

Interstate 680 Northbound Pavement Rehabilitation Project

ALAMEDA COUNTY, CALIFORNIA
CALTRANS, DISTRICT 4
INTERSTATE 680 – ALA PM 0.0-4.0
EA 3G600; Project ID 04-1200-0139

Initial Study with Proposed Mitigated Negative Declaration

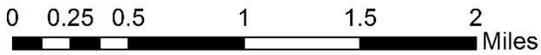
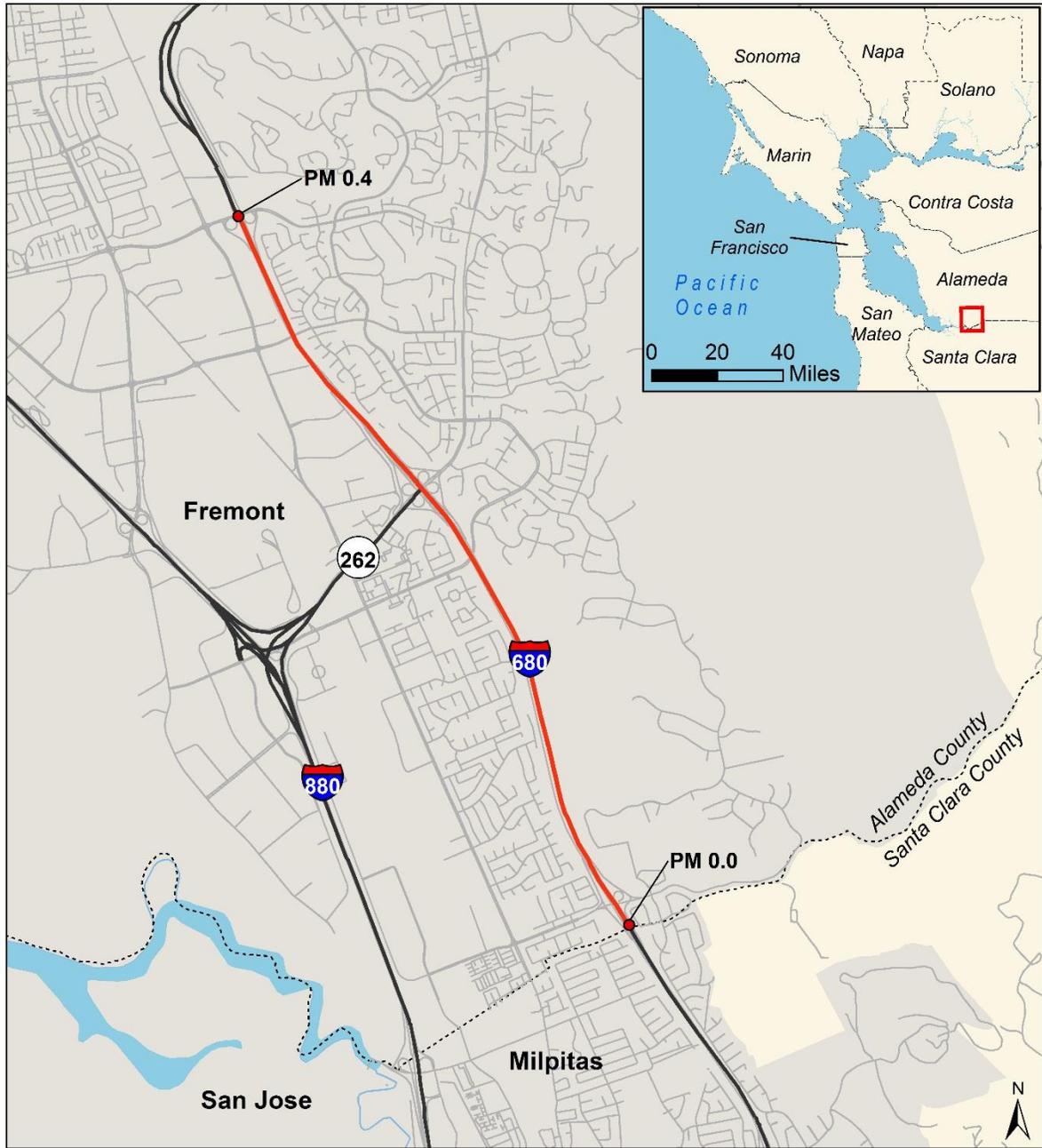


**Prepared by the
California Department of Transportation**

November 2015



Interstate 680 Northbound Pavement Rehabilitation Project City of Fremont, California



- | | | | |
|--|------------|-------------------|---------|
| ● Project Post Miles (PM) | — Highways | ⋯ County Boundary | ■ Urban |
| — Project Location | — Streets | ■ Water | |

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS), which examines the potential environmental impacts of the proposed Interstate 680 Northbound Pavement Rehabilitation Project in Alameda County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of each proposed activity, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of this document and related technical studies are available for review at:
 - Caltrans District 4 Office, 111 Grand Ave, Oakland, CA 94612
 - Fremont Library, 2400 Stevenson Boulevard, Fremont, CA 94538
 - Irvington Library, 41825 Greenpark Drive, Fremont, CA 94538

You can also download or view the report online at www.dot.ca.gov/dist4/envdocs.htm

- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline.
- Send your comments via post mail to:
Environmental Branch Chief, Attn: Jamie Le Dent
Department of Transportation, Environmental Planning
111 Grand Ave, MS 8-B, Oakland, CA 94612
- Send comments via email to: Ala680nbRehab@dot.ca.gov
- If you would like to request that a public hearing be held for this project please submit a request via post mail or email to the above addresses.
- Be sure to send comments or requests by the deadline: December 21, 2015.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. Caltrans may design and construct all or part of the project if the project is given environmental approval and funding is obtained.

INITIAL STUDY WITH MITIGATED NEGATIVE DECLARATION

04 – ALA – 680	ALA 680 – 0.0/4.0	EA 3G600
Dist.-Co.-Rte.	P.M/P.M.	E.A.

Project Title:	Interstate 680 Northbound Pavement Rehabilitation Project
Lead agency name and address:	California Department of Transportation 111 Grand Ave., Oakland, CA 94612
Contact person and phone number:	Ron Kiaania, Project Manager (510) 286-4193
Project Location:	Fremont, Alameda County California
General plan description:	Transportation
Zoning:	Transportation
Other public agencies whose approval is required (e.g., environmental permits); CEQA Responsible Agencies are denoted with a *:	<ul style="list-style-type: none"> • Biological Opinion from the U.S. Fish and Wildlife Service • Lake and Streambed Alteration Agreement from California Department of Fish and Wildlife* • Clean Water Act 404 Permit from the U.S. Army Corps of Engineers • Clean Water Act 401 Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board* • California Transportation Commission* • Incidental Take Permit from the California Department of Fish and Wildlife*

Additional copies of this document, as well as the technical studies this document relies on, are available for review at the District Office, 111 Grand Ave., Oakland, CA 94612.

For 

Stefan Galvez-Abadia
Chief, Office of Environmental Analysis
District 4
California Department of Transportation

11/12/15
Date

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to California Department of Transportation, Attn: Jamie Le Dent, Environmental Planning, 111 Grand Ave, MS-8B, Oakland, CA 94612; or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

Project Information

Setting

The California Department of Transportation (Caltrans) proposes to rehabilitate the freeway mainline and on/off-ramps on the northbound segment of Interstate 680 (I-680) between Scott Creek Road (PM 0.0) and Auto Mall Parkway (PM 4.0) in the City of Fremont. Northbound I-680 consists of three mixed flows lanes that are 12 feet wide each. The northbound and southbound sides of the freeway within the project limits are separated by a double thrie beam barrier. The northbound shoulder between Mission Boulevard and Auto Mall Parkway is 10 feet wide but only 5 feet of it is currently paved. All other shoulders within the project limits are 10 feet wide and completely paved. The portion of I-680 within the project limits is a full access-controlled freeway with residential and commercial land uses on both sides of the freeway.

Project Goal

Caltrans proposes to rehabilitate the freeway mainline and on/off-ramps between Scott Creek Road and Auto Mall Parkway by resurfacing the existing flexible and rigid pavement, and upgrading additional features within the project limits to meet current standards. These features would include the installation of rumble strips, replacement or installation of new guardrail, concrete barriers, crash cushions, Hot Mix Asphalt (HMA) dikes, concrete curbs, sidewalks, and pedestrian curb ramps. Additional rehabilitation activities would include the replacement or installation of drainage facilities, overhead signs, roadside signs, Traffic Monitoring Stations (TMSs) lighting, and replacement of existing concrete approach slabs at several bridge locations.

The purpose of the proposed project is to preserve and extend the roadway service life. The pavement condition survey (PCS) for this section of the freeway has an overall Pavement Management System (PMS) priority number 5, which characterizes the pavement as having minor to moderate distress and poor ride quality.

Project Description

Pavement Resurfacing

The proposed project would resurface the existing flexible pavement between State Route 262 (Mission Boulevard) and Scott Creek Road from Edge of Pavement to Edge of Pavement (EP) using the cold-plane method. This process consists of an Asphalt Concrete (AC) grinding machine with a conveyor belt that would grind the existing pavement and a roller to spread out the newly poured AC. The existing roadway section from EP to EP in this section would be removed up to a depth of 0.25 feet and replaced with a new composite Hot Mix Asphalt (HMA) layer ranging between 0.6-1 feet deep. Existing potholes and severely deteriorated asphalt would be removed as part of the pavement resurfacing operation. Rumble strips would be installed on the outer edges of both the inside lane and outside lanes by using a hot roller method to press them into the AC.

The proposed project would resurface the existing rigid pavement between Mission Boulevard and Auto Mall Parkway using the crack, seat, and overlay method. This method would require a backhoe with a hammer attached to it to crack the existing pavement in preparation for the new overlay. Deteriorated Portland Cement Concrete (PCC) slabs would be removed by saw-cutting the pavement to a depth of 1.5 feet. A crack and seat machine would pass through, dropping its hammer on the existing pavement slabs where the new pavement is intended to be placed. Rapid Set Concrete would be used to replace the existing pavement. All pavement grindings and broken concrete material would be hauled off-site to the appropriate disposal facility.

Gore pavement would be replaced between the ramps and mainline and would involve one foot of excavation for the new pavement. In addition to this, the existing concrete approach slabs at bridge approaches would also be replaced as part of this project.

Traffic Monitoring Stations

The existing Traffic Monitoring Stations (TMSs) within the project limits would be replaced as part of the project. A TMS is a count loop device that is installed in the pavement that detect vehicles passing over the roadway above. The inductive loop detectors within the existing traveled lanes would be replaced as part of preserving the existing TMSs. The loop detectors would be placed within the paved surfaces to a depth of no more than two inches. There are nine locations along the mainline of the freeway within the project limits where loop detectors would be replaced.

Traffic Lighting

New traffic lighting would be installed between Mission Boulevard and Auto Mall Parkway. Approximately 50 new lights would be installed along the outside portion of northbound I-680 and would be spaced approximately 180 feet apart. The lights would be installed on piles five feet deep and would have a 2.5 feet by 2.5 feet foundation. Approximately 12,800 linear feet of trenching for new electrical conduits would be needed for the new traffic lighting. The new electrical conduit would be installed within the existing paved shoulder in a trench that would be 3 feet deep and 1 foot wide. Approximately 72 pull boxes would be needed for the new electrical conduits. The new pull boxes would be used to pull cable through the conduit. The proposed pull boxes would have a maximum depth of 3 feet and would have a footprint of two feet by three feet. The new pull boxes and trench would be installed within the existing shoulder of the freeway using a backhoe. New electrical lines that are intended to cross the freeway would be installed using jacking pits for a directional bore. New electrical lines would cross the freeway in approximately four locations. Installing these new lines would require digging jacking pits to drop the directional bore into. These four jacking pits would be approximately six feet deep and six feet wide each for the directional bore.

Asphalt-Concrete Dikes

Existing Asphalt-Concrete (AC) dikes would be replaced within the project limits to meet current standards. AC dike replacement work would involve removing the existing AC pavement sections to a depth of no more than 0.3 feet. Approximately 20,850 linear feet of AC dikes would be replaced.

Guardrails

Existing Metal Beam Guardrails (MBGRs) within the project limits would be replaced with the new standard Midwest Guardrail System (MGS). An auger with a six inch drill would be used to drill new holes for the wooden posts to a maximum depth of seven feet. A thin layer of vegetation control (minor concrete) would be installed underneath the new MGS to reduce the need for manual weed control. The new vegetation control would be three inches thick and would be about five feet wide.

Concrete Barriers

New concrete barriers would be constructed between loop ramps and diagonal ramps. Due to the different elevation of the ramps on either side, a concrete barrier slab would be needed to add stability. The depth of the concrete barrier slab would be three feet deep. Crash cushions would be attached to the ends of the new barriers.

Overhead Signs

Seven existing overhead signs within the project limits would be replaced. The old sign would be removed from the existing pile foundation and the pile would be left in place. The new over sign would be installed on a new cast-in-drilled-hole (CIDH) pile that would be six feet long. To install the new overhead sign, an auger would be used to drill to an approximate depth of 25 feet for the new piles. A rebar cage would then be dropped into the newly drilled pile, concrete would be poured in, and a sign structure would be erected. The sign panel would be placed last on top of the sign structure.

Pedestrian Facilities

American Disabilities Act (ADA) curb ramps and sidewalks would be replaced or installed to meet current standards.

Drainage Facilities

The newly increased pavement thickness would require existing drainage inlets to be adjusted to match the new finished grade. Installation and/or replacement of the guardrails, concrete barriers, crash cushions, Hot Mix Asphalt (HMA) dikes, and overhead signs would also require modification of existing drainage inlet structures and pipes. Existing drainage facilities that are damaged, deteriorated, or do not meet current standards would also be replaced. The depth of the buried pipes would be the diameter of the new pipe, plus a maximum cover of three feet.

The trench for the new pipe would be four feet wide (two feet wide on both sides of the pipe) plus the diameter of the pipe itself. The drainage facilities to be modified or upgraded within the project limits vary in diameter size and material such as Alternative Pipe Culvert (APC), Corrugated Steel Pipe (CSP), and Reinforced Concrete Pipe (RCP).

Final determination of pipe size would be determined during final design of the project. A backhoe would be used to dig the trenches for the new pipe structures. A temporary construction work area would be needed to for the installation of the new drainage facilities. All

work would occur within the existing State right-of-way (R/W). The temporary work area would be 24 feet wide (12 feet from the centerline of the pipe of on both sides) and 12 feet long from the end of the pipe.

Traffic Control

Construction work is anticipated to take place primarily at night and would take approximately 200 working days to complete. Lane closures on the mainline and ramp closures would be needed for traffic control during construction. Detours would be used to direct traffic to the next available interchange. Local and county roads would not be used for detours.

Staging

Construction equipment and staging would occur within the existing right-of-way (R/W). The southeast quadrant of the Auto Mall Parkway/Durham Road interchange and the east side of the Scott Creek Road diagonal loop ramp have been identified as potential staging area locations for the project.

Environmental Setting

The area adjacent to either side of the project is highly urbanized/landscaped as it passes through the City of Fremont. The habitats within the project limits are confined by the built environment on either side of the Caltrans R/W with little to no connectivity with non-urbanized environments. The existing habitats within the project area are disturbed grasslands with some freshwater marsh and creeks that flow through culverts under I-680. Most habitats are dominated by non-native plant species and some have been modified through landscaping.

Consistency with Existing Zoning Plans

The site of the proposed project runs northward through the southern half of the City of Fremont, CA and is completely within the city limits of Fremont and the county limits of Alameda County. The areas adjacent to the project are zoned for residential, commercial, industrial, and open space. The project complies with the stated goals, guidelines, and recommendations of both the county's plans and the city's plans.

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate the freeway mainline and on/off-ramps on northbound Interstate 680 (I-680) between Auto Mall Parkway and Scott Creek Road near the City of Fremont by resurfacing the existing pavement from edge of pavement to edge of pavement to preserve and extend the service life of the roadway. The project would also upgrade and replace various additional features including rumble strips, guardrails, concrete barriers and crash cushions, hot mix asphalt dikes, concrete curbs, pedestrian sidewalks and curb ramps, drainage systems, signs, traffic monitoring stations, lighting and signals, and some bridge approach slabs.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

Impacts to state and federally listed species will be reduced to a less than significant level based on habitat restoration efforts on- and off-site of the project for freshwater marsh and grasslands habitats. Caltrans will also implement a project specific Paleontological Mitigation Plan to reduce impacts to fossil resources to a less than significant level.

The proposed project would have no effect on Greenhouse gas emissions, land use/planning, population/housing, transportation/traffic, agriculture and forestry, hazards and hazardous materials, mineral resources, public services, air quality, geology/soils, recreation, and mandatory findings of significance.

In addition, the proposed project would have less than significant effects to aesthetics, utilities/service systems, hydrology/water quality, and noise.

With the following mitigation measures incorporated, the proposed project would have less than significant effects to biological resources and cultural resources:

Grassland and freshwater marsh habitat on- and off-site restoration for California red-legged frog, California tiger salamander, and Alameda whipsnake.

Paleontological Mitigation Plan for paleontological resources within the Irvington Gravels.

Melanie Brent
Deputy District Director
District 4
California Department of Transportation

Date

A. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 9 for additional information.

<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input checked="" type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input checked="" type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input checked="" type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

B. DETERMINATION

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required

Signature:	Date:
Printed Name: Melanie Brent	For:

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance. Please note that content-based changes to the text from the draft environmental document to the final environmental document will be noted with a line in the right hand margin when the document is finalized.

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

The design would be consistent with the visual quality of the highway corridor, and no scenic resources would be adversely affected by the proposed project. There would not be a substantial removal of vegetation. The additional lighting included in the proposed project will not increase the amount of nighttime lighting substantially above what is already present due to the dense residential, industrial, and commercial areas.

Avoidance or minimization measures have been identified and can lessen visual impacts of the project. The primary means of minimizing potential project impacts to visual resources involves replanting the State R/W within the project limits. All disturbed areas would be revegetated following construction. Any functional landscaping and irrigations systems that are damaged or removed would be replaced or repaired.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project. and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

No agricultural lands will be directly or indirectly affected by the project.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The project proposes to rehabilitate the existing paved roadway and will not increase, or otherwise change, the amount or type of traffic on the freeway. Therefore, the project will not affect air quality.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IV. BIOLOGICAL RESOURCES: Would the project

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The project site is in largely disturbed residential and industrial areas of the City of Fremont. Sensitive habitats that are within Caltrans' R/W of the project area are grassland, freshwater marsh, seasonal wetlands, and creek channels. Work on the existing drainage system has the potential to impact grassland and freshwater marsh areas and may impact creek habitat. Most of the work on the roadway will be restricted to the area immediately adjacent to the already paved surface of the active travel-way and shoulders. The area within the southeast quadrant of the Auto Mall Parkway/Durham Road Interchange and the east side of Scott Creek Road diagonal loop ramp has been identified as a suitable area for construction staging.

The vegetation within Caltrans' R/W is dominated by grassland with few wetland and creek areas. The remainder of the landscape is urbanized/landscaped with structures, lawns, landfill, and other maintained features with horticultural plantings.

The grassland habitat is mostly composed of non-native dominated species, with less than 10% relative cover being California Native grasses and forbs. A plant survey performed for this project found that this grassland group included the following species plant species: wild oats grasslands (*Avena [barbata, fatua]* Semi-Natural Herbaceous Stands), annual bromes grasslands (*Bromus [diandrus, hordeaceus]* – *Brachypodium distachyon* Semi-Natural Herbaceous Stands), upland mustards (*Brassica [nigra]* and Other Mustards Semi-Natural Herbaceous Stands), yellow star-thistle fields (*Centaurea [solstitialis, melitensis]* Semi-Natural Herbaceous Stands), poison hemlock or fennel patches (*Conium maculatum-Foeniculum vulgare* Semi-Natural Herbaceous Stands), and harding grass swards (*Phalaris aquatica* Semi-Natural Herbaceous Stands). There will be 1.85 acres of temporary habitat impact and 0.15 acres of permanent habitat impact for a total of 2 acres of total impact to grassland habitat.

The freshwater marsh habitat within the area is composed of narrowleaf cattail (*Typha angustifolia*), southern cattail (*T. domingensis*), and broadleaf cattail (*T. latifolia*). There will be 0.008 acres of temporary habitat impact and 0.0006 acres of permanent habitat impact for a total of 0.009 acres of total impact to freshwater marsh habitat.

A protocol-level rare plants survey was conducted according to the botanical survey guidelines of the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, and the California Native Plants Society (CNPS). For this project, rare plants include those that are included in CNPS' Inventory of Rare and Endangered Plants and/or are federally listed. There were no rare plants have been observed within the project area and they are not expected to occur.

A wetlands delineation investigation was conducted to determine where potentially jurisdictional waters of the US may occur within the project area, following the methods described in the Army Corps of Engineers' Wetlands Delineation Manual (USACE 1987) and supplemented with guidance as directed by the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). The investigation identified 0.155 acres of potential waters of the U.S. that occur within the project area and wetland features that total 0.084 acres.

The project area is known to support protected wildlife, including federally listed species, migratory birds, and state species, and special status species of concern. Federally listed threatened animal species that will or have the potential to be impacted by the project include the California red-legged frog (*Rana draytonii*, CRLF and also a state species of special concern), California tiger salamander (*Ambystoma californiense*, CTS and also a state threatened species), and Alameda whipsnake (*Masticophis lateralis eurxanthus*, AWS and also a state threatened species). The Western burrowing owl (*Athene cuniculara hypogea*, WBO), a state species of special concern, may also be affected by the project.

Impacts to Biological Resources

Impacts to biological resources associated with this project include: grassland and freshwater marshland vegetation removal, work on drainage features, grubbing of the project site, construction staging activities, construction-related noise, compaction, and potential sedimentation downstream. Caltrans does not anticipate this project will negatively affect areas outside the project footprint. The discussion below highlights the impacts to special-status animals, marshlands, and waters within the project area. It also highlights the avoidance and minimization measures (AMMs) that will be implemented to minimize impacts to special-status species and to protect the surrounding environment from project-related impacts. Additionally, the complete list of proposed AMMs can be found in Appendix E.

Special-status Animals within the Project Area

Special-status animal species given further consideration with this project include the CTS, CRLF, AWS, WBO, and migratory birds.

Pursuant to Section 7 of the Endangered Species Act, Caltrans will obtain a Biological Opinion from the U.S. Fish and Wildlife Service for CTS, CRLF, and AWS. Caltrans will obtain an Incidental Take Permit from the California Department of Fish and Wildlife for CTS and AWS.

There are five documented occurrences of CTS within the species' known 1.3 mile dispersal range of the project area. The most recent was in 2004. However, there is no designated critical habitat for CTS within the project area and there are no documented occurrences of the species within the project area. CTS requires both upland grass habitat and breeding ponds. There are no suitable breeding ponds in the project area. There are some areas of the grasslands within the project area that are suitable for upland habitat, primarily between South Mission Boulevard (State Route 262) and Scott Creek Road. This is considered marginal habitat due to the high levels of roadside disturbance. There are no dispersal corridors for CTS within the project area

due to the urbanization of the lands immediately adjacent to one, or both sides of I-680 in the project area. Habitat impacts are considered to have a minor potential to adversely impact the behavior patterns of some individuals of the species.

Pursuant to Section 7 of FESA, Caltrans concluded that this project may affect, and is likely to adversely affect, CTS. The proposed project will likely result in direct impacts on the CTS within the project area and may result in the harassment, harm, injury, or mortality of individuals during construction activities, including initial site preparation, during use of heavy equipment for excavation and backfill, during handling of stockpiles and store materials, and during construction of project elements. The potential for take of CTS will be reduced to the greatest extent practicable through the implementation of the AMMs listed in Appendix E. Proposed AMMS include biological monitors present during construction, worker environmental awareness training, pre-construction surveys, prevention of wildlife entrapment measures, wildlife exclusion fencing, proper materials storage, and prohibiting the use of monofilament plastic.

California red-legged frog has eight known occurrences within five miles of the project area, one of which is within a mile of the project. This occurrence was in Agua Caliente Creek, which runs under the project area as a covered culvert. Surveys for CRLF were conducted in 2012 as part of another project along an overlapping stretch of the project area. These surveys were conducted according to the most recent U.S. Fish and Wildlife Service survey protocol (USFWS 2005b). There were no instances of CRLF found during these surveys. They have the potential to occur in grassland, freshwater marsh, and creek channel habitats within the project area between South Mission Boulevard and Scott Creek Road. The paved surface of I-680 and the urbanized landscape surrounding the Caltrans R/W create landscape barriers that do not allow dispersal corridors for the CRLF within the project area. This also removes essential habitat elements for the species within the project area.

Pursuant to Section 7 of FESA, Caltrans concluded that this project may affect, is likely to adversely affect, the CRLF. The proposed project will likely result in direct and indirect impacts on the CRLF and its habitat within the project footprint and may result in the harm and harassment of individuals during construction activities. Habitat impacts will occur with the placement of fill material and other construction activities on grassland, which may provide potential upland and foraging habitat. Culvert replacement or installation will impact a total of 0.009 acre of freshwater marsh, which may provide potential foraging, aquatic dispersal, and/or resting sites. The potential for take of CRLF will be reduced to the greatest extent practicable through the implementation of the AMMs listed in Appendix E. Proposed AMMS include biological monitors present during construction, worker environmental awareness training, pre-construction surveys, prevention of wildlife entrapment measures, wildlife exclusion fencing, proper materials storage, and prohibiting the use of monofilament plastic.

There have been two recorded occurrences of AWS within 5 miles of the project area. While there is no scrub habitat within the project area, the grassland habitat may be used by individuals for dispersal into other areas that are more suitable. The grasslands in the project area are considered marginal quality due to the high disturbance caused from the roadway and surrounding urbanized areas. AWS are not expected to occur in areas with landscaping or other forms of urbanization. Due to the high levels of urban development and high traffic roadways in the surrounding areas, no dispersal corridors for AWS exist within the project area and there is no critical habitat for AWS in the project area. However, critical habitat for the species does exist 2.5 miles east of the project area. Due to the high mobility of the species, there is a potential for AWS to exist in the grasslands within the project area.

Pursuant to Section 7 of FESA, Caltrans concluded that this project may affect, is likely to adversely affect, the AWS. The proposed project will likely result in direct and indirect impacts on the AWS and its habitat within the project footprint and may result in the harm and harassment of individuals during construction activities. Habitat impacts will occur with the placement of fill material and other construction activities on grassland, which may provide potential upland,

foraging, and dispersal habitat. The potential for take of AWS will be reduced to the greatest extent practicable through the implementation of the AMMs listed in Appendix E. Proposed AMMS include biological monitors present during construction, worker environmental awareness training, pre-construction surveys, prevention of wildlife entrapment measures, wildlife exclusion fencing, proper materials storage, and prohibiting the use of monofilament plastic.

Western burrowing owl can be found in open, flat or sloped grasslands but require burrows for nesting and wintering. This species typically nests in the burrows created by burrowing mammals, such as California ground squirrels, but they will nest in open pipes, concrete rubble piles, and small dry culverts. There are 5 occurrences of WBO miles within 1 mile of the project area, all to the west of I-680 and just south of Auto Mall Parkway Interchange. The grassland habitat within the project area is generally too thick to be suitable habitat for burrowing owls, though there is a low potential for some individuals to occasionally forage within the area. Overall, WBO are not known to currently use the project area. However, if owls are discovered, Caltrans will contact the California Department of Fish and Wildlife for further guidance.

Direct impacts to Western burrowing owls are not anticipated as a result of this project. Preconstruction surveys can avoid the direct impacts of occupied burrows. WBO may be indirectly affected by noise, light, and visual disturbance. However, these effects are likely to be negligible considering the highly disturbed existing conditions of the surrounding urban area. Some of the habitat mitigation that Caltrans will be providing for CTS, CRLF, and AWS will also enhance suitable habitat that WBO has in common with these other species.

While the proposed project is likely to adversely affect the CTS, CRLF, AWS and could potentially affect the WBO, planned AMMs will minimize most of these potential adverse effects and a full list can be found in Appendix E. Through consultation with the U.S. Fish and Wildlife Service, Caltrans proposes the following mitigation for federally listed species in order to reduce potential adverse impacts to less than significant with mitigation through efforts such as onsite habitat restoration, off-site habitat restoration, and/or the purchase of species credits through a U.S. Fish and Wildlife Service and California Department of Fish and Wildlife approved mitigation bank. The exact amounts for each species can be found in Appendix E. The final mitigation actions may be subject to change during the consultation and permitting process.

The habitat present along the stretch of I-680 where the project occurs provides marginal quality habitat for nesting migratory birds. However, the non-paved surfaces of the area can be used by one or more bird species for nesting. The majority of migratory birds are protected by the Migratory Bird Treaty Act (MBTA). Several common bird species have been observed within the project area. Measures have been incorporated into this project to avoid the take of migratory birds and their nests (Appendix E). Temporary loss or disturbance of habitats that are used by nesting birds may temporarily displace nesting bird species. However, no mortality of migratory birds is anticipated with the implementation of proposed AMMS.

Wetlands and Waters

This proposed project may impact wetlands and waters under the jurisdiction of the U.S. Army Corps of Engineers and the San Francisco Bay Regional Water Quality Control Board. The anticipated impacts would be 0.008 acre of temporary and 0.006 acre of permanent impacts due to the proposed drainage work on a culvert that abuts a small wetland feature.

Caltrans will consult with the U.S. Army Corps of Engineers during the permitting process on how best to mitigate for wetland impacts. Onsite, offsite, or a combination of both options may be pursued. If offsite mitigation is required, Caltrans proposes to mitigate at a 1:1 ratio of mitigation credits at a U.S. Army Corps of Engineers-approved mitigation bank for any permanent impacts.

Invasive Species

Caltrans recognizes the potential for construction activities to result in the introduction of non-native species to a project area. Standard AMMs will be proposed to control the spread of invasive species.

Native Plant Species Protection

Under the requirements of the Native Plant Protection Act (NPPA), Caltrans is required to conserve endangered and rare native plants (California Fish and Game Code Sections 1900-1913). Caltrans has conducted a botanical survey and found no endangered and rare native plants in the project area. There are no effects to endangered or rare native plants expected from this project.

Avoidance and Minimization

Caltrans will restore all disturbed areas on site, including wetland areas around the culvert impacted by the drainage work. Upland grass areas impacted during the project will be reseeded with a native seed mix. Offsite restoration efforts will be explored during the permitting and design phase of this project but are not needed to avoid significant impacts to wetlands and waters of the U.S. or protected wildlife and plant species.

Avoidance and minimization measures that will be implemented during this project to reduce impacts to the local environment, include: worker environmental awareness training, the delineation of work areas with high-visibility fencing to prevent construction equipment encroachment into sensitive areas, minimizing night-time work, only removing the minimum amount of vegetation necessary to complete the project, water quality best management practices, etc.

Additional specific requirements for special-status species or habitat restoration will be addressed in permitting. All avoidance and minimization measures will be incorporated into the bid package and the construction contract.

This discussion highlights the AMMs, a complete list of proposed AMMs can be found in Appendix E.

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

No historic structures have been identified in the immediate vicinity of the project. The proposed project would require some ground disturbance activities, both on the surface and in the ground. Trenching would require shallow digging. However, the installation of overhead sign poles would require 25 foot deep holes for the pile foundations of the poles in a few locations.

There is one known archaeological site within the project's Area of Potential Effects established by a Caltrans Professionally Qualified Staff (PQS) Co-Principal Investigator. This site has been identified and the limits are well documented. Impacts to this site would be avoided by installing environmentally sensitive area (ESA) fencing around the circumference of this site and prohibiting access to the site during construction in accordance with an ESA Action Plan that will be prepared by a Caltrans PQS member. If cultural materials are discovered outside of this area during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a PQS can assess the nature and significance of the find.

A section of the project site also contains part of the Irvington Gravels formation which is known to contain North American land mammal fossils from the beginning of the Quaternary Period (~1.8 million years ago) to 240,000 years ago. Only the installation of overhead signs has the potential to affect the fossil bearing formation since other project features are in previously disturbed areas.

The Irvington Gravels are considered to be a unique paleontological resource. Impacts to the Gravels will be reduced to less than significant with mitigation through implantation of avoidance measures. A project-specific Paleontological Mitigation Plan will be prepared by a qualified paleontologist and a paleontologist will be present onsite during construction to educate construction workers on identification of fossil resources and monitor construction activities. If fossil resources are discovered during construction, all earth-moving activities within and around the immediate discovery area will be diverted until the paleontological monitor can assess the nature and significance of the find. See Appendix E for further information on Avoidance and Minimization Measures for paleontological resources.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project contains no components which would contribute to soil or slope instability. All slopes will be stabilized using standard Caltrans erosion-control BMPs.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS: Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. See http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/The_Department_Climate_Action_Program.pdf

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (s, s, s, 2-tetrafluoroethane), and HFC-152a (difluoroethane). In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles make up the largest source of GHG-emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change: "Greenhouse Gas Mitigation" and "Adaptation." "Greenhouse Gas Mitigation" is a term for reducing GHG emissions to reduce or "mitigate" the impacts of climate change. "Adaptation" refers to the effort of planning for and adapting to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)¹.

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing travel activity, 3) transitioning to lower GHG-emitting fuels, and 4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued cooperatively.²

¹ http://climatechange.transportation.org/ghg_mitigation/

² http://www.fhwa.dot.gov/environment/climate_change/mitigation/

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and proactive approach to dealing with GHG emissions and climate change.

Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions: Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

Executive Order (EO) S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."

Executive Order S-20-06 (October 18, 2006): This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.

Executive Order S-01-07 (January 18, 2007): This order set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Senate Bill 97 (SB 97) Chapter 185, 2007, Greenhouse Gas Emissions: This bill required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board (CARB) to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan for the achievement of the emissions target for their region.

Federal

Although climate change and GHG reduction are a concern at the federal level, currently no regulations or legislation have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level GHG analysis. ³ FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the state is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and EO 13514 - *Federal Leadership in Environmental, Energy and Economic Performance*.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.⁴

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, U.S. EPA and NHTSA issued a joint Final Rulemaking to extend the National Program for fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model year 2017-2025 standards this program is projected to save approximately four billion barrels of oil and two billion metric tons of GHG emissions.

The complementary U.S. EPA and NHTSA standards that make up the Heavy-Duty National Program apply to combination tractors (semi trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama’s 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

³ To date, no national standards have been established regarding mobile source GHGs, nor has U.S. EPA established any ambient standards, criteria or thresholds for GHGs resulting from mobile sources.

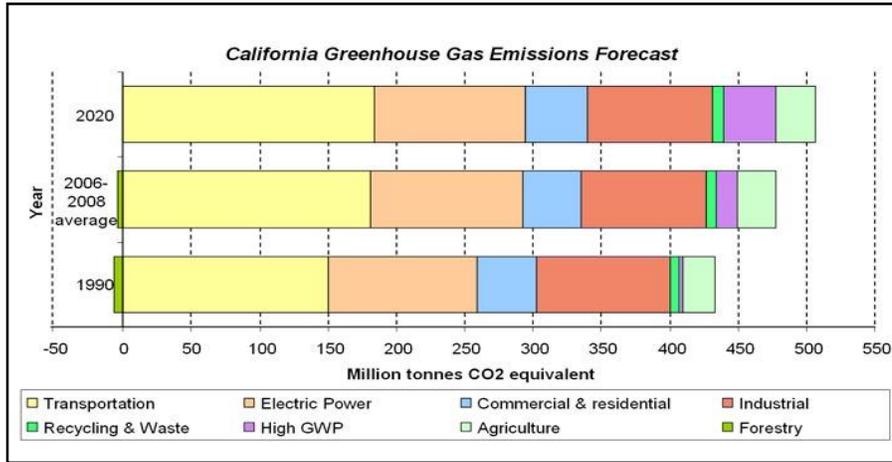
⁴ <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contributions of all other sources of GHG.⁵ In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 includes the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, the ARB released the GHG inventory for California (forecast last updated: October 28, 2010). The forecast is an estimate of the emissions expected to occur in 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008

Figure 1 California Greenhouse Gas Forecast



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Caltrans and its parent agency, the Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California’s GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006.⁶

The purpose of this project is to rehabilitate the pavement of the NB section of I-680 through repaving and will not result in additional lanes or a change in the pattern or types of traffic that

⁵ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the U.S. Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

⁶ Caltrans Climate Action Program is located at the following web address: http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/The_Department_Climate_Action_Program.pdf

use this roadway. By keeping the existing lane configuration and on/off-ramps that connect to the main line, the project will not result in an increase in car use or a change in truck traffic above the existing levels and thus will not result in an increase in CO₂ emissions due to this project. As discussed below, construction emissions will be unavoidable, but there will likely be long-term GHG benefits associated reduced maintenance and improved operation through smoother pavement surfaces.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

CEQA Conclusion

Although construction emissions are unavoidable and are expected to be minimal, the proposed project will not increase capacity and is not expected to result in additional operational CO₂ emissions. However, it is Caltrans’ determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a determination regarding significance of the project’s direct impact and its contribution on the cumulative scale to climate change. However, Caltrans is firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

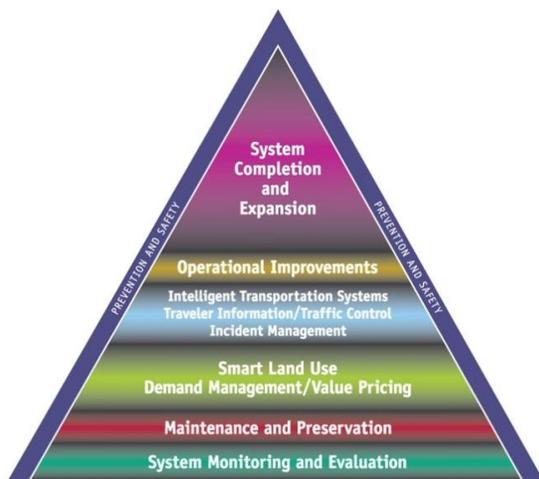


Figure 2: Mobility Pyramid

Caltrans continues to be involved on the Governor’s Climate Action Team as the ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from then-Governor Arnold Schwarzenegger’s Strategic Growth Plan for California. The Strategic Growth Plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in GHG emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 2: The Mobility Pyramid.

Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. Caltrans works closely with local jurisdictions on planning activities, but does not have local land use planning authority. Caltrans assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting ongoing research

efforts at universities, by supporting legislative efforts to increase fuel economy, and by participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and ARB.

Caltrans is also working towards enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill (SB) 375 (Steinberg 2008), SB 391(Liu 2009) requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill (AB) 32.

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas (GHG) emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future, statewide, integrated, multimodal transportation system.

The purpose of the CTP is to provide a common policy framework that will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. Through this policy framework, the CTP 2040 will identify the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the State's transportation needs.

Table 1 summarizes Caltrans and statewide efforts that Caltrans is implementing to reduce GHG emissions. More detailed information about each strategy is included in the [Climate Action Program at Caltrans](#) (December 2006).

Table 1 Climate Change/CO ₂ Reduction Strategies						
Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.045 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 0.36	4.2 3.6
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

Climate Change (June 22, 2012): is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013)⁷ provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

The following measures will also be included in the project to reduce the GHG emissions and potential climate change impacts from the project:

- 1) According to Caltrans' Standard Specifications, the contractor must comply with all of the Bay Area Air Quality Management District rules, ordinances, and regulations regarding air quality restrictions.

⁷ http://www.dot.ca.gov/hq/tpp/offices/orip/climate_change/projects_and_studies.shtml

2) Compliance with Title 13, California Code of Regulations §2449(d)(3)-Adopted by the Air Resources Board on June 15, 2008, this regulation would restrict idling of construction vehicles to no longer than 5 consecutive minutes. The Contractor must comply with this regulation in order to reduce harmful emissions from diesel-powered construction vehicles.

3) To the extent that it is feasible for the project, the use of reclaimed water may be used to reduce GHG emissions produced during construction. Currently 30 percent of the electricity used in California is used for the treatment and delivery of water. Use of reclaimed water helps conserve this energy, which reduces greenhouse gas emissions from electricity production.

Adaptation Strategies

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011⁸, outlining the federal government's progress in expanding and strengthening the Nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks .

Climate change adaptation must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California’s vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

In addition to addressing projected sea level rise, the California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, state and federal public and private entities to develop The California Climate Adaptation Strategy (Dec 2009)⁹, which summarizes the best-known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were

⁸ <http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation>

⁹ <http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF>

involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings.

The National Academy of Science was directed to prepare a Sea Level Rise Assessment Report¹⁰ to recommend how California should plan for future sea level rise. The report was released in June 2012 and included:

- Relative sea level rise projections for California, Oregon and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise.

In 2010, interim guidance was released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise. Subsequently, CO-CAT updated the Sea Level Rise guidance to include information presented in the National Academies Study.

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data

All projects that have filed a Notice of Preparation as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines. This project was programmed for construction after 2013. The proposed project is outside the coastal zone and direct impacts to transportation facilities due to projected sea level rise are not expected.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system, and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be needed to protect the transportation system from sea level rise.

¹⁰ *Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012) is available at http://www.nap.edu/catalog.php?record_id=13389.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The unpaved areas of the project that would be excavated would be have an investigation conducted during the design phase of the project to determine if there are any contaminants in the soil. Results of the site investigation would dictate the appropriate procedures to be included as part of the project's final design. Ground water sampling will also be conducted if it is determined that CIDH piles are necessary for the project design. Thermoplastic striping and excess construction materials would be removed and disposed of in compliance with standard Caltrans procedures.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

In order to accomplish the proposed scope, varying activities during construction are of particular water quality concern, including, but not limited to, the following: pavement grinding and removal; pavement placement; concrete operations; foundation drilling and excavation; utility trenching; material handling and storage; sediment control. In order to manage such activities, temporary Construction Site Best Management Practices (BMPs) will be deployed as part of the project Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be developed by the Contractor and approved by Caltrans, pursuant to Caltrans 2010 Standard Specifications Section 13-3. As the project proposes to upgrade and/or replace existing drainage systems, temporary creek diversion(s) may have to be deployed, to create a dry working environment for Contractor personnel and equipment. This will be assessed further, as the project progresses further in development.

In the post-construction condition, as the project scope proposes an increase of impervious surface of approximately 0.32 acre, an increased rate of run-off is expected compared to the

existing condition. The quantity of new impervious surface is insignificant when compared to the area of each respective tributary shed. As a 401 certification will be required, a condition for permanent stormwater treatment should be anticipated. This condition may be equivalent to the summation of the new and reworked (or redeveloped) impervious surfaces, also termed as “net new impervious surface”. At this time, the net new impervious surface is equivalent to the quantity of new impervious surface, or 0.32 acre. This will be refined as the project is further developed. Any proposed permanent stormwater treatment BMPs will be biofiltration/bioretenion-type measures, and will be sited as to avoid any sensitive resources.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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X. LAND USE AND PLANNING: Would the project:

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

This project complies with the stated goals, guidelines, and recommendations of the City of Fremont’s plans, including recommendations for view preservation, and the minimization of visual degradation of natural landforms.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XI. MINERAL RESOURCES: Would the project:

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

There are no documented mineral resources within the project area. Therefore, the project would not have any impact to mineral resources.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XII. NOISE: Would the project result in:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The project would not introduce permanent new noise impacts or increase ambient noise levels. Construction noise would be temporary and would be within acceptable levels for construction activity. There are nearby residential areas on the east side of the project area. Construction activities will be done at night with special provisions to avoid and minimize affects from construction noise generated during this time. Contraction activities that may cause an increase in the ambient noise level of the surrounding area are: construction vehicles traveling on- and off-site, operation of the crack and seat machine, pavement grinding, drilling for pile foundations, and boring holes beneath the freeway.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XIII. POPULATION AND HOUSING: Would the project:

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

All project construction activities would be conducted within the State right-of-way (R/W). The proposed project would not consist of any freeway expansion resulting in increased capacity. As such, no displacements would occur.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XIV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

To maintain the flow of traffic during construction, Caltrans will prepare a Traffic Management Plan (TMP) that would ensure accessibility through the project area for vehicles associated with essential services.

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

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

The project does not include any recreational areas, nor will it limit the access to any recreational areas.

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

Interstate 680 (I-680) is a fully controlled-access freeway, thus there are no existing pedestrian or bicycling facilities on this section of I-680. However, there are pedestrian facilities on some of the on- and off-ramps within the project limits that will receive treatment. The project would upgrade existing pedestrian curb ramps, sidewalks, and pedestrian signals at on/off-ramp locations within the project limits. These upgrades would enhance pedestrian access and safety within the project limits where appropriate. The new curb ramps and sidewalks would be constructed to meet current American Disabilities Act (ADA) standards. New pedestrian signals would also be installed as part of the pedestrian facilities enhancements. Therefore, the project would enhance pedestrian access and performance rather than conflict with any bicycle or pedestrian policies.

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

The project proposes alterations and upgrades to existing drainage facilities and will add 0.32 acre of additional impervious area. Additional treatment for increased runoff from this new impervious area would be provided by biofiltration/bioretenion-type measures, which are a component of this project that will be designed in the next phase of project development. The total volume of additional runoff flowing away from the project area would not cause increases that would result in impacts to the connecting drainage systems, and improvements to local drainage should reduce local flooding issues.

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Caltrans' application of best management practices; the re-establishment of ditches and vegetation in kind, incorporation of minimization measures into project construction, and habitat restoration on- and off-site would ensure that there would be no residual impacts from this project that can contribute to long term cumulative impacts.

Appendix A: References

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- U.S. Fish and Wildlife Service. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog. August 2005b
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Appendix B: Draft Notice of Intent to Adopt a Mitigated Negative Declaration

This will be provided in the final version of the document.

Appendix C: List of Preparers

Amacher, Andrew	Caltrans District 04 Office of Biological Studies and Permits
Bright, Douglas	Caltrans District 4 Office of Cultural Studies
Boyer, Ray	Caltrans District 4 Office of Environmental Engineering
Darko, Emily	Caltrans District 4 Office of Cultural Studies
Gaffney, Matthew	Caltrans District 4 Office of Geotechnical Design
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Wellen, Jonathan	Caltrans District 4 Office of Environmental Engineering
Wilson, Christopher	Caltrans District 4 Office of Environmental Engineering

Appendix D: Project Plans

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

REVISOR: A. Phan
 DATE: 9-24-15

DESIGNER: DAVID CHAN
 CHECKER: ANDREW PHAN

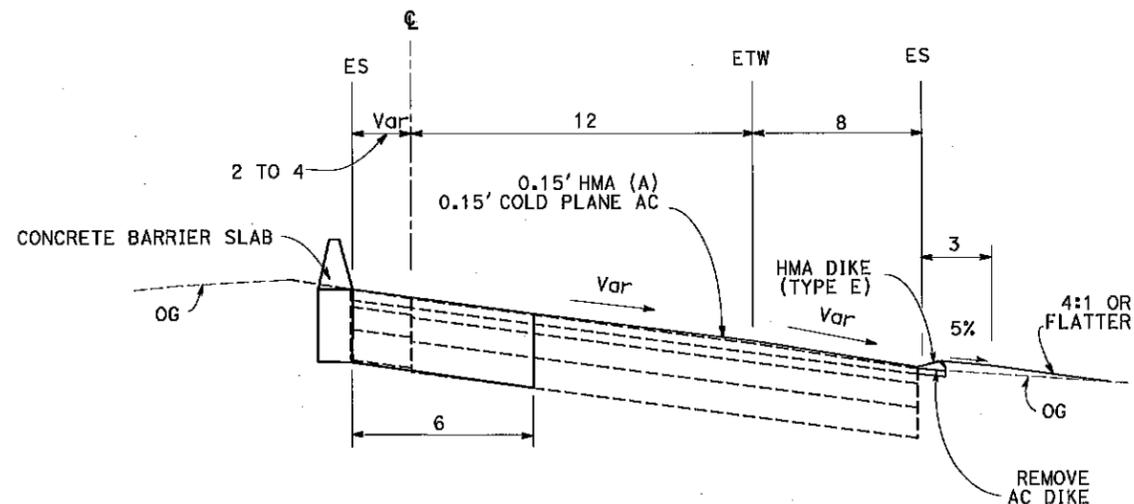
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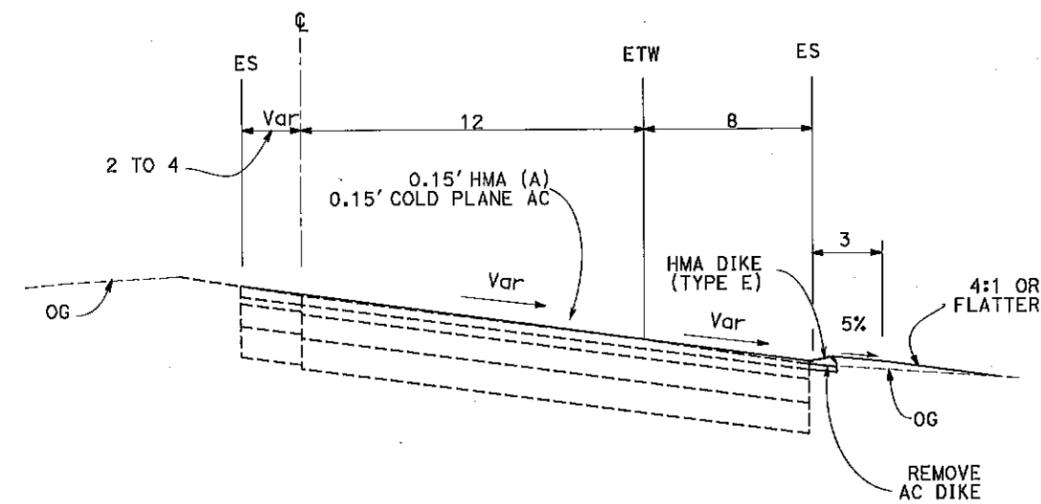
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	680	MO.0/M4.0		

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SCOTT CREEK RD. RAMP WITH CONCRETE BARRIER SLAB



SCOTT CREEK RD. RAMP

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TYPICAL CROSS SECTIONS
 NO SCALE
RAMPS X-R

FOR NOTES, ABBREVIATIONS &/OR LEGEND, SEE SHEET X-1

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Caltrans
 DESIGN

REVISOR: A. Phan
 DATE: 9-24-15

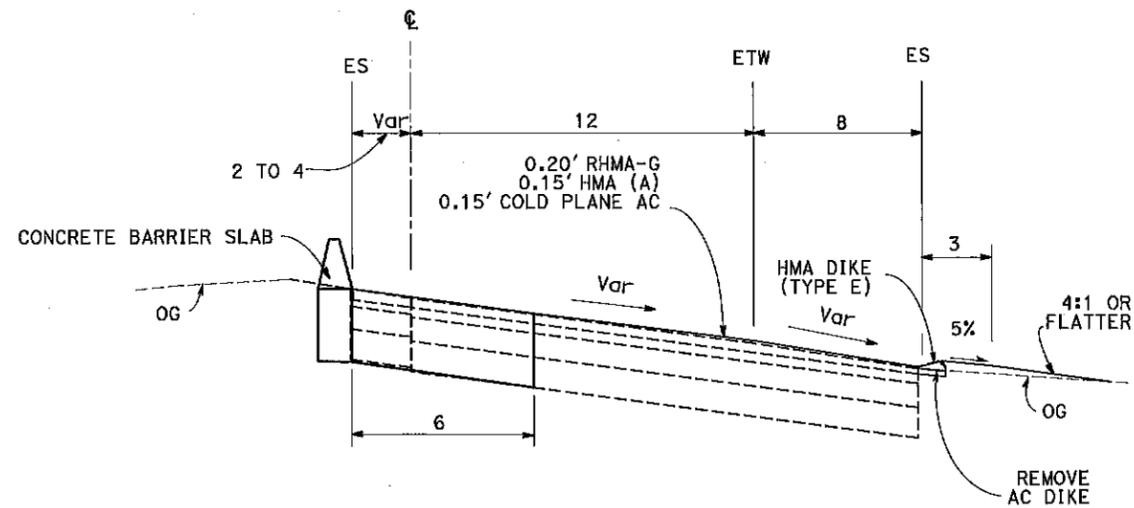
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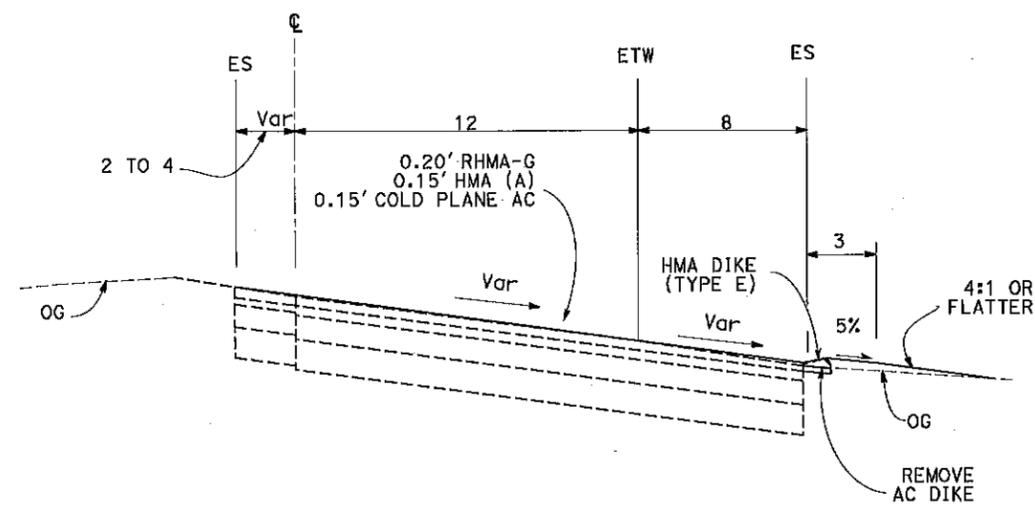
FUNCTIONAL SUPERVISOR: [Blank]

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MISSION BLVD / SR262
 AUTOMALL PARKWAY RAMP

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TYPICAL CROSS SECTIONS

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RAMPS X-R

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L-4

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L-8

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L-09

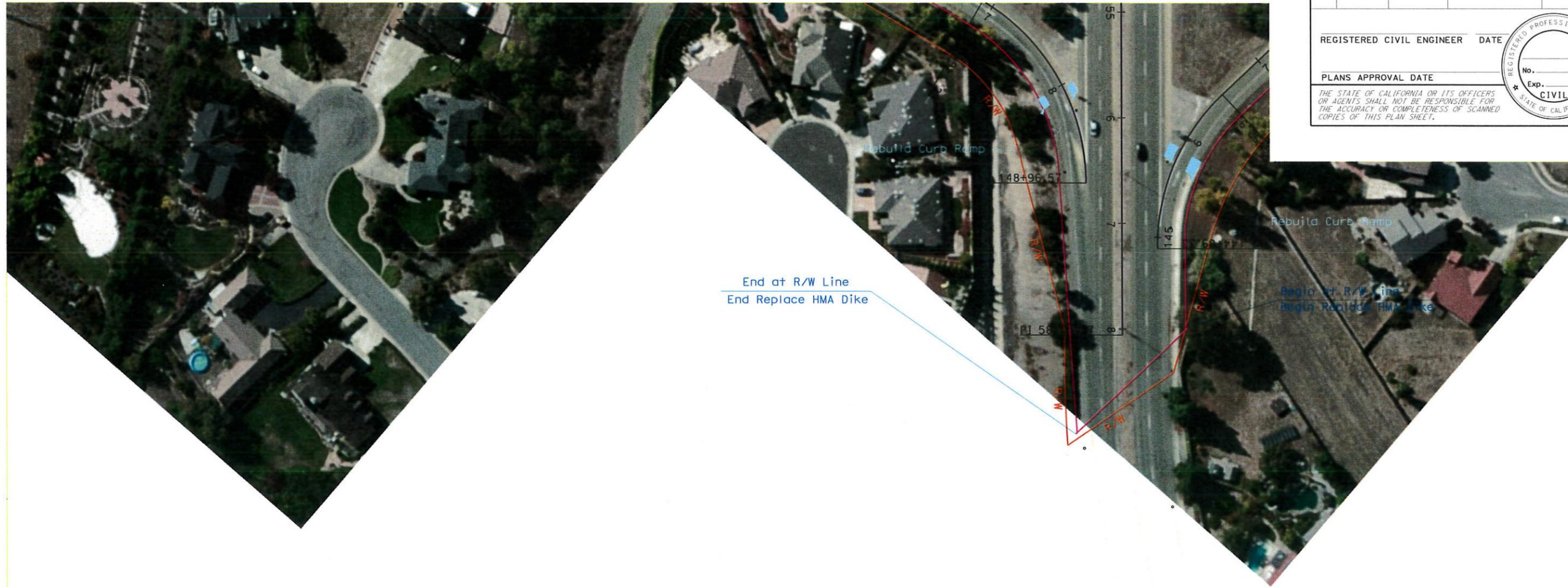
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DATE PLOTTED => 29-OCT-2015
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L-09A

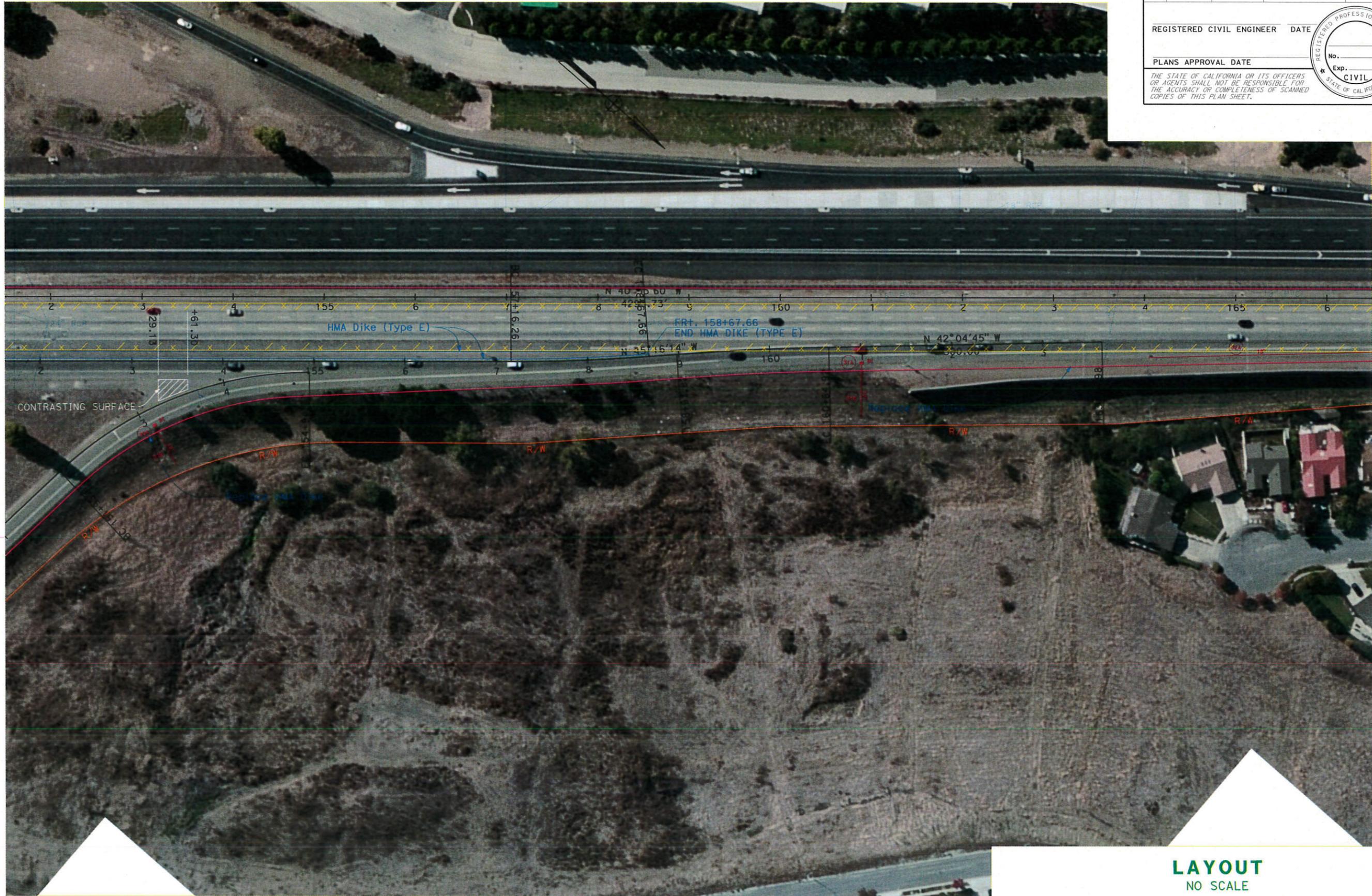
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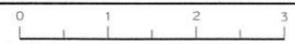
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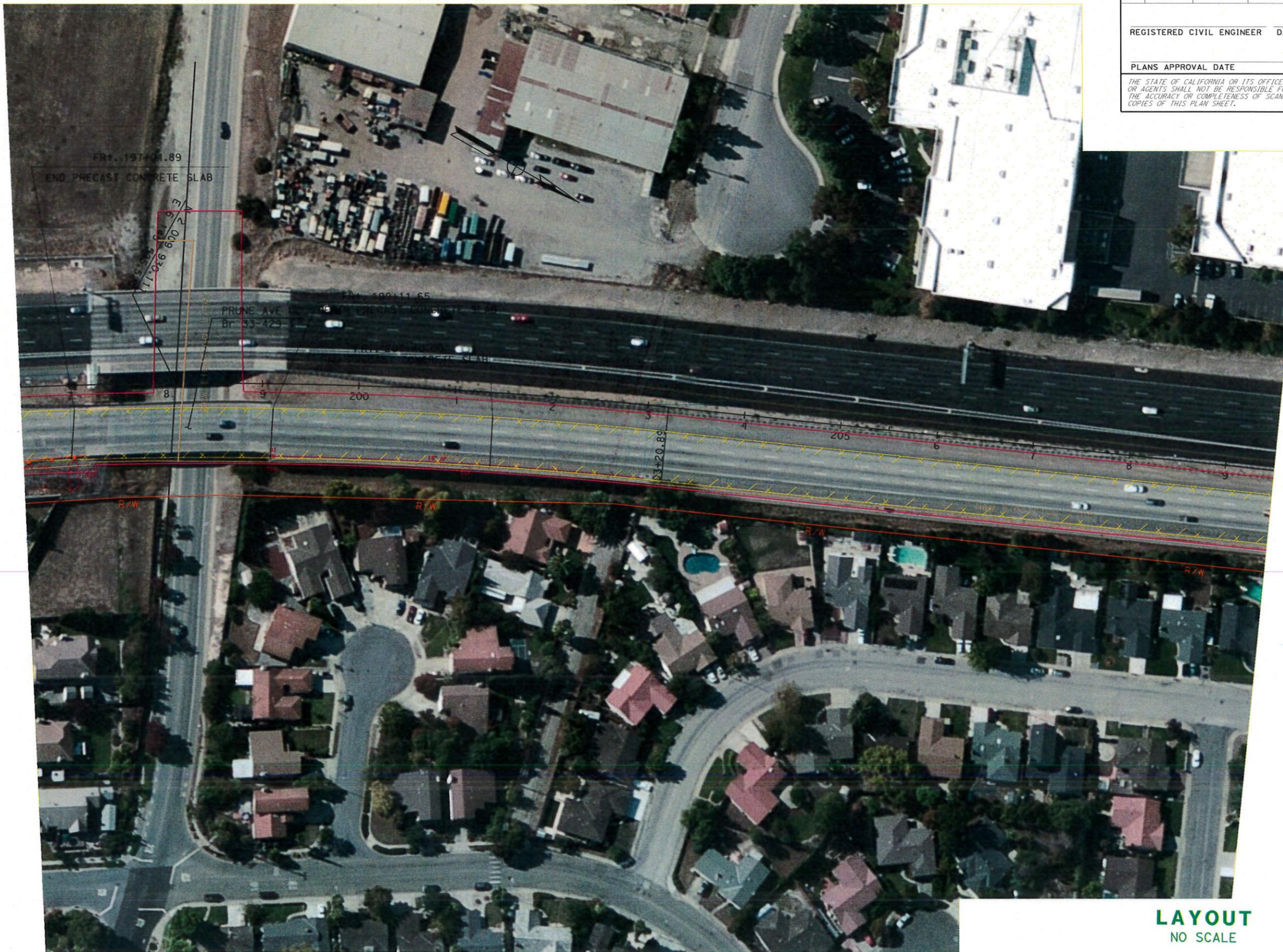


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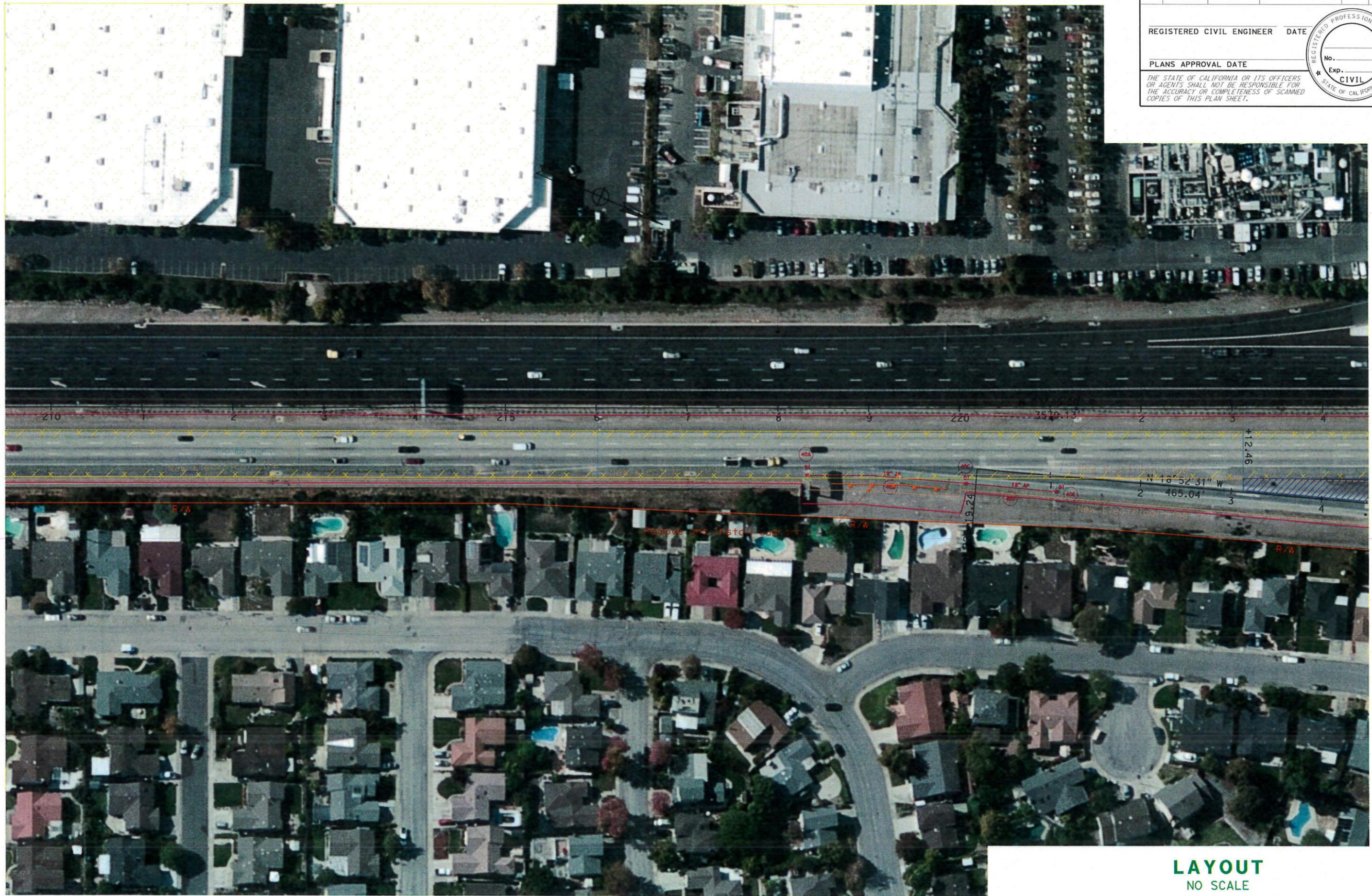
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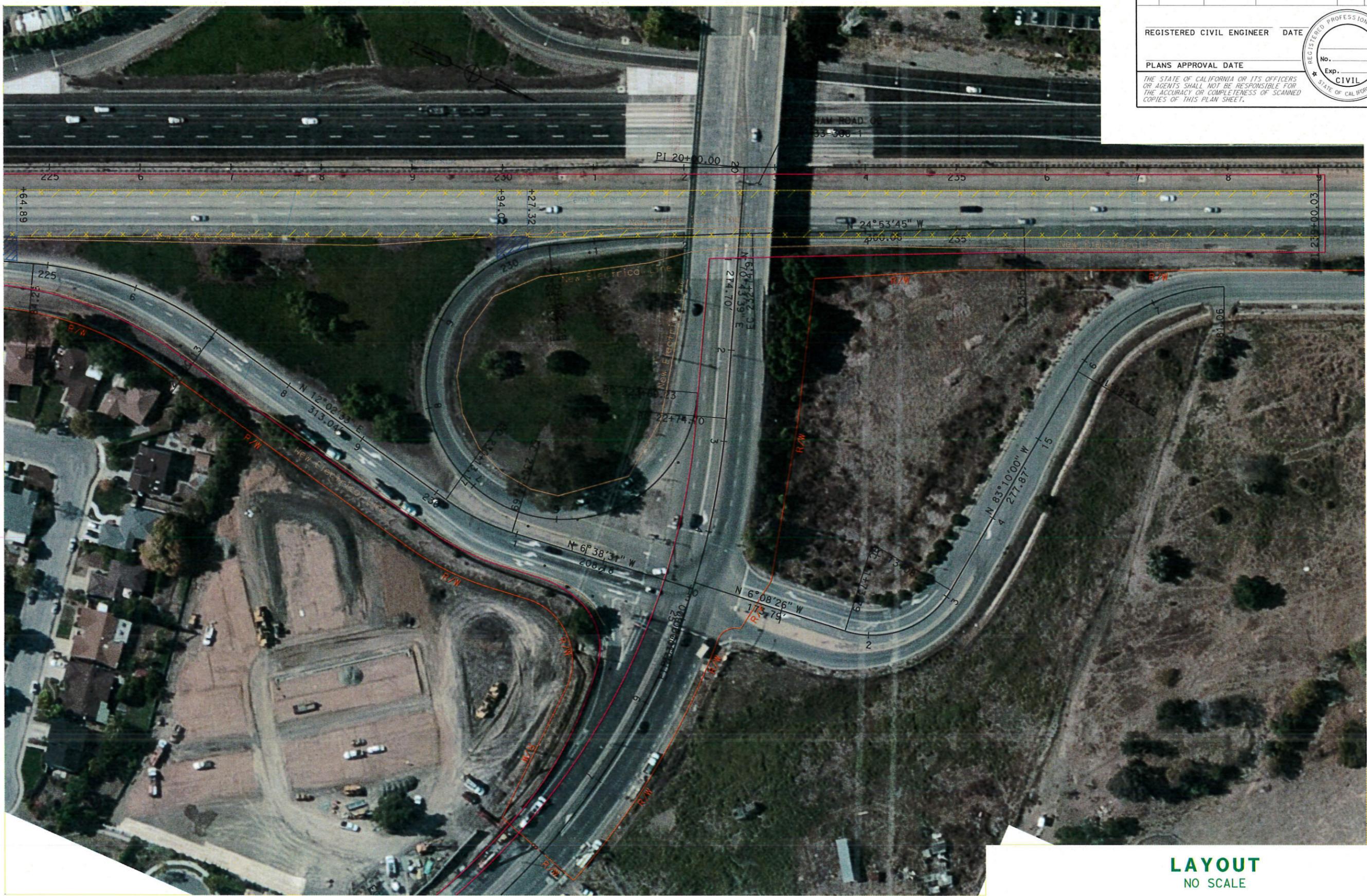
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

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L-15

Appendix E: Avoidance and Minimization Measures

Caltrans has incorporated several avoidance and minimization measures into the proposed project to avoid and minimize the impacts of this project on special-status species, migratory birds, and protected resources that occur in the project area. Special-status species known to occur or with a potential to occur in the project area include the California tiger salamander, California red-legged frog, Alameda whipsnake, burrowing owl, and migratory birds. Measures taken to minimize the likelihood of take of federally listed species have been identified through consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the federal Endangered Species Act. Proposed avoidance measures include conducting construction activities during specific work windows to avoid the time of year when protected species is most active, worker education awareness training, prohibiting the use of monofilament netting, prevention methods for wildlife entrapment, use of wildlife exclusion fencing, proper materials storage, and species surveys of the project area ahead of construction.

Caltrans has also developed other measures to avoid and mitigate impacts to species of special concern as part of the proposed project. The principal measures listed below are not all inclusive and not an iterative list. For example, the final Biological Assessment contains several, very specific measures that will ultimately be incorporated into the contractor's bid package but are not listed here. The list below is categorized by species and includes a general overview of the most important and applicable measures. The proposed avoidance and minimization measures are as follows:

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
<p>General Avoidance and Minimization Measures</p>	<ol style="list-style-type: none"> 1. Caltrans will include a copy of the Biological Opinion within the construction bid package of the proposed project. The Resident Engineer or their designee will be responsible for implementing the <i>Conservation Measures</i> and <i>Terms and Conditions</i> of the U.S. Fish and Wildlife Service (USFWS), Biological Opinion and the California Department of Fish and Wildlife (CDFW), Incidental Take Permit. 2. Caltrans will submit the names and qualifications of the biological monitor(s) for USFWS and CDFW approval prior to initiating construction activities for the proposed project. 3. The agency-approved biologist(s) will be onsite during initial ground-disturbing activities, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The biologist(s) will keep copies of applicable permits in their possession when onsite. Through the Resident Engineer or their designee, the agency-approved biologist(s) shall be given the authority to communicate either verbally, by telephone, email or hardcopy with all project personnel to ensure that take of listed species is minimized and permit requirements are fully implemented. Through the Resident Engineer or their designee, the agency-approved biologist(s) shall have the authority to stop project activities to minimize take of listed species or if he/she determines that any permit requirements are not fully implemented. If the agency-approved biologist(s) exercises this authority, the agencies shall be notified by telephone and email within 48 hours.

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
	<p>4. All construction personnel will attend a mandatory environmental education program delivered by an agency-approved biologist prior to working on the project.</p> <p>5. Prior to any ground disturbance, pre-construction surveys will be conducted by an agency-approved biologist for listed species. These surveys will consist of walking surveys of potential species habitat within the project limits. The biologist(s) will investigate all potential cover sites. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, and debris. Native vertebrates found in the cover sites within the project limits will be documented and relocated to an adequate cover site in the vicinity.</p> <p>6. To prevent inadvertent entrapment of listed species during construction, excavated holes or trenches more than one foot deep with walls steeper than 30 degrees will be covered at the close of each working day by plywood or similar materials. Alternatively, an additional four-foot high vertical barrier, independent of exclusionary fences, will be used to further prevent the inadvertent entrapment of listed species. If it is not feasible to cover an excavation or provide an additional four-foot high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks will be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape or USFWS and CDFW will be contacted by telephone for guidance. USFWS and CDFW will be notified of the incident by telephone and electronic mail within 48 hours.</p> <p>7. The limits of construction zones within suitable habitat for listed species will be delineated with high visibility wildlife exclusion fencing at least four feet in height to prevent wildlife from accessing the construction footprint. The fencing will be removed only when all construction equipment is removed from the site. No project activities will occur outside the delineated project construction area. Wildlife exclusion fencing is not required for construction activities occurring outside of suitable habitat for listed species.</p> <p>8. The Resident Engineer will immediately contact the agency-approved project biologist(s) in the event that an Alameda whipsnake, California red-legged frog, or California tiger salamander is observed within a construction zone. The Resident Engineer will suspend construction activities within a 50 foot radius of the animal until the animal leaves the site voluntarily or an agency-approved protocol for removal has been established.</p> <p>9. Wildlife may become trapped or injured if such materials are moved. All construction pipes, culverts, or similar structures, construction equipment or construction debris left overnight</p>

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
	<p>within the work area will be inspected by the agency-approved biological monitor prior to being moved.</p> <p>10. Water quality inspections will occur per the approved Storm Water Pollution Prevention Plan (SWPPP), which will coincide with the State Water Resources Control Board (SWRCB) Statewide Construction General Permit. This permit is for any project, not specifically by Caltrans, that disturb 1.0 acre, or greater, of land.</p> <p>11. Project employees will be required to comply with guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.</p> <p>12. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area.</p> <p>13. No firearms will be allowed in the project area except for those carried by authorized security personnel, or local, State, or Federal law enforcement officials.</p> <p>14. To prevent harassment, injury or mortality of sensitive species, no pets will be permitted on the project site.</p> <p>15. The potential for impacts to water quality will be avoided by implementing temporary and permanent Best Management Practices (BMPs). To address potential temporary impacts, a SWPPP will be developed by the Contractor, and approved by Caltrans, prior to commencement of construction activities. The SWPPP demonstrates the deployment of appropriate BMPs to prevent discharge of unmanaged storm and non-storm water beyond the perimeter of the construction site. Additionally, this will include soil and sediment control BMPs, to minimize, or prevent, such discharge beyond the construction perimeter.</p> <p>To address potential permanent impacts, erosion control and stormwater treatment BMPs will be incorporated into the project design. These will be implemented to provide soil and sediment control, as well as treatment of vehicular pollutants characteristic of stormwater run-off. No Discharge of pollutants from vehicle and equipment cleaning are allowed into the storm drain or water courses.</p> <p>16. Disturbed slopes and graded areas will be protected from erosion, during construction, using a combination of temporary fiber roll, hydro-mulch, and silt fence placed at intervals and/or along perimeters or disturbed areas and toes-of-slopes. Permanent erosion and control measures, such as fiber roll, hydroseed, and erosion-control netting (i.e. jute or coir), will be incorporated as part of the project design.</p> <p>17. Plastic mono-filament netting (erosion control matting) or similar material will not be used for the project because Alameda whipsnakes, California red-legged frogs, and California tiger salamanders may become entangled or trapped</p>

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
	<p>in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds</p> <p>18. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature.</p> <p>19. All areas that are temporarily affected during construction will be revegetated with an assemblage of native grass, shrub, and trees. Invasive, exotic plants will be controlled within the PCA to the maximum extent practicable, pursuant to Executive Order 13112.</p> <p>20. To the extent practicable, clearing and grubbing activities will be conducted during the non-nesting season, from September 1 to February 15.</p> <p>21. Pre-construction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction for activities occurring during the breeding season (February 15 to August 31).</p> <p>22. If work is to occur within 300 feet of active raptor nests or 50 feet of other species nests, a non-disturbance buffer will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance.</p> <p>23. The project has been designed to avoid impacts to Waters of the U.S. to the maximum extent practicable.</p> <p>24. Lighting for nighttime work will be directed downwards and towards the construction work taking place.</p>
<p>Grassland Habitat</p>	<p>1. Caltrans will mitigate for grassland impacts to CTS, CRLF, and AWS habitat. Compensations on site will be at a 1.1:1 ratio and is expected to total 2.04 acres of mitigation. Compensations off-site will be at a 3:1 ratio and is expected to total 0.45 acre. Total compensation for grassland habitat is expected to be 2.49 acres.</p> <p>2. The project has been designed to avoid impacts to grassland habitat to the maximum extent practicable.</p>

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
<p>Freshwater Marsh Habitat</p>	<ol style="list-style-type: none"> 1. Caltrans will mitigate for freshwater marsh impacts to CTS and CRLF habitat. Compensations on site will be at a 1.1:1 ratio and is expected to total 0.009 acre of mitigation. Compensations off-site will be at a 3:1 ratio and is expected to total 0.0018 acre. Total compensation for freshwater habitat is expected to be 0.01 acre. 2. The project has been designed to avoid impacts to freshwater marsh habitat to the maximum extent practicable.
<p>California Red-legged Frog</p>	<ol style="list-style-type: none"> 1. Proposed on-site habitat restoration due to 1.86 acres of temporary impacts to California red-legged frog habitat. See Grassland and Freshwater Marsh Sections. 2. Proposed off-site habitat restoration due to 0.15 acre permanent impacts to California red-legged frog habitat.
<p>California Tiger Salamander</p>	<ol style="list-style-type: none"> 1. Proposed on-site habitat restoration due to 1.86 acres of temporary impacts of California tiger salamander habitat. See Grassland and Freshwater Marsh Habitat Sections. 2. Proposed off-site habitat restoration due to 0.15 acres of permanent impacts to California tiger salamander habitat.
<p>Alameda Whipsnake</p>	<ol style="list-style-type: none"> 1. Proposed on-site habitat restoration due to 1.86 acres of temporary impacts of Alameda whipsnake habitat. See Grassland Habitat Section. 2. Proposed off-site habitat restoration due to 0.15 acre of permanent impacts of Alameda whipsnake habitat.
<p>Western Burrowing Owl</p>	<ol style="list-style-type: none"> 1. Active burrowing owl burrows detected during preconstruction surveys within or adjacent to the active construction area will be avoided per the requirements of CDFW.
<p>Migratory Birds</p>	<ol style="list-style-type: none"> 1. To the extent practicable, clearing and grubbing activities will be conducted during the non-nesting season, from September 1 to February 15. 2. Pre-construction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction for activities occurring during the breeding season (February 15 to August 31). 3. If work is to occur within 300 feet of active raptor nests or 50 feet of other species nests, a non-disturbance buffer will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the species'

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
	sensitivity to disturbance, and the intensity/type of potential disturbance.
Invasive Species	<ol style="list-style-type: none"> 1. Standard AMMs will be proposed to control the spread of invasive species.
Cultural	<ol style="list-style-type: none"> 1. Areas that have been identified as containing cultural resources will be protected with Sensitive Area Fencing. 2. No construction activities or personnel will be allowed within the area protected with Sensitive Area Fencing. 3. If any cultural artifacts are found during construction, the Resident Engineer will immediately be notified and halt work within the area around where the artifact was found. Work will not restart until a qualified archaeologist has been notified and assessed the significance of the find.
Paleontological	<ol style="list-style-type: none"> 1. The Caltrans Project design team will work with the paleontologist to ensure that paleontological resources will be avoided to the maximum extent possible. 2. A project-specific Paleontological Mitigation Plan will be prepared by a qualified paleontologist once project design information regarding subsurface disturbance location, depth, and lateral extent if available. 3. The qualified paleontologist will be present at pre-construction meetings to train contractors in paleontological identification during ground-disturbing activities. 4. Paleontological monitors, under the direction of the paleontologist, will be on site to inspect excavations for fossils at all times during original ground disturbance involving sensitive geologic formations. 5. When fossils are discovered, the paleontologist (or monitor) will recover them. Construction work in these areas may be halted or diverted by the Resident Engineer to allow the prompt recovery of fossils. 6. Fossils collected during the monitoring and salvage portion of the program will be prepared to the point of identification, sorted, and cataloged. 7. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited in a scientific institution with paleontological collections.

Protected or Regulated Resource	Proposed Avoidance and Minimization Measures
	8. A Paleontological Mitigation Report will be completed that outlines the results of the mitigation program.
Visual	<ol style="list-style-type: none"> 1. Landscaping and irrigation systems that are damaged or removed will be replaced or repaired. 2. All disturbed ground surfaces will be restored.
Hazardous Waste	<ol style="list-style-type: none"> 1. Standard safe handling practices will be implemented with the removal of yellow traffic striping that contains hazardous waste levels of lead.

Appendix F: Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
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March 2013

NON-DISCRIMINATION POLICY STATEMENT

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For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

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