud cover: 50% Precipitation: No  
Air Temperature: 15°C / 59°F Water Temperature: 20°C / 68°F  
Wind Speed: Ø CALM Visibility Conditions: CLEAR  
Moon phase: WAXING 1/2 Humidity: 47%  
Description of weather conditions: CLEAR COOL CALM  
PARTIALLY CLOUDY

Brand name and model of light used to conduct surveys: Black Diamond Icon

Were binoculars used for the surveys (circle one)? YES NO  
Brand, model, and power of binoculars: Pentax DCF SP 8X42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<i>Pseudacris hypochondriaca</i>	3	0	adult		100%
<i>Pseudacris hypochondriaca</i>	45	H	adult		100%
<i>Anaxyrus boreas halophilus</i>	7	0	juvenile		100%
<i>Xenopus laevis</i>	1	0	adult		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: BULLFROGS, CRAYFISH, ~~FISH~~  
OBSERVED IN ARROYO LAS POSAS AND TRIBUTARIES. POOR  
WATER QUALITY FROM AGRICULTURAL RUNOFF

Other notes, observations, comments, etc.

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species locations

**Appendix E.**  
**California Red-legged Frog Survey Data Sheet**

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: 4/25/2011 Survey Biologist: Stewart Sam  
(mm/dd/yyyy) (Last name) (first name)  
Survey Biologist: Mintzer Jason  
(Last name) (first name)

Site Location: Ventura, Somis, 34.263745° / -118.994674°  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: SR 118 / SR-34 Intersection Improvements  
Brief description of proposed action:  
Roadway & intersection improvements in Somis, CA.

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 20:37 End Time: 23:55

Cloud cover: CLEAR Precipitation: No

Air Temperature: 18 °C / 64 °F Water Temperature: 18 °C / 64 °F

Wind Speed: 0-2 MPH Visibility Conditions: CLEAR

Moon phase: 1/2 QUARTER Humidity: 50%

Description of weather conditions: CLEAR COOL CALM

Brand name and model of light used to conduct surveys: Black Diamond Icon

Were binoculars used for the surveys (circle one)? YES NO  
Brand, model, and power of binoculars: Pentax DCF SP 8x42

**Appendix E.  
California Red-legged Frog Survey Data Sheet**

**AMPHIBIAN OBSERVATIONS**

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<i>Pseudacris hypochondriaca</i>	2	0	adult		100%
<i>Pseudacris hypochondriaca</i>	40	4	adult		100%
<i>Lithobates castesbeianus</i>	3	0	adult		100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: Bullfrog, crayfish  
observed in Arroyo Las Posas & tributaries. Poor water  
quality from agricultural runoff.

Other notes, observations, comments, etc.

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species locations

**ATTACHMENT D**  
**WILDLIFE COMPENDIUM**

**ATTACHMENT D  
WILDLIFE COMPENDIUM**

BIG TUJUNGA WILDLIFE COMPENDIUM
SPECIES
<b>Crustaceans</b>
<b>CAMBARIDAE - FRESHWATER CRAYFISH</b>
<i>Procambarus clarkii</i> red-swamp crayfish
<b>Fish</b>
<b>CYPRINIDAE - MINNOWS</b>
<i>Gila orcutti</i> arroyo chub
<b>POECILIDAE - LIVEBEARERS</b>
<i>Gambusia affinis*</i> western mosquitofish
<b>Amphibians</b>
<b>BATRACHOSEPS – SLENDER SALAMANDERS</b>
<i>Batrachoseps nigriventris</i> black-bellied slender salamander
<b>BUFONIDAE - TRUE TOADS</b>
<i>Anaxyrus boreas</i> western toad
<b>HYLIDAE - TREEFROGS</b>
<i>Pseudacris [Hyla] regilla</i> Pacific chorus frog
<b>RANIDAE - TRUE FROGS</b>
<i>Rana catesbeiana*</i> bullfrog
<b>XENOPUS - CLAWED FROGS</b>
<i>Xenopus laevis</i> African clawed frog
<b>Reptiles</b>
<b>PHRYNOSOMATIDAE - ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS</b>
<i>Sceloporus occidentalis</i> western fence lizard
<i>Uta stansburiana</i> side-blotched lizard
<b>ANGUIDAE - ALLIGATOR LIZARDS</b>
<i>Elgaria multicaudata</i> southern alligator lizard
<b>COLUBRIDAE - COLUBRID SNAKES</b>
<i>Pituophis catenifer</i> gopher snake
<b>Birds</b>
<b>ANATIDAE - WATERFOWL</b>
<i>Anas platyrhynchos</i> mallard

**ATTACHMENT D  
WILDLIFE COMPENDIUM**

BIG TUJUNGA WILDLIFE COMPENDIUM
SPECIES
<b>CATHARTIDAE - VULTURES</b>
<i>Cathartes aura</i> turkey vulture
<b>ARDEIDAE - HERONS</b>
<i>Butorides virescens</i> green heron
<i>Nycticorax nycticorax</i> black-crowned night-heron
<b>ACCIPITRIDAE - HAWKS</b>
<i>Buteo lineatus</i> red-shouldered hawk
<i>Buteo jamaicensis</i> red-tailed hawk
<b>COLUMBIDAE - PIGEONS &amp; DOVES</b>
<i>Columba livia</i> rock pigeon
<i>Zenaida macroura</i> mourning dove
<b>STRIGIDAE - TRUE OWLS</b>
<i>Bubo virginianus</i> great horned owl
<b>TROCHILIDAE - HUMMINGBIRDS</b>
<i>Calypte anna</i> Anna's hummingbird
<b>ALCEDINIDAE - KINGFISHERS</b>
<i>Ceryle alcyon</i> belted kingfisher
<b>PICIDAE - WOODPECKERS</b>
<i>Picoides nuttallii</i> Nuttall's woodpecker
<b>TYRANNIDAE - TYRANT FLYCATCHERS</b>
<i>Empidonax difficilis</i> Pacific-slope flycatcher
<i>Sayornis nigricans</i> black phoebe
<i>Tyrannus vociferans</i> Cassin's kingbird
<i>Tyrannus verticalis</i> western kingbird
<b>CORVIDAE - JAYS &amp; CROWS</b>
<i>Corvus brachyrhynchos</i> American crow
<i>Corvus corax</i> common raven
<b>HIRUNDINIDAE - SWALLOWS</b>
<i>Stelgidopteryx serripennis</i> northern rough-winged swallow

**ATTACHMENT D  
WILDLIFE COMPENDIUM**

BIG TUJUNGA WILDLIFE COMPENDIUM
SPECIES
<b>AEGITHALIDAE - BUSHTITS</b>
<i>Psaltriparus minimus</i> bushtit
<b>TROGLODYTIDAE - WRENS</b>
<i>Thryomanes bewickii</i> Bewick's wren
<b>TURDIDAE - THRUSHES &amp; ROBINS</b>
<i>Sialia mexicana</i> western bluebird
<b>MIMIDAE - THRASHERS</b>
<i>Mimus polyglottos</i> northern mockingbird
<b>PARULIDAE - WARBLERS</b>
<i>Dendroica coronata</i> yellow-rumped warbler
<i>Dendroica petechia</i> yellow warbler
<i>Geothlypis trichas</i> common yellowthroat
<i>Wilsonia pusilla</i> Wilson's warbler
<b>THRAUPIDAE - TANAGERS</b>
<i>Piranga ludoviciana</i> western tanager
<b>EMBERIZIDAE - SPARROWS &amp; JUNCOS</b>
<i>Pipilo maculatus</i> spotted towhee
<i>Pipilo crissalis</i> California towhee
<i>Melospiza melodia</i> song sparrow
<i>Zonotrichia leucophrys</i> white-crowned sparrow
<b>CARDINALIDAE - GROSBEAKS &amp; BUNTINGS</b>
<i>Pheucticus melanocephalus</i> black-headed grosbeak
<b>ICTERIDAE - BLACKBIRDS</b>
<i>Molothrus ater</i> brown-headed cowbird
<i>Euphagus cyanocephalus</i> Brewer's blackbird
<b>FRINGILLIDAE - FINCHES</b>
<i>Carpodacus mexicanus</i> house finch
<i>Carduelis psaltria</i> lesser goldfinch

**ATTACHMENT D  
WILDLIFE COMPENDIUM**

BIG TUJUNGA WILDLIFE COMPENDIUM
SPECIES
Mammals
<b>LEPORIDAE - HARES AND RABBITS</b>
<i>Sylvilagus audubonii</i> desert cottontail
<b>SCIURIDAE - SQUIRRELS</b>
<i>Spermophilus beecheyi</i> California ground squirrel
<b>GEOMYDAE - POCKET GOPHERS</b>
<i>Thomomys bottae</i> Botta's pocket gopher
<b>MURIDAE - MICE, RATS, AND VOLES</b>
<i>Neotoma lepida</i> desert woodrat
<b>CANIDAE - WOLVES &amp; FOXES</b>
<i>Canis latrans</i> coyote
<b>PROCYONIDAE - RACCOONS</b>
<i>Procyon lotor</i> common raccoon
* introduced species

**Appendix H** Steve Kirkland-USFWS-Email  
dated 04-11-2011

---



<Steve\_Kirkland@fws.gov>  
04/11/2011 10:58 AM

To Nayla El-Shammas <nayla\_el-shammas@dot.ca.gov>  
cc  
bcc  
Subject Re: EA 105960- SR118/SR34- Intersection  
Improvement-Somis-Ventura County-SRH#1998081078

History: This message has been replied to and forwarded.

Hi Nayla,

In retrospect, I dont think its necessary to do the protocol swwf surveys since the LBVI protocol was completed and not even a migrant flycatcher was observed during those. Its likely they would have been detected if present

thanks for coordinating.

Steve Kirkland  
U.S. Fish and Wildlife Service  
2493 Portola Road, Suite B  
Ventura, CA 93003

805-644-1766 ext. 267

steve\_kirkland@.fws.gov  
 Nayla El-Shammas <nayla\_el-shammas@dot.ca.gov>

**Nayla El-Shammas**  
<nayla\_el-shammas@dot.ca.gov>  
04/11/2011 10:02 AM

ToSteve Kirkland <Steve\_Kirkland@fws.gov>  
cc  
SubjecRe: EA 105960- SR118/SR34- Intersection  
tImprovement-Somis-Ventura  
County-SRH#1998081078

Good morning Steve,

I would like to update you about the paste of the project.  
We still have 2 more CRF surveys. No positive finding yet.

I want to make sure that SWWFC protocol surveys still required by the service. If yes, I will be writing a task order to hire a consultant. Please look at the chain of emails below.

**Appendix I** Jurisdictional Delineation Report-  
BonTerra Consulting

---



## JURISDICTIONAL DELINEATION REPORT

### SR-118 AT SR-34 AND DONLON ROAD INTERSECTION IMPROVEMENT PROJECT SOMIS, CALIFORNIA

Prepared for

Rich Galvin  
GPA Environmental  
1611 South Pacific Coast Highway, Suite 104  
Redondo Beach, California 90277

Nayla El-Shammas  
Caltrans District 7  
100 South Main Street  
Los Angeles, California 90012  
Tel: (213) 488-4059

Prepared by

Gary Medeiros, Associate Principal  
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151 Kalmus Drive, Suite E-200  
Costa Mesa, California 92626  
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August 19, 2010

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- A Wetland Data Forms
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- C Nationwide Permit Description
- D Approved Jurisdictional Determination Forms

## 1.0 INTRODUCTION

This Jurisdictional Delineation Report (report) was prepared to provide baseline data concerning the type and extent of resources under U.S. Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), and Regional Water Quality Control Board (RWQCB) jurisdictions for the State Route 118 (SR-118) at State Route 34 (SR-34) and Donlon Road Intersection Improvement project (hereafter referred to as “the proposed project”).

BonTerra Consulting Associate Principal of Regulatory Services Gary Medeiros conducted a jurisdictional delineation on May 11, 2010, in accordance with the USACE and CDFG requirements. The delineation was conducted based on the current regulations, policies, and guidance letters provided by these regulatory agencies, and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b), and the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Please note that this report must be reviewed and approved by the USACE and the CDFG before the determination of jurisdictional boundaries is finalized.

### 1.1 PROJECT DESCRIPTION AND BACKGROUND

There are six alternatives under consideration for the proposed project. The alternatives are (1) “No-Build” Alternative, (2) Intersection Improvement Alternative, (3) Save Our Somis (SOS) Alternative, (4) Roundabout Alternative, (5) Somis Bypass Alternative, and (6) Bridge Alternative. The study area for the proposed project includes two areas where jurisdictional areas could be impacted by one of the six project alternatives (see Exhibit 1).

The study area is located on the U.S. Geological Survey’s Moorpark 7.5-minute quadrangle map (Exhibit 2). The study area includes a portion of a north-south drainage and a portion of an east-west drainage, which are both tributaries to Arroyo Las Posas. Wetland Delineation Area 1 is the north-south drainage adjacent to Donlon Road from SR-118 upstream approximately 800 feet to a debris basin and from SR-118 downstream approximately 150 feet (Exhibit 2). Wetland Delineation Area 1 is comprised primarily of gum trees (*Eucalyptus* spp.) with no appreciable understory habitat. Directly adjacent to where this drainage crosses under SR-118, there are also a few willows (*Salix* spp.) and Mexican elderberry (*Sambucus mexicana*); however, these species are limited to the portion of the drainage directly adjacent to SR-118. Wetland Delineation Area 2 includes an approximate 1,575-foot portion of an east-west drainage that is located north of the railroad tracks (Exhibit 2). This east-west drainage consists of dense southern willow scrub dominated by arroyo willow (*Salix lasiolepis*) with an understory of mule fat (*Baccharis salicifolia*), poison hemlock (*Conium maculatum*), castor bean (*Ricinus communis*), and hoary nettle (*Urtica dioica*). Other species commonly occurring along this drainage include coyote brush (*Baccharis pilularis*), Mexican elderberry, California walnut (*Juglans californica*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian pepper (*Schinus molle*), and gum trees. There are also patches of giant reed (*Arundo donax*) along this drainage.

### 1.2 REGULATORY AUTHORITY

#### 1.2.1 Summary of Regulations

##### ***U.S. Army Corps of Engineers***

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into “Waters of the U.S.” under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all Waters of the U.S. where the material has the effect of (1) replacing any portion of a Waters of the U.S. with dry land or

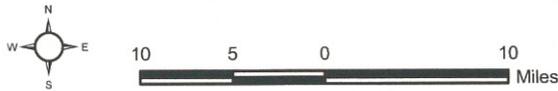


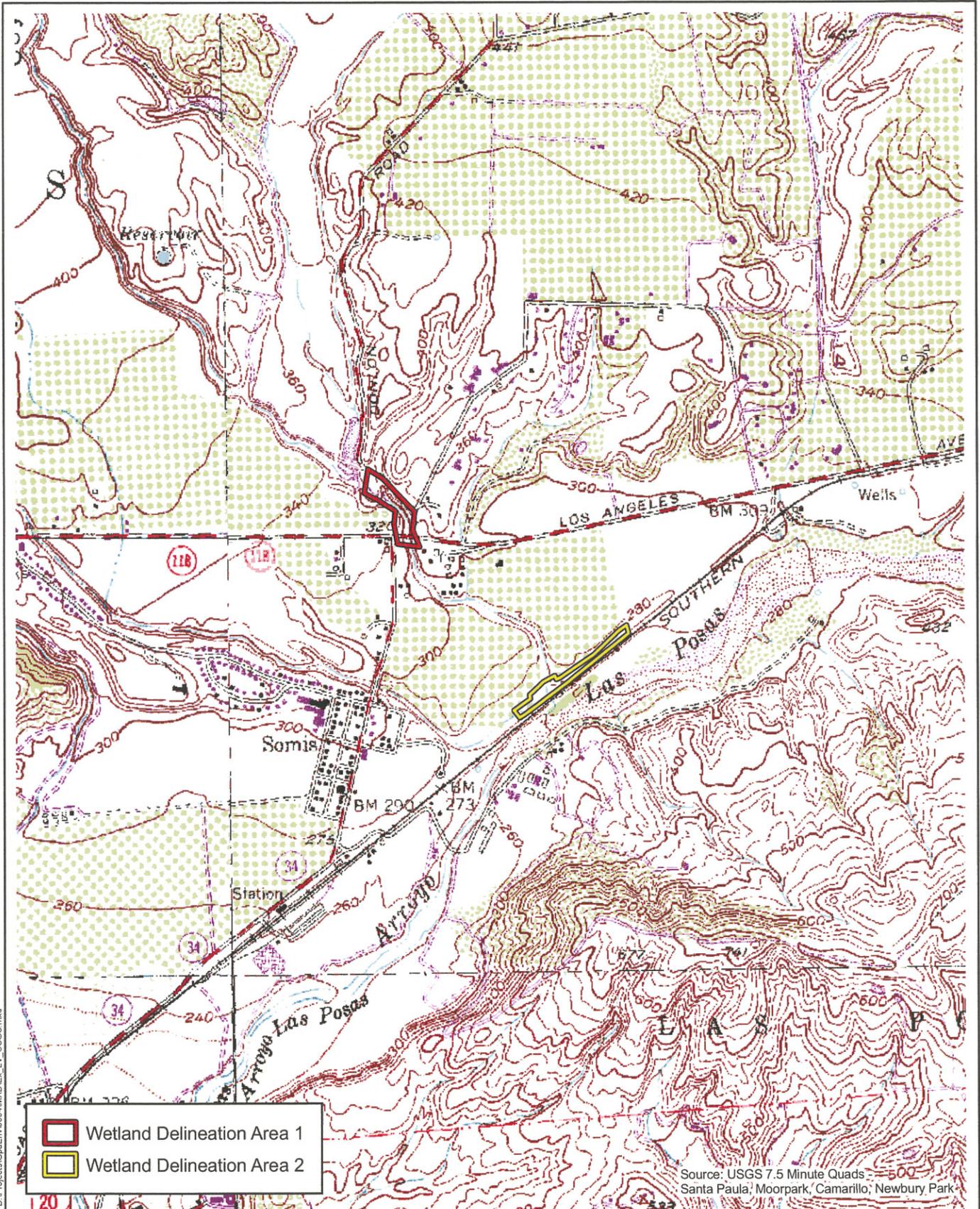
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**Regional Location**

**Exhibit 1**

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*





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### Local Vicinity

SR-118 at SR-34 and Donlon Road Intersection Improvement Project



### Exhibit 2

(2) changing the bottom elevation of any portion of Waters of the U.S. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in the Waters of the U.S. The selection of disposal sites for dredged or fill material is done in accordance with the Section 404(b)(1) guidelines, which were developed by the U.S. Environmental Protection Agency (USEPA).

### **Waters of the United States**

“Waters of the U.S.” can be divided into three categories: territorial seas, tidal waters, or non-tidal waters. The term “Waters of the U.S.” is defined by the *Code of Federal Regulations* (Title 33, Navigation and Navigable Waters; Part 328, Definition of Waters of the United States; Section 328.3, Definitions) and includes:

1. All waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, or streams (including intermittent streams); mudflats; sand flats; wetlands; sloughs; prairie potholes; wet meadows; playa lakes; or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce;
4. All impoundments of waters otherwise defined as “Waters of the U.S.” under the definition;
5. All tributaries of waters identified above;
6. The territorial seas; and
7. All wetlands adjacent to waters (other than waters that are themselves wetlands) identified above.

### Ordinary High Water Mark

The landward limit of tidal Waters of the U.S. is the high tide line. In non-tidal waters where adjacent wetlands are absent, jurisdiction extends to the ordinary high water mark (OHWM). In the absence of wetlands in non-tidal waters, the extent of jurisdictional limits is determined by the OHWM, which is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas” (33 *Code of Federal Regulations* [CFR], Section [§] 328.3[e]).

### Wetlands

A wetland is a subset of Waters of the U.S. and is defined by the USACE and the USEPA as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR §328.3[b]). Wetlands generally include swamps, marshes, bogs, and areas containing similar features. The definition and methodology for identifying wetland resources have now been refined and are described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b), a supplement to the 1987 Corps Manual. The revised methodology

was used to identify the type and extent of Waters of the U.S. including wetland resources in the study area.

#### Supreme Court Rulings/Regulatory Guidance

Guidance for determining USACE jurisdiction over Waters of the U.S. was provided following the consolidated cases of *Rapanos v. United States* and *Carabell v. United States* (referred to as the "Rapanos" cases). On June 19, 2006, a majority of the U.S. Supreme Court overturned two Sixth Circuit Court of Appeals decisions, finding that certain wetlands constituted Waters of the U.S. under the Federal CWA.

On June 5, 2007, the USACE published a memorandum that provides guidance to the USEPA regions and the USACE districts that implement the Supreme Court's decision in the Rapanos cases (which address the jurisdiction over Waters of the U.S. under the CWA). The memorandum includes a chart that summarizes its key points and is intended to be used as a reference tool along with a complete discussion of issues and guidance furnished throughout the memorandum.

In summary, the USACE and the USEPA will assert jurisdiction over the following waters: (1) traditional navigable waters (TNWs); (2) wetlands adjacent to TNWs; (3) non-navigable tributaries of TNWs that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and (4) wetlands that directly abut such tributaries.

The USACE and the USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW: (1) non-navigable tributaries that are not relatively permanent; (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent; and (3) wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The USACE and the USEPA generally will not assert jurisdiction over the following features: (1) swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) and (2) ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The USACE and the USEPA will apply the significant nexus standard as follows:

1. A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream TNWs.
2. A significant nexus includes consideration of hydrologic and ecologic factors.

#### **Regional Water Quality Control Board**

The RWQCB is the primary agency responsible for protecting water quality within California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "Waters of the State" and to all Waters of the U.S., including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water

quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide “certification that there is reasonable assurance that an activity which may result in the discharge to Waters of the U.S. will not violate water quality standards”. Water Quality Certification must be based on a finding that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine Regional Boards’ Basin Plans.

The Porter-Cologne Act provides the State with very broad authority to regulate “Waters of the State” (which are defined as any surface water or groundwater, including saline waters). The Porter-Cologne Act has become an important tool since the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* and *Rapanos* decisions with respect to the State’s authority over isolated waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a “Report of Waste Discharge” (WDR) when there is no federal nexus, such as under Section 404(b)(1) of the CWA. Although “waste” is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharged into water bodies.

### **California Department of Fish and Game**

Historically, the CDFG has had jurisdictional authority over wetland resources associated with rivers, streams, and lakes under the *California Fish and Game Code* (§§1600–1607). Legislation repealing *California Fish and Game Code* §§1600–1607 became effective on January 1, 2004. This legislative action further added *California Fish and Game Code* §§1600-1616. The most important change is that public and private notifications are now treated in the same fashion. Specifically, activities of State and local agencies as well as public utilities that are project proponents are now regulated by the CDFG under §1602 of the *California Fish and Game Code*. This section regulates any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Because the CDFG includes streamside habitats under its jurisdiction that, under the federal definition, may not qualify as wetlands on a particular project site, its jurisdiction may be broader than that of the USACE. Riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland. However, riparian forests are frequently within CDFG regulatory jurisdiction under Section 1602 of the *California Fish and Game Code*.

The CDFG enters into a Lake or Streambed Alteration Agreement (SAA) with a project proponent and can impose conditions on the agreement. The notification process is the completion of the applications that will serve as the basis for the CDFG’s issuance of a Section 1602 SAA. *California Fish and Game Code* Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State.

The CDFG jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFG takes jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at

least periodically or permanently through a bed or channel with banks that support fish, other aquatic plant, and/or wildlife species and watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

## 2.0 METHODOLOGY

The three-parameter approach used to identify USACE wetlands is summarized in Sections 2.1 through 2.3; literature reviewed for the preparation of the delineation is outlined in Section 2.4; and the field delineation is outlined in Section 2.5.

### 2.1 VEGETATION

Hydrophytic vegetation (or hydrophytes) is defined as any macrophytic plant that is typically adapted to and subsequently grows within water or which is on a substrate that is at least periodically deficient in oxygen; this oxygen deficiency can be a result of excessive saturation conditions that range from open water to periodically saturated soils. In other words, these plant species are specialized and can survive in permanently saturated to periodically saturated soils where oxygen levels are very low or anaerobic. The U.S. Fish and Wildlife Service (USFWS) has identified approximately 2,000 plant species of this type within the State of California (i.e., Zone 0) and nearly 5,000 species throughout the U.S. (Reed 1988). The wetland indicator categories reflect the range of estimated probabilities (expressed as a frequency of occurrence) that a species occurs in wetlands versus non-wetlands (e.g., a frequency of 67 percent to 99 percent means that 67 percent to 99 percent of randomly selected sample plots that contain the species across its range would be a wetland). A positive (+) or negative (-) sign was used with the wetland indicator categories to more specifically define the regional frequency of a species' occurrence in wetlands (Reed 1988). The positive sign indicates a frequency toward the higher end of the category (i.e., more frequently found in wetlands), and a negative sign indicates a frequency toward the lower end of the category (less frequently found in wetlands). The positive and negative modifiers are eliminated from the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* when determining if an area meets the hydrophytic plant criterion for a wetland. Species not listed by Reed (1988) are considered to be upland (UPL).

Plant indicator status categories are as follows:

**Obligate Wetland (OBL):** Plants that occur almost always (estimated probability 99 percent) in wetlands under natural conditions, but which may also occur rarely (estimated probability 1 percent) in non-wetlands (e.g., cattails [*Typha* spp.] or common water hyacinth [*Eichhornia crassipes*]).

**Facultative Wetlands (FACW):** Plants that occur usually (estimated probability 67 to 99 percent) in wetlands, but also occur (estimated probability 1 to 33 percent) in non-wetlands (e.g., mule fat or arroyo willow).

**Facultative (FAC):** Plants with similar likelihood (estimated probability 34 to 66 percent) of occurring in both wetlands and non-wetlands (e.g., California saltbush [*Atriplex californica*]).

**Facultative Upland (FACU):** Plants that occur sometimes (estimated probability 1 to 33 percent) in wetlands, but occur more often (estimated probability 67 to 99 percent) in non-wetlands (e.g., giant wild rye [*Leymus condensatus*]).

**Obligate Upland (UPL):** Plants that occur rarely (estimated probability 1 percent) in wetlands, but occur almost always (estimated probability 99 percent) in non-wetlands under natural conditions (e.g., coast live oak [*Quercus agrifolia*]).

The procedure for hydrophytic vegetation indicators will be determined through one of three methods: Indicator 1: "Dominance Test" by using the "50/20 Rule"; Indicator 2: "Prevalence Index"; or Indicator 3: "Morphological Adaptation" procedures identified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b). Hydrophytic vegetation is present if any indicator is satisfied. If none of the indicators are satisfied, then hydrophytic vegetation is absent unless (1) indicators of hydric soil and wetland hydrology are present and (2) the site meets the requirements for a problematic wetland situation.

**Dominance Test:** Vegetative cover is estimated and is ranked according to dominance. Dominant species are the most abundant species for each stratum of the community (i.e., tree, sapling/shrub, herb, or woody vine) that individually or collectively amount to 50 percent of the total coverage of vegetation, plus any other species that, by itself, accounts for 20 percent of the total vegetation cover (also known as the "50/20 Rule"). These species are recorded on the "Wetland Determination Data Form – Arid West Region" (see Attachment A). The wetlands indicator status of each species is also recorded on the data forms based on The List of Plant Species that Occur in Wetlands (Reed 1988). If greater than 50 percent of the dominant species across all strata are OBL, FACW or FAC species, the criterion for wetland vegetation is considered to be met.

**Prevalence Index:** The prevalence index considers all plant species in a community, not just the dominant ones. The prevalence index is the average of the wetland indicator status of all plant species in a sampling plot. Each indicator status category is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and is weighted by the species' abundance (percent cover). Hydrophytic vegetation is present if the prevalence index is 3.0 or less.

**Morphological Adaptation:** Morphological adaptations, such as adventitious roots (i.e., roots that take advantage of the wet conditions) and shallow root systems, must be observed on more than 50 percent of the individuals of a facultative upland species for the hydrophytic vegetation wetland criterion to be met.

## 2.2 SOILS

The National Technical Committee for Hydric Soils defines a hydric soil as a soil that is formed under conditions of saturation, flooding, or ponding that occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and that favor the establishment of hydrophytic vegetation (USDA NRCS 2008a). It should be noted that hydric soils created under artificial conditions of flooding and inundation sufficient for the establishment of hydrophytic vegetation would also meet this hydric soils indicator.

The soil conditions are verified through the digging of test pits along each transect to a depth of at least 20 inches (except where noted because of restrictive layers). It should be noted that at some sites, it may be necessary to make exploratory soil test pits up to 40 inches in depth to more accurately document and understand the variability in soil properties and hydrologic relationships on the site. Soil test pit locations are usually dug within the drainage invert or at the edge of a drainage course within vegetated areas. Soil extracted from each soil test pit is then examined for texture and color using the standard plates within the Munsell Soil Color Chart (1994) and recorded on the Data Form. The Munsell Soil Color Chart aids in designating soils by color labels based on gradations of three simple variables: hue, value, and chroma. Any indicators of hydric soils, such as redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; gleyed (i.e., soils having a characteristic

bluish-gray or greenish-gray color) or low-chroma soils; or sulfuric odor are also recorded on the Data Form. If hydric soils are found, progressive pits are dug along the transect moving laterally away from the active channel area until hydric soil features are no longer present within the top 20 inches of the soil.

## 2.3 HYDROLOGY

Wetlands hydrology is represented by either (1) all hydrological elements or characteristics of areas permanently or periodically inundated or (2) areas containing soils that are saturated for a sufficient duration of time to create hydric soils suitable for the establishment of plant species that are typically adapted to anaerobic soil conditions. The presence of wetland hydrology is evaluated at each intersect by recording the extent of observed surface flows, the depth of inundation, the depth to saturated soils, and the depth to free water in soil test pits. In instances where stream flow is divided into multiple channels with intervening sandbars, the entire area between the channels is considered to be within the OHWM. Therefore, an area containing these features would meet the indicator requirements for wetland hydrology.

## 2.4 LITERATURE

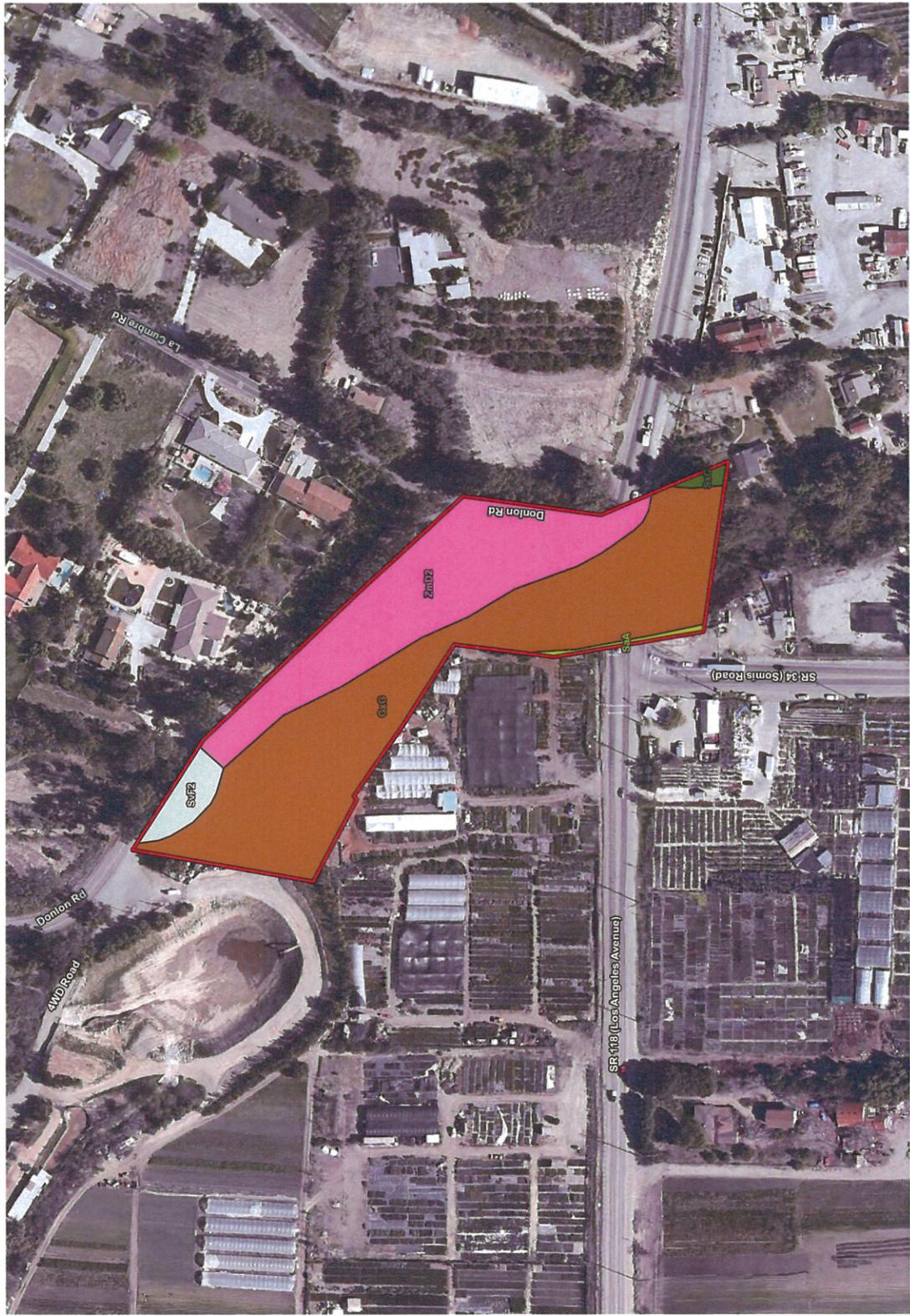
Prior to conducting the jurisdictional delineation, BonTerra Consulting reviewed the following documents to identify areas that may fall under agency jurisdiction: the U.S. Geological Survey (USGS) Moorpark 7.5-minute topographic quadrangles; color aerial photography; the Soil Survey Geographic Database (SSURGO) for Ventura County, California, Northwestern Part (USDA NRCS 2007b); and the National Hydric Soils List (USDA NRCS 2008b). A description of this literature is provided below.

**USGS Topographic Quadrangle:** USGS quadrangle maps show geological formations and their characteristics; they describe the physical settings of an area through topographic contour lines and other major surface features. These features include lakes, streams, rivers, buildings, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agencies. In addition, the USGS maps provide topographic information that is useful in determining elevations, latitude and longitude, and Universal Transverse Mercator Grid coordinates for a project site.

The USGS quadrangle map shows that unnamed drainages in Area 1 and Area 2 ultimately flow into the Arroyo Las Posas (Exhibit 2).

**Color Aerial Photography:** BonTerra Consulting reviewed an existing color aerial photograph of the study area prior to the May 11, 2010, site visit. The aerial photograph was useful in identifying the extent of the drainages and any riparian vegetation that could be present in the area.

**U.S. Department of Agriculture:** The presence of hydric soils is one of the chief indicators of jurisdictional wetlands. BonTerra Consulting reviewed the soil survey data for the study area and determined that the U.S. Department of Agriculture (USDA) mapped the soils in Area 1 as gullied land, Salinas clay loam (0 to 2 percent slopes), Soper gravelly loam (30 to 50 percent slopes, eroded), Sorrento silty clay loam (2 to 9 percent slopes), and Zamora loam (9 to 15 percent slopes, eroded) (Exhibit 3A). Soils mapped in Area 2 are gullied land, Metz loamy fine sand (0 to 2 percent slopes), Sorrento loam (2 to 9 percent slopes), and Sorrento silty clay loam (2 to 9 percent slopes) (USDA NRCS 2007a) (Exhibit 3B). The soil types are identified in Exhibit 3A and 3B and briefly described in Attachment B of this report.



Wetland Delineation Area 1

Wetland Delineation Area 2

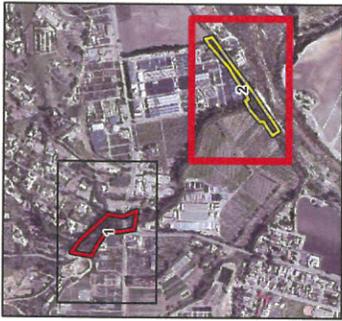
**Soils**

- GxG - GULLIED LAND
- McA - Metz loamy fine sand, 0 to 2 percent slopes
- SaA - Salinas clay loam, 0 to 2 percent slopes
- SvF2 - Soper gravelly loam, 30 to 50 percent slopes, eroded
- SwC - Sorrento loam, 2 to 9 percent slopes
- SxC - Sorrento silty clay loam, 2 to 9 percent slopes
- ZmD2 - Zamora loam, 9 to 15 percent slopes, eroded

**Soils**

SR-118 at SR-34 and Danton Road Intersection Improvement Project

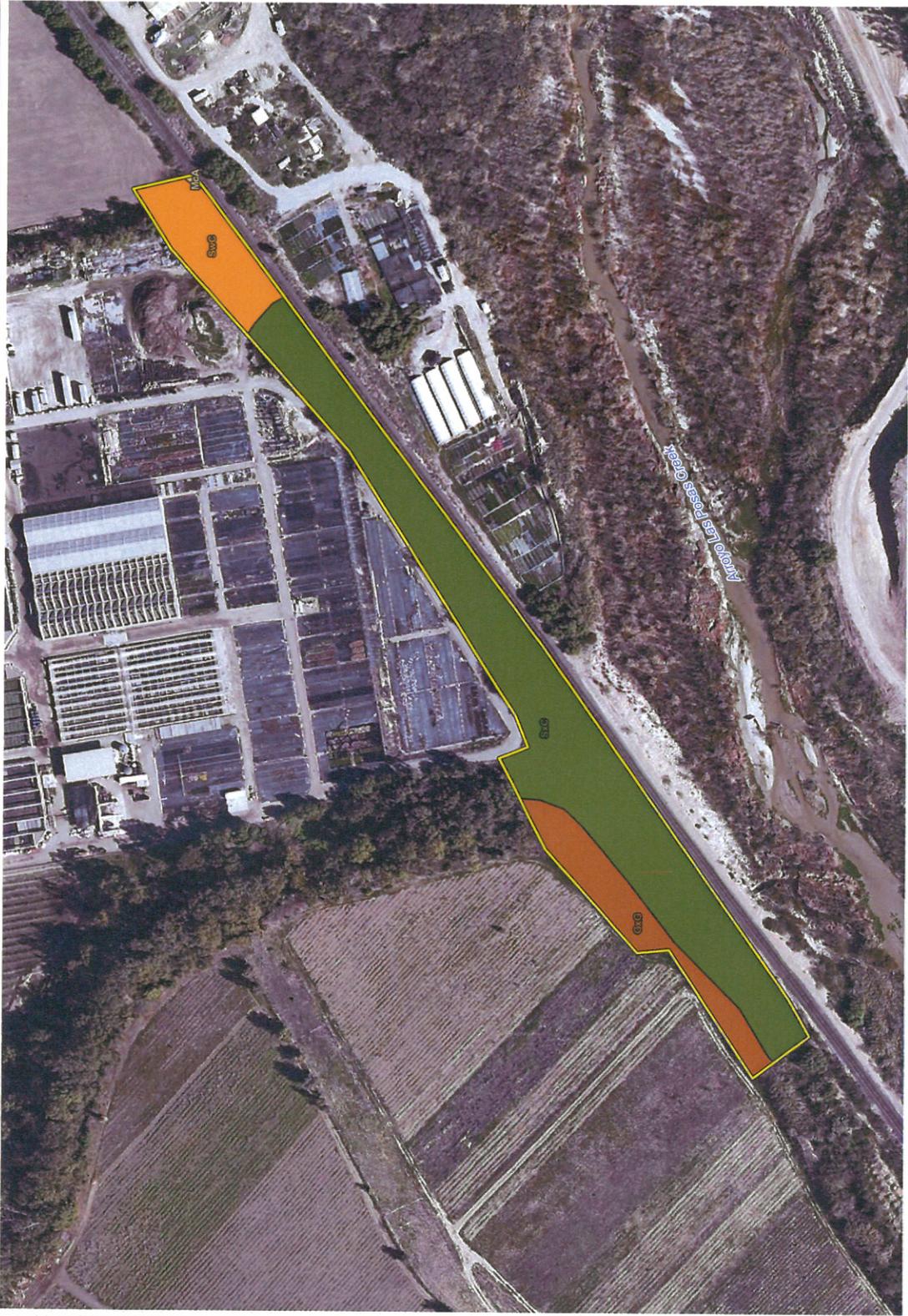




- Wetland Delineation Area 1
- Wetland Delineation Area 2

**Soils**

- GxG - GULLIED LAND
- McA - Metz loamy fine sand, 0 to 2 percent slopes
- SaA - Salinas clay loam, 0 to 2 percent slopes
- SVF2 - Soper gravelly loam, 30 to 50 percent slopes, eroded
- SwC - Sorrento loam, 2 to 9 percent slopes
- SxC - Sorrento silty clay loam, 2 to 9 percent slopes
- ZmD2 - Zamora loam, 9 to 15 percent slopes, eroded



**Soils**

SR-118 at SR-34 and Donlon Road Intersection Improvement Project



## 2.5 JURISDICTIONAL DELINEATION

In September 2008, the USACE issued the final Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. This regional supplement is designed for use with the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). Both manuals provide technical methods and guidelines for determining the presence of Waters of the U.S. and wetland resources. A three-parameter approach is used to identify wetlands and requires evidence of wetland hydrology, hydrophytic vegetation, and hydric soils. Wetlands generally include swamps, marshes, bogs, and similar areas. In order to be considered a wetland, an area must exhibit at least minimal hydric characteristics within the three parameters. However, problem areas may periodically or permanently lack certain indicators due to seasonal or annual variability of the nature of the soils or plant species on site. Atypical wetlands lack certain indicators due to recent human activities or natural events. Guidance for determining the presence of wetlands in these situations is presented in the regional supplement. Non-wetland Waters of the U.S. are delineated based on the limits of the OHWM, which can be determined by a number of factors including erosion, the deposition of vegetation or debris, and changes in vegetation.

It should be noted that the RWQCB shares USACE jurisdiction unless isolated conditions are present. If isolated waters conditions are present, the RWQCB takes jurisdiction using the OHWM and/or the three-parameter wetlands methodology that the USACE uses. The CDFG's jurisdiction is defined as the top of the bank of the stream/channel/basin or to the outer limit of riparian vegetation located within or immediately adjacent to the river, stream, creek, pond, or lake.

The analysis contained in this report uses the results of a field survey to verify current conditions. The field survey was conducted on May 11, 2010, by BonTerra Consulting Associate Principal of Regulatory Services Gary Medeiros. During the field survey, jurisdictional areas containing vegetation, soils, and evidence of hydrology were recorded on a 1 inch = 100 feet aerial photograph. Photographs of the jurisdictional areas were taken and are presented in Exhibits 4A and 4B.

## 3.0 RESULTS

### 3.1 VEGETATION

Vegetation was analyzed at five locations within an unnamed "blueline" stream in Area 1; four locations between Donlon Road and SR-118 (Sampling Points 1 through 4) and one location downstream of SR-118 (Sampling Point 5). Vegetation was analyzed at one location within an unnamed "blueline" stream in Area 2, just north of and parallel to the railroad tracks (Sampling Point 6). Photos of the vegetation at Sampling Points 1 through 6 are shown in Exhibits 4A and 4B and summarized as follows:

- Sampling Point 1 (Area 1; Exhibit 4A and 4B) is located just upstream of Donlon Road. This site is dominated by ornamental vegetation specifically Tasmanian blue gum (*Eucalyptus globulus*), which was likely planted to provide windrows for past agricultural land uses. Other plant species found at this sample site include sapling Tasmanian blue gum, black mustard (*Brassica nigra*), and castor bean. The stream bottom contained significant gum tree leaf litter, limiting the establishment of other vegetation. This sampling point did not pass the Dominance Test and the Prevalence Index was greater than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was not met.



Sampling Pit 1. Just upstream of Donlon Road in Area 1.



Sampling Pit 2. Downstream of Donlon Road in Area 1.



Sampling Pit 3. Mid-point between SR-118 and Donlon Road in Area 1.

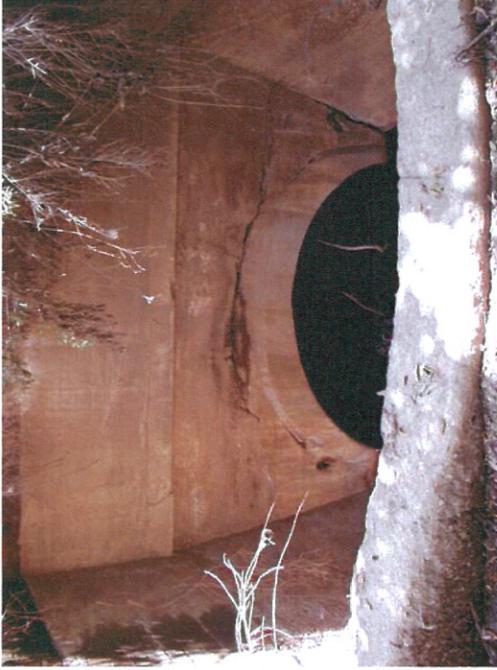


Sampling Pit 4. Just upstream of SR-118 in Area 1.

## Site Photographs

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*

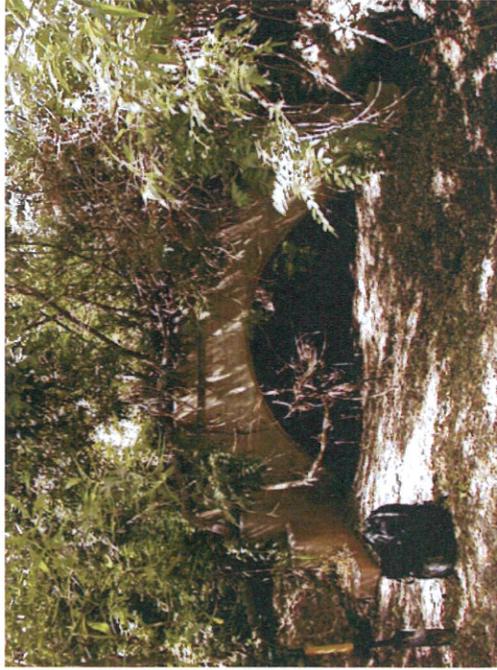
Exhibit 4A



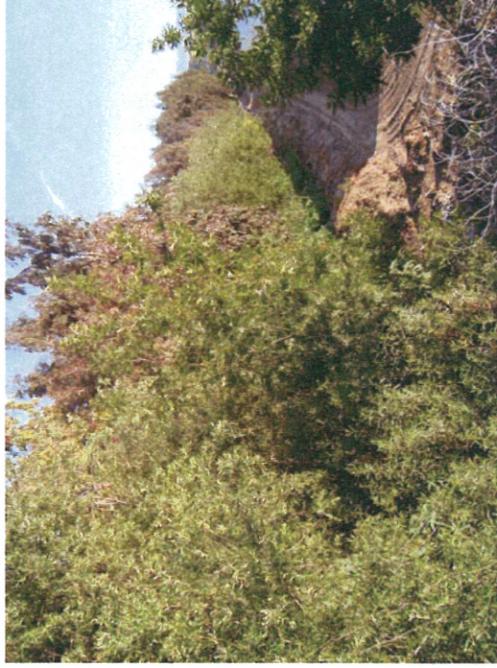
Drop structure just upstream of SR-118 in Area 1.



Downstream project limits of SR-118 in Area 1.



Sampling Pit 5 just downstream of SR-118 in Area 1.



Looking west along Area 2.

## Site Photographs

*SR-118 at SR-34 and Donlon Road Intersection Improvement Project*

## Exhibit 4B

- Sampling Point 2 (Area 1; Exhibit 4A) is located just downstream of Donlon Road. The vegetation at this site is also dominated by gum trees with a few understory species such as annual grasses (*Bromus* spp). This sampling point did not pass the Dominance Test and the Prevalence Index was greater than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was not met.
- Sampling Point 3 (Area 1; Exhibit 4A) is located midway between Donlon Road and SR-118. The vegetation at this site included arroyo willow with a small amount of mule fat and hoary nettle. This sampling point passed the Dominance Test and the Prevalence Index less than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was met.
- Sampling Point 4 (Area 1; Exhibit 4A) is located just upstream of SR-118 and an existing grade-control structure. The vegetation at this site included arroyo willow with a small amount of poison hemlock. This sampling point passed the Dominance Test and the Prevalence Index was less than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was met.
- Sampling Point 5 (Area 1; Exhibit 4A and 4B) is located just downstream of SR-118 and the existing culvert. The vegetation at this site included arroyo willow and hoary nettle. This sampling point passed the Dominance Test and the Prevalence Index was less than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was met.
- Sampling Point 6 (Area 2; Exhibit 4B) is located within an unnamed east-west drainage just north of the railroad tracks and Arroyo Las Posas. The vegetation at this site included arroyo willow with a hoary nettle understory. This sampling point passed the Dominance Test and the Prevalence Index was less than or equal to 3.0. Therefore, the hydrophytic vegetation criterion for wetlands was met.

### 3.2 SOIL

Six (6) soil test pits were dug – five within Area 1 and one within Area 2 to determine depth to free water and/or the presence of hydric soils. The following is a summary of these soil samples:

**Area 1 (Exhibit 5A-1 and 5B-1):** Soils were clayey-loam at Sampling Point 1; clayey-sand at Sampling Point 2; clayey-loam at Sampling Point 3; clay at Sampling Point 4; sandy-gravel at Sampling Point 5.

**Area 2 (Exhibit 5A-2 and 5B-2):** Soils were mucky-clay at Sampling Point 6.

Hydric soils were observed at Sampling Points 1 (Redox) and 6 (Gley). Therefore, the hydric soils criterion for wetlands was met in these areas.

### 3.3 HYDROLOGY

The areas surveyed are located within two unnamed drainage courses as identified on the Moorpark USGS Quadrangle map. Also, evidence of bed and bank, sediment deposits, drift deposits, and water-stained leaves were detected at Sampling Points, 1, 2, 3, and 4 (Area 1; Exhibit 5A-1 and 5B-1). Biotic crust was observed at Sampling Point 4 (Area 1; Exhibit 5A-1 and 5B-1), and surface water, saturation, and high groundwater were observed at Sampling Points 5 (Area 1; Exhibit 5A-1 and 5B-1) and 6 (Area 2; Exhibit 5A-2 and 5B-2). Therefore, the hydrology criterion for wetlands was met at each of these sampling points.

A summary wetlands determination is provided in Table 1 below:

**TABLE 1  
SUMMARY WETLANDS DETERMINATION**

Area	Sampling Point	Passed Dominance Test	Passed Prevalence Test	Evidence of Hydrophytic Vegetation	Evidence or Hydric Soils	Evidence of Wetlands Hydrology	Wetlands Criteria Met?
1	1	No	No	No	Yes	Yes	No
1	2	No	No	No	No	Yes	No
1	3	Yes	Yes	Yes	No	Yes	No
1	4	Yes	Yes	Yes	No	Yes	No
1	5	Yes	Yes	Yes	No	Yes	No
2	6	Yes	Yes	Yes	Yes	Yes	Yes

#### 4.0 JURISDICTIONAL DELINEATION

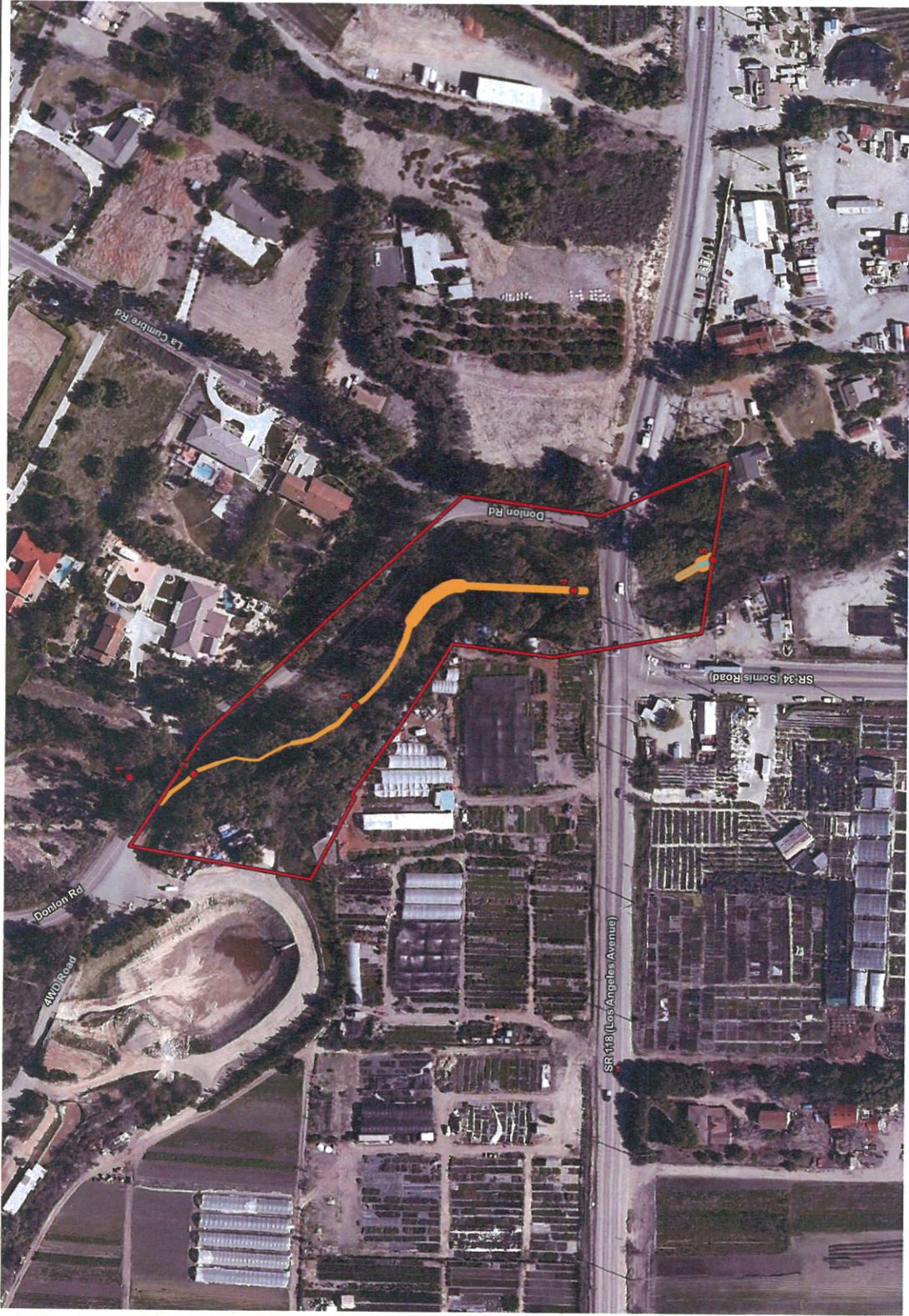
##### 4.1 U.S. ARMY CORPS OF ENGINEERS DETERMINATION

**Wetlands Determination:** As described in Section 2.0 of this report, an area must exhibit all three wetland parameters, as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008b) and the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), in order to be considered a jurisdictional wetland. 0.170 acre of wetlands were identified within Area 2's drainage feature located just north of the railroad tracks and Arroyo Las Posas (Table 2).

**"Waters of the U.S." (Non-Wetland) Determination:** All drainages surveyed within Area 1 (Exhibit 5A-1) and Area 2 (Exhibit 5A-2) exhibit evidence of hydrology sufficient to document that the OHWM meets the criteria for USACE jurisdictional waters. The OHWM was based on the presence of water marks; sediment deposits, drift deposits, and water-stained leaves at Sampling Points 1 through 4; and surface water and saturated soils at Sampling Points 5 and 6. Based on field observations and data collection, a total of approximately 1.096 acres of Waters of the U.S. occur within project area including 0.199 acre in Area 1 (0.007 acre open water and 0.192 acre non-wetlands Waters of the U.S.) (Exhibit 5A-1, Table 2) and 0.897 acre in Area 2 (0.170 acre wetlands, 0.247 acre open water, and 0.480 acre non-wetlands Waters of the U.S.) (Exhibit 5B-2, Table 2)(. This jurisdictional delineation report provides baseline data to be used by Caltrans to assess impacts associated with the implementation of Alternatives 1 through 6 and to prepare and submit a request for an "Approved Jurisdictional Determination" to the USACE.



- Pits
- Wetland Delineation Area 1
- Wetland Delineation Area 2
- Open Water
- Wetlands
- "Waters of the U.S."



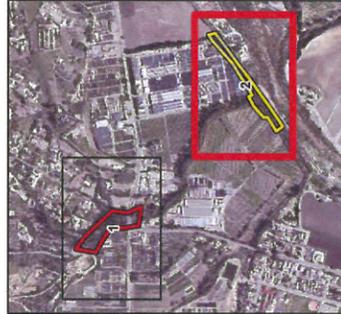
**USACE Jurisdictional Resources**

SR-118 at SR-34 and Donlon Road Intersection Improvement Project



Exhibit 5A-1





- Pits
- Wetland Delineation Area 1
- Wetland Delineation Area 2
- Open Water
- Wetlands
- "Waters of the U.S."

Exhibit 5A-2

USACE Jurisdictional Resources  
 SR-118 at SR-34 and Danton Road Intersection Improvement Project







- Pits
- Wetland Delineation Area 1
- Wetland Delineation Area 2
- CDFG Jurisdictional Area

Exhibit 5B-1

CDFG Jurisdictional Resources  
 SR-118 at SR-34 and Donlon Road Intersection Improvement Project







- Pits
- Wetland Delineation Area 1
- Wetland Delineation Area 2
- CDFG Jurisdictional Area



**CDFG Jurisdictional Resources**

SR-118 at SR-34 and Donlon Road Intersection Improvement Project



Exhibit 5B-2

**TABLE 2  
WATERS AND WETLAND RESOURCES  
UNDER THE JURISDICTION OF THE USACE**

Area 1	Acres
Wetlands	0.000
Open Water	0.007
Other Non-Wetland Waters	0.192
<b>Total "Water of the U.S" in Area 1</b>	<b>0.199</b>
Area 2	Acres
Wetlands	0.170
Open Water	0.247
Other Non-Wetland Waters	0.480
<b>Total "Waters of the U.S." in Area 2</b>	<b>0.897</b>
<b>Total "Waters of the U.S. in Areas 1 and 2"</b>	<b>1.096</b>

#### 4.2 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DETERMINATION

The RWQCB's jurisdictional boundaries are defined as those determined for the USACE under Waters of the U.S. for drainages within the study area. However, the RWQCB takes jurisdiction over both connected and isolated waters. There were no isolated waters in the study area; therefore, a total of approximately 1.096 acre under the jurisdiction of the RWQCB occurs in the study area (0.199 acre in Area 1 [Exhibit 5A-1] and 0.897 acre in Area 2 [Exhibit 5A-2]).

#### 4.3 CALIFORNIA DEPARTMENT OF FISH AND GAME DETERMINATION

The CDFG's jurisdiction was defined by the top of the bank in the absence of riparian vegetation. Based on field observations and data collection, approximately 3.740 acres (0.951 acre in Area 1 [Exhibit 5B-1, Table 3] and 2.789 acres in Area 2 [Exhibit 5B-2, Table 3]) of CDFG jurisdiction occurs in the study area).

**TABLE 3  
IMPACTS ON WATERS UNDER THE JURISDICTION OF THE CDFG**

CDFG Jurisdiction	Existing (Acres)
Area 1	0.951
Area 2	2.789
<b>Total</b>	<b>3.740</b>

### 5.0 CONCLUSION OF REGULATORY APPROVAL PROCESS

#### 5.1 REGULATORY PERMIT REQUIREMENTS

The following is a general summary of the various permits, agreements, and certifications required prior to initiation of project activities that involve impacts to areas under USACE, RWQCB, and/or CDFG jurisdictions. Required regulatory permits include:

- USACE Section 404 Permit;
- RWQCB Section 401 Water Quality Certification; and
- CDFG Section 1602 SAA.

Permit authorizations from the USACE, the RWQCB, and the CDFG are required prior to the initiation of any construction-related project activity for a development proposal that involves impacts to drainages, streams, or wetlands within and/or immediately adjacent to a project site through activities including filling; stockpiling; converting to a storm drain; modifying an existing storm drain or channel; creating a channel; stabilizing a bank; modifying road or utility transmission line crossings; or completing other modifications of an existing drainage, stream, or wetland. Also, both permanent and temporary impacts to jurisdictional resources are regulated activities that require permit authorization from these agencies.

There are two primary permits that the USACE routinely issues. These include a "Nationwide Permit" (NWP) and an "Individual Permit" (IP). The NWP is a type of general permit that authorizes certain specified activities nationwide. An IP is a permit that is issued following an individual evaluation and a determination that the proposed activity is not contrary to the public interest. Standard permits and letters of permission are types of IPs. The specific permit that is required depends on the project description and extent of jurisdictional impacts.

It should be noted that the USACE will likely issue conditional approval of the Section 404 permit subject to its receipt of the RWQCB's Section 401 Water Quality Certification. The USACE refers to this conditional approval as "Denial Without Prejudice". It should also be noted that the USACE, the RWQCB, and the CDFG applications can be processed concurrently. Also, the RWQCB and the CDFG application submittals will not be deemed complete until the application fees have been paid and they are provided with a certified California Environmental Quality Act (CEQA) document and a signed copy of the receipt of County Clerk filing fees for the Notice of Determination. Land use jurisdictions can no longer make "de minimis" findings if they determine that the project will not impact resources under the CDFG's jurisdiction. Therefore, the finding of "No Impact" to the CDFG jurisdictional resources must now be made by the CDFG prior to the payment of CDFG fees.

A detailed explanation of the regulatory permitting requirements for impacts to jurisdictional resources is provided in Sections 5.2 through 5.4.

## **5.2 U.S. ARMY CORPS OF ENGINEERS**

Regulatory authorization in the form of an IP will be required from the USACE Regulatory Branch, Los Angeles District Office if any permanent and/or temporary construction-related activity results in a discharge of material into USACE jurisdictional Waters of the U.S. that are greater than 0.5 acre or 300 linear feet. Impacts up to 0.5 acre and less than 300 linear feet may be authorized under the provisions of the NWP, such as NWP No. 14 (Linear Transportation Projects) (Attachment C).

Pursuant to USACE Regulatory Guidance Letter 08-02 dated June 26, 2008, the USACE can issue two types of jurisdictional determinations to implement Section 404 of the CWA: Approved Jurisdictional Determinations and Preliminary Jurisdictional Determinations. An Approved Jurisdictional Determination is an official USACE determination that jurisdictional Waters of the U.S., Navigable Waters of the U.S., or both are either present or absent on a site. An Approved Jurisdictional Determination also identifies the precise limits of jurisdictional waters within a project site.

The USACE will provide an Approved Jurisdictional Determination when (1) an applicant requests an official determination; (2) an applicant contests jurisdiction over a particular water body or wetland; or (3) the USACE determines that jurisdiction does not exist over a particular water body or wetland. The Approved Jurisdictional Determination then becomes the USACE's official determination that can then be relied upon over a five-year period to request regulatory authorization as part of the permit application.

In addition, an applicant may decline to request an Approved Jurisdictional Determination and instead obtain an IP or General Permit authorization based on a Preliminary Jurisdictional Determination or, in certain circumstances (e.g., authorizations by non-reporting nationwide general permits), no Jurisdictional Determination.

Preliminary Jurisdictional Determinations are non-binding and advisory in nature. They indicate that there may be Waters of the U.S. on a project site. An applicant may elect to use a Preliminary Jurisdictional Determination to voluntarily waive or set aside questions regarding CWA jurisdiction over a site, usually in the interest of allowing the applicant to move ahead expeditiously with the permitting process. The USACE will determine what form of Jurisdictional Determination is appropriate for a particular project site.

On January 31, 2007, the USACE published a memorandum clarifying the Interim Guidance for amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation implementation regulations. The Interim Guidance applies to all Department of the Army requests for authorization/verification, including IPs (standard permits and letters of permission) and all Regional General Permits (RGPs) and NWPs. The State or Tribal Historic Preservation Officer (SHPO/THPO) has 30 days to respond to a determination that a proposed activity, that otherwise qualifies for an NWP or RGP, has no effect or no adverse effect on a historic property. If the SHPO/THPO does not respond within 30 days of notification, the USACE Los Angeles District (District) may proceed with the verification. If the SHPO/THPO disagrees with the District's determination, the District may work with the SHPO/THPO to resolve the disagreement or request an opinion from the Advisory Council on Historic Preservation. The USACE will submit the draft jurisdictional delineation to the SHPO/THPO for review prior to initiating the actual regulatory process.

The USACE Regulatory Branch Offices will coordinate with the USEPA Regional Office and USACE Headquarters, as outlined in its January 28, 2008, memorandum entitled the "Process for Coordinating Jurisdictional Delineations Conducted Pursuant to Section 404 of the CWA in Light of the *Rapanos* and [*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*] Supreme Court Decisions". The guidance provided in this memorandum is quoted as follows:

1. Effective immediately, unless and until paragraph 5(b) of the June 5, 2007, *Rapanos* guidance coordination memorandum is modified by a joint memorandum from Army and USEPA, we will follow these procedures:
  - a. For Jurisdictional Determinations (JDs) involving significant nexus determinations, Corps districts will send copies of draft jurisdictional delineations via e-mail to appropriate USEPA regional offices. The USEPA regional office will have 15 calendar days to decide whether to take the draft jurisdictional delineation as a special case under the January 19, 1989, "Memorandum of Agreement Between the Department of the Army and the USEPA Concerning the Determination of the Section 404 Program and the Application of the Exceptions Under Section 404(f) of the CWA." If the USEPA regional office does not respond to the district within 15 days, the district will finalize the JD.
  - b. For JDs involving isolated waters determinations, the agencies will continue to follow the procedure in paragraph 5(b) of June 5, 2007, coordination memorandum, until a new coordination memorandum is signed by Army and USEPA. (In accordance with paragraph 6 of the June 5, 2007, coordination memorandum, this is a 21-day timeline that can only be changed through a joint memorandum between agencies).

2. Approved JDs are not required for non-reporting NWP, unless the project proponent specifically requests an Approved JD. For proposed activities that may qualify for authorization under a State Programmatic General Permit or Regional General Permit (RGP), an Approved JD is not required unless requested by the project proponent.
3. The Army will continue to work with USEPA to resolve the JDs involving significant nexus and isolated waters determinations that are currently in the elevation process.
4. Districts will continue posting completed Approved JD Forms on their web pages.

Please note that if the USACE determines that drainages are jurisdictional and would be impacted by project implementation, the Applicant will be required to obtain a CWA Section 401 Water Quality Certification from the RWQCB before the USACE will issue the Section 404 Permit. If the USACE determines that the impacted drainages are non-jurisdictional, the Applicant will be required to obtain RWQCB authorization under the provisions of a WDR.

### 5.3 REGIONAL WATER QUALITY CONTROL BOARD

As noted above, issuance of the USACE Section 404 Permit would be contingent upon the approval of a Section 401 Water Quality Certification from the Central Valley RWQCB. Also, the RWQCB requires certification of the project's CEQA documentation before it will approve the Section 401 Water Quality Certification or the WDR. The RWQCB, as a responsible agency, will use the project's CEQA document to satisfy its own CEQA compliance requirements.

Upon acceptance of a complete permit application, the RWQCB has between 60 days and 1 year to make a decision regarding the permit request. That is, USACE regulations indicate that the RWQCB has 60 days from the date of receipt of a completed application that requests water quality certification to make a decision (33 CFR §325.2[b][1][iii]). Please note that the USACE District Engineer may specify a longer time (up to one year) or shorter time based on his/her determination of a reasonable processing time (33 CFR §325.2[b][1][ii]). If the RWQCB determines that more than 60 days are needed to process the request, it has the option of requesting additional time from the USACE. Also, please note that the RWQCB has the option of issuing a "Denial Without Prejudice", which does not mean that the request is denied, but that it requires more information in order to make a decision. This effectively stops the processing clock until the requested information is provided.

The RWQCB is required (under 23 *California Code of Regulations* [CCR] §3858[a]) to have a "minimum 21 day public comment period" before any action can be taken on the 401 application. This period closes when the RWQCB acts on the application. Since projects often change or are revised during the 401 permit process, the comment period can remain open. The public comment period starts as soon as an application has been received. Generally, the RWQCB Section 401, USACE Section 404, and CDFG Section 1602 permit applications run concurrently and close at about the same time.

The RWQCB will require the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff and are required in all complete applications. Please note that the application would also require a 401 Application Fee, which would be based the amount of project impacts.

#### 5.4 CALIFORNIA DEPARTMENT OF FISH AND GAME

The CDFG regulates all work (including initial construction and ongoing operation and maintenance) that may substantially divert or obstruct the natural flow of or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake through its Streambed Alteration Program. An applicant must enter into an agreement with the CDFG to ensure no net loss of wetland values and acreages.

Impacts resulting from project implementation will require a Section 1602 SAA. The SAA must address the initial construction as well as long-term operation and maintenance of any structures within areas identified as "Waters of the State" (such as a culvert or desilting basin) that may require periodic maintenance.

Prior to construction, a notification (SAA application) must be submitted to the CDFG that describes any proposed streambed alteration contemplated by a proposed project. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., a Mitigated Negative Declaration) must be included in the submittal, consistent with CEQA requirements. The CDFG will prepare a draft SAA, which will include standard measures to protect sensitive plant and wildlife resources during project construction as well as during ongoing operation and maintenance of any project element that occurs within a CDFG jurisdictional area.

If an SAA is required, the CDFG may want to conduct an on-site inspection. The CDFG would then prepare a draft agreement, which includes measures to protect fish and wildlife resources that would be directly or indirectly impacted by project construction. The draft agreement would be transmitted to the Applicant within 60 calendar days of the CDFG's determination that the notification is complete. It should be noted that the 60-day timeframe may not apply to long-term agreements.

The applicant has 30 calendar days to notify the CDFG concerning the acceptability of the proposed terms, conditions, and measures. If the applicant agrees with these terms, conditions and measures, the agreement must be signed and returned to the CDFG. The agreement becomes final once the CDFG executes it and an SAA is issued. Note that all application fees must be paid and the final certified CEQA documentation must be provided prior to the CDFG's execution of the agreement.

If the CDFG does not respond in writing concerning the completeness of the Notification within 30 days of its submittal, the Notification automatically becomes complete. If the CDFG does not submit a draft SAA to the applicant within 60 days of the determination of a completed Notification package, the CDFG will issue a letter that either (1) identifies the final date that the CDFG has to transmit a draft SAA or (2) indicates that an SAA was not required. The CDFG will also indicate that it was unable to meet this date and that, by law, the applicant must complete the project without an SAA, and must comply with all avoidance, minimization, and mitigation measures described in the submitted Notification package. Please note that project construction activities may not begin until the applicant has received written notification from CDFG.

## 6.0 REFERENCES

- California Office of Administrative Law. 2010a (June 11). *California Code of Regulations* (Title 14, Natural Resources; Section 670.2, Plants of California Declared to Be Endangered, Threatened or Rare.). Sacramento, CA: the State. <http://weblinks.westlaw.com/result/default.aspx?action=Search&cfid=1&cnt=DOC&db=CA%2DADC&eq=search&fmqv=c&fn=%5Ftop&method=TNC&n=1&origin=Search&query=CI%28%2214+CA+ADC+S+670%2E2%22%29&rtl=CLID%5FQRYRLT63654251115246&rtdb=CLID%5FDB37279251115246&rti=1&rp=%2Fsearch%2Fdefault%2Ewl&rs=GVT1%2E0&service=Search&sp=CCR%2D1000&srch=TRUE&ss=CNT&sskey=CLID%5FSSA13279251115246&tempinfo=FINDD&vr=2%2E0>.
- . 2010b (June 11). *California Code of Regulations* (Title 23, Waters; Section 3858, Public Notices and Hearings). Sacramento, CA: the State. <http://weblinks.westlaw.com/result/default.aspx?action=Search&cfid=1&cnt=DOC&db=CA%2DADC&eq=search&fmqv=c&fn=%5Ftop&method=TNC&n=1&origin=Search&query=CI%28%2223+CA+ADC+S+3858%22%29&rtl=CLID%5FQRYRLT9740811315246&rtdb=CLID%5FDB6315811315246&rti=1&rp=%2Fsearch%2Fdefault%2Ewl&rs=GVT1%2E0&service=Search&sp=CCR%2D1000&srch=TRUE&ss=CNT&sskey=CLID%5FSSA217411315246&tempinfo=FINDD&vr=2%2E0>.
- California, State of. 2008. *California Fish and Game Code* (Section 1600–1616, California Endangered Species Act). Sacramento, CA: the State. <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=fgc&group=01001-02000&file=1600-1616>.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual* (Technical Report Y-87-1). Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.
- Munsell Color. 1994. *Munsell Soil Color Charts*. New Windsor, NY: Kollmorgen Instruments Corp.
- Reed, P.B., Jr. 1988. *National List of Plant Species That Occur In Wetlands: National Summary* (Biological Report 88 [24]). Washington, D.C.: U.S. Fish and Wildlife Service.
- State Water Resources Control Board (SWRCB). 2009 (January 1, amendments through). Porter-Cologne Water Quality Control Act (With Additions and Amendments Effective January 1, 2009). Sacramento, CA: SWRCB. [http://www.swrcb.ca.gov/laws\\_regulations/docs/portercologne.pdf](http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf).
- U.S. Army Corps of Engineers (USACE). 2008a (January 28). Memorandum entitled the “Process for Coordinating Jurisdictional Delineations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the *Rapanos* and [*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*] Supreme Court Decisions. Washington, D.C.: USACE.
- . 2008b. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (J.S. Wakeley, R.W. Lichvar, and C.V. Noble, Eds.). Vicksburg, MS: U.S. Army Engineer Research and Development Center.

- U.S. National Archives and Records Administration. 2010a (June 22). *33 Code of Federal Regulations* (Sections 325.2[b][1][ii], Processing of the Department of the Army Permits). Washington, D.C.: U.S. National Archives and Records Administration. <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=1aa28b6060d615c5042570bf906c2333&rgn=div8&view=text&node=33:3.0.1.1.32.0.10.2&idno=33>.
- . 2010b (June 22). *33 Code of Federal Regulations* (Section 328.3, Definition of Waters of the United States). Washington, D.C.: U.S. National Archives and Records Administration. <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=a541d007cd964151422066f8f8e82874&rgn=div8&view=text&node=33:3.0.1.1.35.0.10.3&idno=33>.
- U.S. Congress. 1977. *33 United States Code* (Sections 1251 et seq.). U.S. Clean Water Act. Washington, D.C.: U.S. Government Printing Office. [http://www4.law.cornell.edu/uscode/html/uscode33/usc\\_sec\\_33\\_00001251----000-.html](http://www4.law.cornell.edu/uscode/html/uscode33/usc_sec_33_00001251----000-.html).
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2008a (August 28, last modified). *Hydric Soils – Introduction*. Washington, D.C.: USDA NRCS. <http://soils.usda.gov/use/hydric/intro.html>.
- . 2008b (January). *Hydric Soils: National List – 2008* (Excel document). Washington, D.C.: USDA NRCS. <http://soils.usda.gov/use/hydric/index.html>.
- . 2007a (January 9). *Soil Survey Geographic Database for Ventura County, California, Northwestern Part*. Fort Worth, TX: USDA, NRCS.
- . 2007b (March 6). *Soil Survey Geographic (SSURGO) Database for Ventura Area, California*. Fort Worth, TX: USDA, NRCS.

**ATTACHMENT A**  
**WETLAND DATA FORMS**

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR118 at SR34 and Dorton Rd City/County: Ventura Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans District 7 State: CA Sampling Point: 1  
 Investigator(s): Gary Medeiros Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Foot hill Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): California Lat: 34°15'56.60N Long: 118°59'42.53"W Datum: NAD83  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Ephemeral creek flows into a 36" corrugated steel pile. sample site located within a retention area just upstream of Dorton Road.</u>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Eucalyptus globulus</u>	<u>50</u>	<u>Yes</u>	<u>UPL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>50</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>50 &amp; 21</u> x 5 = <u>250 &amp; 105</u> Column Totals: <u>50 &amp; 21</u> (A) <u>250 &amp; 105</u> (B) Prevalence Index = B/A = <u>5 &amp; 5</u>
<u>21</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Eucalyptus globulus</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Ricinus communis</u>	<u>1</u>	<u>No</u>	<u>UPL</u>	
<u>2</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Brassica nigra</u>	<u>2</u>	<u>No</u>	<u>UPL</u>	
<u>0</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>N/A</u>)</b>				
<u>0</u> = Total Cover				
<b>% Bare Ground in Herb Stratum <u>25</u> % Cover of Biotic Crust <u>0</u></b>				
<u>0</u> = Total Cover				
<b>Hydrophytic Vegetation Indicators:</b> _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 <sup>1</sup> _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>				
Remarks: <u>Creek side slopes dominated by Eucalyptus and other non-native plant species.</u>				

**SOIL**

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20	2.5Y/3/3	100	5YR/4/4	10	RM	M	Clay-loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR118 at SR34 and Douglas Rd City/County: Ventura Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans District 7 State: CA Sampling Point: 2  
 Investigator(s): Gary Medeiros Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Featherhill Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): California Lat: 34°15'56.06"N Long: 118°59'43.59"W Datum: NAD83  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks:	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>Eucalyptus globulus</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>100</u> &amp; <u>10</u></td> <td>x 5 = <u>500</u> &amp; <u>50</u></td> </tr> <tr> <td>Column Totals: <u>100</u> &amp; <u>10</u> (A)</td> <td><u>500</u> &amp; <u>50</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>5 and 5</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>100</u> & <u>10</u>	x 5 = <u>500</u> & <u>50</u>	Column Totals: <u>100</u> & <u>10</u> (A)	<u>500</u> & <u>50</u> (B)	Prevalence Index = B/A = <u>5 and 5</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>100</u> & <u>10</u>	x 5 = <u>500</u> & <u>50</u>																			
Column Totals: <u>100</u> & <u>10</u> (A)	<u>500</u> & <u>50</u> (B)																			
Prevalence Index = B/A = <u>5 and 5</u>																				
Sapling/Shrub Stratum (Plot size: <u>5'</u> ) <u>100</u> = Total Cover																				
1. <u>Eucalyptus globulus</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
Herb Stratum (Plot size: <u>5'</u> ) <u>10</u> = Total Cover																				
1. <u>Bromus sp</u>	<u>15</u>	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
Woody Vine Stratum (Plot size: <u>N/A</u> ) <u>15</u> = Total Cover																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ <u>0</u> = Total Cover																				
% Bare Ground in Herb Stratum <u>0</u>		% Cover of Biotic Crust <u>0</u>																		
Remarks: <u>Creek area dominated by Eucalyptus.</u>																				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																				

**SOIL**

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-20	2.5Y/5/3	100	-	-	-	-	Clay-Sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

Dry streambed.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR 118 at SR 34 and Doolan Rd City/County: Ventura Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans District 7 State: CA Sampling Point: 3  
 Investigator(s): Gary Medeiros Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flat agricultural Local relief (concave, convex, none): Flat Slope (%): 1  
 Subregion (LRR): California Lat: 34°15'53.28"N Long: 118°59'40.98"W Datum: NAD 83  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____ _____ _____	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>60</u>	<u>Yes</u>	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Baccharis salicifolia</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5'</u> ) <u>65</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>60</u> x 1 = <u>60</u> FACW species <u>5 &amp; 5</u> x 2 = <u>10 &amp; 10</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>65 &amp; 5</u> (A) <u>70 &amp; 10</u> (B)
Herb Stratum (Plot size: <u>5'</u> ) <u>0</u> = Total Cover				Prevalence Index = B/A = <u>0.9 &amp; 0.5</u> <b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size: <u>N/A</u> ) <u>5</u> = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>				
_____ <u>0</u> = Total Cover				
Remarks: <u>Small patch of willows in an area surrounded by Eucalyptus.</u>				

**SOIL**

Sampling Point: 3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	2.5Y/5/3	100	-	-	-	-	Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5) (LRR C)
  - 1 cm Muck (A9) (LRR D)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Sandy Mucky Mineral (S1)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Loamy Mucky Mineral (F1)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Vernal Pools (F9)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR C)
  - 2 cm Muck (A10) (LRR B)
  - Reduced Vertic (F18)
  - Red Parent Material (TF2)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: Hard pan

Depth (inches): 16"

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

- Wetland Hydrology Indicators:**
- Primary Indicators (minimum of one required; check all that apply)
- Surface Water (A1)
  - High Water Table (A2)
  - Saturation (A3)
  - Water Marks (B1) (Nonriverine)
  - Sediment Deposits (B2) (Nonriverine)
  - Drift Deposits (B3) (Nonriverine)
  - Surface Soil Cracks (B6)
  - Inundation Visible on Aerial Imagery (B7)
  - Water-Stained Leaves (B9)
  - Salt Crust (B11)
  - Biotic Crust (B12)
  - Aquatic Invertebrates (B13)
  - Hydrogen Sulfide Odor (C1)
  - Oxidized Rhizospheres along Living Roots (C3)
  - Presence of Reduced Iron (C4)
  - Recent Iron Reduction in Tilled Soils (C6)
  - Thin Muck Surface (C7)
  - Other (Explain in Remarks)
- Secondary Indicators (2 or more required)
- Water Marks (B1) (Riverine)
  - Sediment Deposits (B2) (Riverine)
  - Drift Deposits (B3) (Riverine)
  - Drainage Patterns (B10)
  - Dry-Season Water Table (C2)
  - Crayfish Burrows (C8)
  - Saturation Visible on Aerial Imagery (C9)
  - Shallow Aquitard (D3)
  - FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR118 at SR94 and Donlon Rd City/County: Ventura Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans District 7 State: CA Sampling Point: 4  
 Investigator(s): Gary Medeiros Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): California Lat: 34° 15' 49.93" N Long: 118° 59' 39.02" W Datum: NAD83  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Sampling point just upstream of existing catch basin.</u>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5'</u> ) <u>40</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>40/0</u> x 1 = <u>40/0</u> FACW species <u>0/0</u> x 2 = <u>0/0</u> FAC species <u>0/10</u> x 3 = <u>0/30</u> FACU species <u>0/0</u> x 4 = <u>0/0</u> UPL species <u>0/0</u> x 5 = <u>0/0</u> Column Totals: <u>40/10</u> (A) <u>40/30</u> (B)
Herb Stratum (Plot size: <u>5'</u> ) _____ = Total Cover				Prevalence Index = B/A = <u>1/3</u>
1. <u>Conium maculatum L.</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>N/A</u> ) <u>10</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust <u>50</u>				
_____ = Total Cover				
Remarks: <u>Area surrounded by extensive Eucalyptus forest.</u>				

**SOIL**

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	2.5Y/4/3	100	-	-	-	-	Clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5) (LRR C)
  - 1 cm Muck (A9) (LRR D)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Sandy Mucky Mineral (S1)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Loamy Mucky Mineral (F1)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Vernal Pools (F9)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR C)
  - 2 cm Muck (A10) (LRR B)
  - Reduced Vertic (F18)
  - Red Parent Material (TF2)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: Hard Pan Layer  
 Depth (inches): 100

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

- Wetland Hydrology Indicators:**
- Primary Indicators (minimum of one required; check all that apply)
- Surface Water (A1)
  - High Water Table (A2)
  - Saturation (A3)
  - Water Marks (B1) (Nonriverine)
  - Sediment Deposits (B2) (Nonriverine)
  - Drift Deposits (B3) (Nonriverine)
  - Surface Soil Cracks (B6)
  - Inundation Visible on Aerial Imagery (B7)
  - Water-Stained Leaves (B9)
  - Salt Crust (B11)
  - Biotic Crust (B12)
  - Aquatic Invertebrates (B13)
  - Hydrogen Sulfide Odor (C1)
  - Oxidized Rhizospheres along Living Roots (C3)
  - Presence of Reduced Iron (C4)
  - Recent Iron Reduction in Tilled Soils (C6)
  - Thin Muck Surface (C7)
  - Other (Explain in Remarks)
- Secondary Indicators (2 or more required)
- Water Marks (B1) (Riverine)
  - Sediment Deposits (B2) (Riverine)
  - Drift Deposits (B3) (Riverine)
  - Drainage Patterns (B10)
  - Dry-Season Water Table (C2)
  - Crayfish Burrows (C8)
  - Saturation Visible on Aerial Imagery (C9)
  - Shallow Aquitard (D3)
  - FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR118 at SR34 and Down Rd City/County: Ventura Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans, District 7 State: CA Sampling Point: 5  
 Investigator(s): Gary Medeiros Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): California Lat: 34°15'48.71"N Long: 118°59'38.84"W Datum: NAD83  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>sample site just downstream of large outlet corrugated steel culvert beneath SR118.</u>	

**VEGETATION – Use scientific names of plants.**

Stratum	Plot size	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet
<u>Tree Stratum</u>	<u>30'</u>				
1. <u>Salix lasiolepis</u>		<u>100</u>	<u>Yes</u>	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____					Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____					
Total Cover: <u>100</u>					
<u>Sapling/Shrub Stratum</u>	<u>5'</u>				
1. <u>Salix lasiolepis</u>		<u>5</u>	<u>No</u>	<u>OBL</u>	
2. _____					
3. _____					
4. _____					
5. _____					
Total Cover: <u>5</u>					
<u>Herb Stratum</u>	<u>5'</u>				
1. <u>Aristida draca</u>		<u>2</u>	<u>No</u>	<u>FACU</u>	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
Total Cover: _____					
<u>Woody Vine Stratum</u>	<u>N/A</u>				
1. _____					
2. _____					
Total Cover: <u>0</u>					
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____					Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>100</u> x 1 = <u>100</u> FACW species <u>2</u> x 2 = <u>4</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>102</u> (A) <u>104</u> (B) Prevalence Index = B/A = <u>1.0</u>
Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____					

Remarks: \_\_\_\_\_

**SOIL**

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	2.5Y/4/4	100	-	-	-	-	Sandy gravel	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):  
 Type: Hard Pan  
 Depth (inches): 8"

Hydric Soil Present? Yes  No

Remarks:

**HYDROLOGY**

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): 1  
 Water Table Present? Yes  No  Depth (inches): 8  
 Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 1

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: SR118 at SR234 and Doylon Rd City/County: Ventura Co. Sampling Date: 5/11/10  
 Applicant/Owner: Caltrans District 7 State: CA Sampling Point: 6  
 Investigator(s): Gary Medeiros Section, Township, Range: Sec B, T2N, R20W  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): California Lat: 34°15'56.60"N Long: 118°59'41.70"W Datum: NAD83  
 Soil Map Unit Name: - NWI classification: -

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Drainage course just north of railroad tracks. Drainage is very uniform in width.</u>	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix lasiolepis</u>	<u>100</u>	<u>Yes</u>	<u>OBL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5'</u> ) <u>100</u> = Total Cover				
1. <u>none</u>	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species <u>100/0</u> x 1 = <u>100/0</u> FACW species <u>0/60</u> x 2 = <u>0/120</u> FAC species <u>0/0</u> x 3 = <u>0/0</u> FACU species <u>0/0</u> x 4 = <u>0/0</u> UPL species <u>0/0</u> x 5 = <u>0/0</u> Column Totals: <u>100/60</u> (A) <u>100/120</u> (B) Prevalence Index = B/A = <u>1/2</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5'</u> ) <u>0</u> = Total Cover				
1. <u>Urtica dioica</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>30'</u> ) <u>60</u> = Total Cover				
1. <u>none</u>	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
_____ <u>0</u> = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks: <u>the drainage is well developed willow woodland.</u>				

**SOIL**

Sampling Point: 6

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	Clay 2/3 70		Clay 2	-	-	-	Muck Clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: *Hydrogen sulfide odor detected.*

**HYDROLOGY**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (2 or more required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches): 1

Water Table Present? Yes  No  Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): 2

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: *The drainage are entrained open water. Sampling was at the edge of the open water.*

**ATTACHMENT B**  
**SOIL SURVEY**

## ATTACHMENT B

### SOIL SURVEY

#### SR118 AT SR34 AND DONLON ROAD INTERSECTION IMPROVEMENT PROJECT

The soils classifications identified in Exhibit 3A and 3B and described below were obtained from the SSURGO for Ventura area, California, Fort Worth, Texas (USDA, NRCS).

#### Gullied Land

Gullied land is concave. The parent material is residuum weathered from igneous and sedimentary rock.

#### Metz Series

The Metz series is a sandy, mixed, thermic Typic Xerofluvent. It consists of very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. Metz soils are on floodplains and alluvial fans and have slopes of 0 to 15 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 59 degrees Fahrenheit (°F).

#### *Range in Characteristics:*

The mean annual soil temperature is 59 to 64 °F. The soil between the depths of 10 and 30 inches is usually dry all of the time from late April or May until November or early December and is usually moist in some or all parts the rest of the year. The textural control section (10 to 40 inches) averages loamy sand. Individual strata are sand, coarse sand, loamy sand, loamy fine sand, sandy loam, fine sandy loam, very fine sandy loam and loam plus minor thin silty lenses. Organic matter decreases irregularly with depth and on the average is less than 1 percent. The soil is neutral, slightly or moderately alkaline, although most pedons are moderately alkaline in most parts. Individual strata are noncalcareous or weakly to strongly calcareous. Gravel content ranges from 0 to 15 percent, although individual strata may reach 35 percent. A few mottles are present in some pedons but they seem to be relic from initial deposition and are associated with the finer textures.

The A and C horizons are 10YR 7/3, 6/1, 6/4, 5/2, 5/3; 2.5Y 6/2, 6/4, 5/2, and 5/4.

#### *Drainage and Permeability:*

Metz soils are somewhat excessively drained, have negligible to low runoff, and have moderately rapid permeability. Some areas subject to flooding are protected by dikes and dams.

#### Salinas Series

The Salinas series is a fine-loamy, mixed, superactive, thermic Pachic Haploxeroll. It consists of deep, well drained soils that formed in alluvium weathered from sandstone and shale. Salinas soils are on alluvial plains, fans, and terraces and have slopes of 0 to 9 percent. The mean annual precipitation is about 16 inches and the mean annual temperature is about 59 degrees Fahrenheit (°F).

*Range in Characteristics:*

The mean annual soil temperature is 60 degrees to 64 °F and the soil temperature usually is not below 47 °F at any time. The soil between depths of about 5 to 15 inches usually is dry all of the time from about May until late November or early December and usually is moist all the rest of the year. Depth to lime is about 22 to 36 inches. Most of the lime is disseminated, with a few fine to medium lime masses in the lower part. Some pedons have Cca horizons. The soils are neutral to moderately alkaline to a depth of about 22 inches and moderately alkaline below. The 10 to 40 inch control section averages loam, silt loam, clay loam or silty clay loam. It contains 18 to 30 percent clay and more than 15 percent fine sand or coarser.

The A horizon is very dark gray, dark gray or gray (10YR 3/1, 4/1, 5/1) with a chroma of less than 2 to a depth of 22 inches or more. In some pedons, lower A horizons grade to C horizons and are grayish brown (10YR and 2.5Y 5/2). Organic matter content is 1 to 4 percent to a depth of more than 20 inches and decreases regularly to less than 1 percent within 30 inches of the surface.

The C horizon is grayish brown, light brownish gray, pale brown, light yellowish brown or yellowish brown (10YR and 2.5Y 5/2, 6/2, 6/4). It is very fine sandy loam, fine sandy loam, loam, clay loam or silty clay loam, and usually is weakly stratified.

*Drainage and Permeability:*

Salinas soils are well drained, have slow to medium runoff, and have moderately slow permeability.

**Soper Series**

The Soper series is a fine-loamy, mixed, superactive, thermic Typic Argixeroll. It consists of moderately deep, well drained soils that formed in material weathered from conglomerate and sandstone. Soper soils are on hills and uplands and have slopes of 15 to 50 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 60 degrees Fahrenheit (°F).

*Range in Characteristics:*

Depth to a paralithic contact is 24 to 40 inches. The mean annual soil temperature is 60 to 65 °F at 20 inches depth and the soil temperature usually is not below 47 °F at any time. The soil between depths of about 6 and 16 inches is continuously dry in all parts from late April or May until late October or November and usually is moist in some part all the rest of the year.

The A horizon is grayish brown, dark grayish brown, or brown in 10YR hue. It is loam or less commonly sandy loam and is commonly gravelly or cobbly with 0 to 20 percent rock fragments by volume. The horizon usually has weak or moderate granular or subangular blocky structure and is slightly hard or hard. In some pedons it is massive in some part and slightly hard. The A horizon is neutral to medium acid. It contains 1 to 4 percent organic matter to depth of about 10 inches and the amount decreases regularly to less than 1 percent at a depth of about 15 inches.

The B2t horizon is brown, dark brown or light yellowish brown in 10YR or 7.5YR hue or reddish brown in 5YR hue. It is gravelly or cobbly clay loam or gravelly or cobbly sandy clay loam and has 25 to 35 percent clay. This horizon is slightly acid to mildly alkaline. Some pedons have horizons transitional to the B2t horizon and have either or both B1 or B3 horizons. Some pedons

have a C horizon above the paralithic contact that is gravelly or cobbly loam or gravelly or cobbly sandy loam.

*Drainage and Permeability:*

Soper soils are well drained, have rapid runoff, and have moderately slow permeability.

**Sorrento Series**

The Sorrento series is a fine-loamy, mixed, superactive, thermic Calcic Haploxeroll. It consists of very deep, well drained soils that formed in alluvium mostly from sedimentary rocks. Sorrento soils are on alluvial fans and stabilized floodplains and have slopes of 0 to 15 percent. The mean annual precipitation is about 16 inches and the mean annual temperature is about 61 degrees Fahrenheit (°F).

*Range in Characteristics:*

The mean annual soil temperature is 59 to 63 °F and the soil temperature is rarely if ever below 47 °F. The soil between depths of about 5 and 15 inches usually is dry all of the time from late April or May until November or early December and usually is moist in some or all parts the rest of the year. The 10 to 40 inch control section is loam, fine sandy loam, clay loam, sandy clay loam, or silty clay loam with 18 to 35 percent clay and more than 15 percent fine sand or coarser. Few pedons have as much as 15 percent rock fragments. The upper part of the profile is slightly acidic to moderately alkaline, and is noncalcareous to a depth of 20 to 40 inches. Effervescence is weak to violent in disseminated lime and secondary powder or mycelial lime is present.

The A horizon has 10YR or 2.5Y hue. It has weak to strong granular or subangular blocky structure. This horizon has 2 to 4 percent organic matter in the upper part which decreases regularly to less than 1 percent at depths of 12 to 20 inches.

The B and C horizons are 10YR 5/2, 5/3, 6/2, 6/4, 7/2, 7/4; 2.5Y 5/2, 5/3, 6/2, 6/4, 7/2; and 5Y 6/3. It is somewhat stratified, particularly in the lower part of some pedons but contrasting texture is not present above a depth of 40 inches.

*Drainage and Permeability:*

Sorrento soils are well drained, have negligible to medium runoff, and have moderate to moderately slow permeability depending upon dominant texture and amount of stratification in the lower part of the profile.

**Zamora Series**

The Zamora series is a fine-silty, mixed, superactive, thermic Mollic Haploxeralf. It is a member of the fine-silty, mixed, thermic family of Mollic Haploxeralfs. Typically, Zamora soils have grayish brown, slightly acid loam A horizons; brown silty clay loam, neutral Bt horizons; and yellowish brown C horizons.

*Range in Characteristics:*

The solum ranges in thickness from 35 to 46 inches. The mean annual soil temperature ranges from about 59 to 64 degrees Fahrenheit (°F). These soils are continually moist between 4 and 12 inches from some time in November until April or May and dry the remainder of the year.

The A horizon is dark grayish brown, grayish brown, dark brown or brown; hue is 10YR or 2.5Y. It is fine sandy loam, loam, silt loam or light silty clay loam. The surface layer is both hard or very hard and massive when dry. The A horizon is about 2 to 4 percent organic matter. Reaction ranges from slightly acid to neutral.

The B2t horizon is dark grayish brown or brown, hue is 10YR or 7.5YR, and chroma is 2 or 3. It is clay loam or silty clay loam that contains less than 15 percent coarser than very fine sand. The upper boundary is diffuse, gradual or clear and some pedons have a transitional A3 horizon or B1 horizon. It has about 6 to 10 percent more clay absolute than the A horizon, but averages slightly less than 35 percent total clay. It is either massive or has blocky structure and ranges from neutral to slightly alkaline.

The C horizon is brown, grayish brown, yellowish brown, pale brown, light yellowish brown or light olive brown. Hue is 10YR or 2.5Y, value of 5 or 6, and chroma of 2, 3 or 4. Texture is clay loam, silt loam, loam, sandy loam or gravelly loam. In some pedons the lower part of the C horizon is stratified. The C horizon ranges from neutral to moderately alkaline and some pedons contain segregated lime and others lack it.

*Drainage and Permeability:*

Zamora soils are well-drained, have slow to medium runoff, and have moderately slow permeability.

**ATTACHMENT C**  
**NATIONWIDE PERMIT**

## ATTACHMENT C

### NATIONWIDE PERMIT

#### SR-118 AT SR-34 AND DONLON ROAD INTERSECTION IMPROVEMENT PROJECT

14. Linear Transportation Projects.

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This Nationwide Permit also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This Nationwide Permit cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

**Note:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

**ATTACHMENT D**  
**APPROVED JURISDICTIONAL DETERMINATION FORM**

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): June 2010**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: CA County/parish/borough: Ventura City: N/A  
Center coordinates of site (lat/long in degree decimal format): Lat. 34° 15' 49.41" N, Long. 118° 59' 40.87" W.  
Universal Transverse Mercator: N/A

Name of nearest waterbody: Arroyo Las Posas Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean

Name of watershed or Hydrologic Unit Code (HUC): Santa Clara - Calleguas Hydrologic Unit. HUC 3.63

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date:

Field Determination. Date(s):

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: N/A.

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, Arid West Supplement**

Elevation of established OHWM (if known):

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain:

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

**1. TNW**

Identify TNW: .

Summarize rationale supporting determination: .

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": .

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: 1,760 square miles

Drainage area: Pick List

Average annual rainfall: 15.2 inches

Average annual snowfall: 0 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 1 tributaries before entering TNW.

Project waters are 13.0 river miles from TNW.

Project waters are 15 river miles from RPW.

Project waters are 13.0 aerial (straight) miles from TNW.

Project waters are 0.5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW<sup>5</sup>: Two unnamed drainages flow into East Arroyo Las Posas Creek, then to the Pacific Ocean.

Tributary stream order, if known: .

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is:

- Natural  
 Artificial (man-made). Explain:  
 Manipulated (man-altered). Explain: Area 1 drainage is natural. Area 2 drainage was created

during agricultural development.

Tributary properties with respect to top of bank (estimate):

Average width: 10-20 feet

Average depth: 20 feet

Average side slopes: **20 percent**.

Primary tributary substrate composition (check all that apply):

- |   |   |                                   |
|---|---|-----------------------------------|
| <input type="checkbox"/> Silts              | <input checked="" type="checkbox"/> Sands                     | <input type="checkbox"/> Concrete |
| <input checked="" type="checkbox"/> Cobbles | <input checked="" type="checkbox"/> Gravel                    | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock            | <input checked="" type="checkbox"/> Vegetation. Type/% cover: |                                   |
| <input type="checkbox"/> Other. Explain:    |   |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **5**

Describe flow regime: ephemeral.

Other information on duration and volume:

Surface flow is: **Discrete and confined**. Characteristics:

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input checked="" type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input type="checkbox"/> clear, natural line impressed on the bank                       | <input checked="" type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil                                | <input type="checkbox"/> destruction of terrestrial vegetation        |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                   |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent              | <input type="checkbox"/> sediment sorting                             |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away                 | <input checked="" type="checkbox"/> scour                             |
| <input checked="" type="checkbox"/> sediment deposition                                  | <input type="checkbox"/> multiple observed or predicted flow events   |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community             |
| <input type="checkbox"/> other (list):   |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain:                       |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by:              | <input type="checkbox"/> Mean High Water Mark indicated by:            |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list):                             |  |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Discolored by leaves.

Identify specific pollutants, if known:

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings: Least Bell's Vireo.
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size:        acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain:

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately (        ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)      Size (in acres)      Directly abuts? (Y/N)      Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
  - TNWs:      linear feet      width (ft), Or,      acres.
  - Wetlands adjacent to TNWs:      acres.
2. **RPWs that flow directly or indirectly into TNWs.**
  - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
  - Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

**3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

**Identify water body and summarize rationale supporting determination:** .

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters: .

Wetlands: acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .

Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource: .

Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

Lakes/ponds: acres.

Other non-wetland waters: acres. List type of aquatic resource: .

Wetlands: acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

Office concurs with data sheets/delineation report.

Office does not concur with data sheets/delineation report.

Data sheets prepared by the Corps:

Corps navigable waters' study:

U.S. Geological Survey Hydrologic Atlas:

USGS NHD data.

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: Moorpark.

USDA Natural Resources Conservation Service Soil Survey. Citation:

National wetlands inventory map(s). Cite name: Wetlands Mapper.

State/Local wetland inventory map(s):

FEMA/FIRM maps:

100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

Photographs:  Aerial (Name & Date):

or  Other (Name & Date):

Previous determination(s). File no. and date of response letter:

Applicable/supporting case law:

Applicable/supporting scientific literature:

Other information (please specify):

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**

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**Appendix J** Vegetation Map

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# Alternative 5-Vegetation Impact Areas

Nurseries and Landscape Vegetation along SR-118

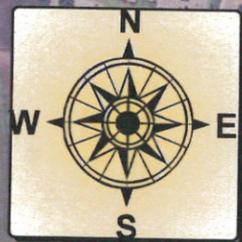
Mixed Riparian Habitat along Alt.5

Landscape Vegetation on a private property

Non-riparian Native and landscaped vegetation

Nursery

- PostMile Tenth
- Alt 5\_Non- Riparian Vegetation along the railroad
- Alt 5\_Riparian Vegetation to be impacted
- Alt 5\_Nurseries and Landscaped Vegetation-SR118

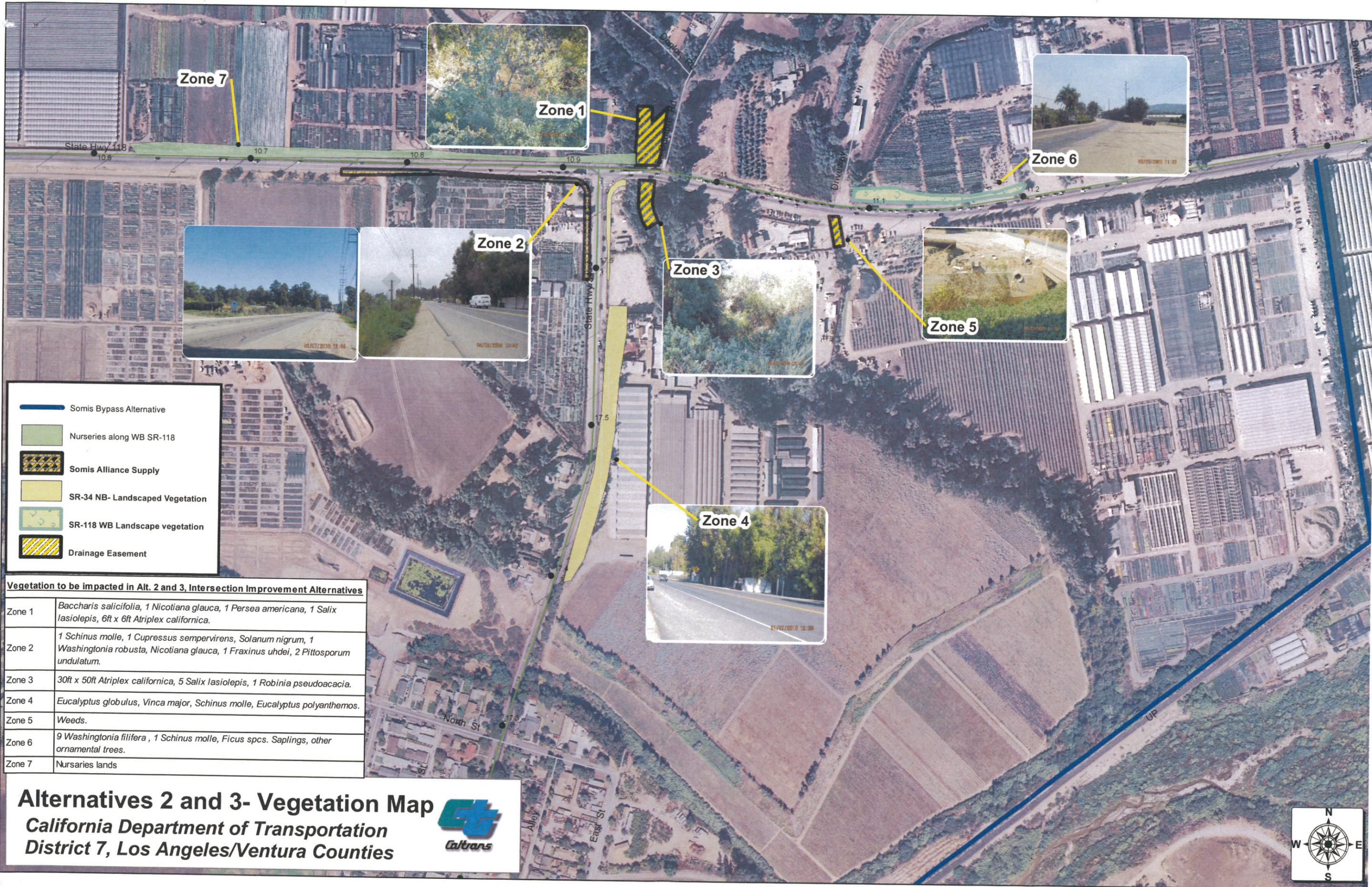


Map created by: Nayla & Robert.

## SR-118/34

California Department of Transportation  
District 7, Los Angeles/Ventura Counties





-  Somis Bypass Alternative
-  Nurseries along WB SR-118
-  Somis Alliance Supply
-  SR-34 NB- Landscaped Vegetation
-  SR-118 WB Landscape vegetation
-  Drainage Easement

**Vegetation to be impacted in Alt. 2 and 3, Intersection Improvement Alternatives**

Zone 1	<i>Baccharis salicifolia</i> , 1 <i>Nicotiana glauca</i> , 1 <i>Persea americana</i> , 1 <i>Salix lasiolepis</i> , 6ft x 6ft <i>Atriplex californica</i> .
Zone 2	1 <i>Schinus molle</i> , 1 <i>Cupressus sempervirens</i> , <i>Solanum nigrum</i> , 1 <i>Washingtonia robusta</i> , <i>Nicotiana glauca</i> , 1 <i>Fraxinus uhdei</i> , 2 <i>Pittosporum undulatum</i> .
Zone 3	30ft x 50ft <i>Atriplex californica</i> , 5 <i>Salix lasiolepis</i> , 1 <i>Robinia pseudoacacia</i> .
Zone 4	<i>Eucalyptus globulus</i> , <i>Vinca major</i> , <i>Schinus molle</i> , <i>Eucalyptus polyanthemus</i> .
Zone 5	Weeds.
Zone 6	9 <i>Washingtonia filifera</i> , 1 <i>Schinus molle</i> , <i>Ficus</i> spcs. Saplings, other ornamental trees.
Zone 7	Nursaries lands

**Alternatives 2 and 3- Vegetation Map**  
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