

*Chapter 3*  
*California Environmental Quality*  
*Act (CEQA) Evaluation*



## Chapter 3 California Environmental Quality Act (CEQA) Evaluation

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### 3.1 Determining Significance under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement (EIS) or some lower level of documentation will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. In the case of this project, a decision was made that the proposed project, as a whole, would not have the potential to significantly affect the quality of the human environment and therefore, an EIS was not required. Instead of an EIS, an Environmental Assessment (EA) has been prepared to satisfy NEPA requirements.

Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

### 3.1.1 CEQA Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2006 CEQA Guidelines. For this EIR, implementation of the proposed project may have a significant impact on the environment if it would result in any of the following:

#### **Aesthetics:**

- A substantial adverse effect on a scenic vista.
- Substantial damage to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Substantial degradation to the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

#### **Agriculture Resources:**

- 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 nonagricultural use.
- Conflict with existing zoning for agricultural use or a Williamson Act contract.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

#### **Air Quality:**

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- 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).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

#### **Biological Resources:**

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in

local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or United States Fish and Wildlife Service (USFWS).

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFG or USFWS.
- 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.
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

**Cultural Resources:**

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

**Geology and Soils:**

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 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.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.

- Substantial soil erosion or the loss of topsoil.
- 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.
- 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.
- 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.

#### **Hazards/Hazardous Wastes and Materials:**

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one- quarter mile of an existing or proposed school.
- 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 create a significant hazard to the public or the environment.
- 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, result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structure to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands.

#### **Hydrology and Water Quality:**

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or substantially interfere 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).

- 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.
- 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.
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- 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.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- 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.
- Inundation by seiche, tsunami, or mudflow.

**Land Use and Planning:**

- Physically divide an established community.
- 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.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

**Mineral Resources:**

- 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.
- 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.

**Noise:**

- 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.
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- 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, expose people residing or working in the project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

**Population and Housing:**

- Induce substantial population growth in the area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

**Public Services:**

- 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:
  - Fire protection;
  - Police protection;
  - Schools;
  - Parks; or
  - Other public facilities.

**Recreation:**

- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

**Transportation/Traffic:**

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.
- 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.
- Substantial increase in hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Result in inadequate parking capacity.
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

**Utilities and Service Systems:**

- Exceed wastewater treatment requirements of the Regional Water Quality Control Board.
- 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.
- 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.
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.

- Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

### **CEQA Mandatory Findings of Significance:**

- 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, 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?
- 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)?
- Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

## **3.2 Discussion of Significance of Impacts**

### **3.2.1 Aesthetics**

#### **3.2.1.1 Less than Significant Effects of the Proposed Project**

**Impact VA-1** The proposed project would replace an existing interchange in a developed urban area and would have a *less than significant* effect on the creation of new sources of light or glare that would adversely affect day or nighttime views in the area.

See Section 2.1.5, Visual/Aesthetics, for more information.

#### **3.2.1.2 Significant Environmental Effects of the Proposed Project**

**Impact VA-2** The proposed project would improve an existing interchange located in a developed urban area. The proposed project would have a *less than significant effect with incorporated mitigation* on scenic vistas, scenic resources, and the visual character and quality of the site and its surroundings.

See Section 2.1.5, Visual/Aesthetics, for more information.

### 3.2.1.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to aesthetics associated with the construction or operation of the proposed project.

### 3.2.1.4 Mitigation Measures

Mitigation measures under CEQA are the same as those discussed in Section 2.1.5, Visual/Aesthetics.

## 3.2.2 Agriculture Resources

### 3.2.2.1 Less than Significant Effects of the Proposed Project

**Impact AG-1** The proposed project is not located on and would not directly affect existing 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 nonagricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract, therefore, the project would have *no impact* on agricultural resources.

**Impact AG-2** The proposed project would occur within an existing transportation corridor in an established urban area and would not involve changes which would result in conversion of farmland, to non-agricultural use, therefore, the project would have *no impact* on agricultural resources.

### 3.2.2.2 Significant Environmental Effects of the Proposed Project

There are no significant environmental effects related to agricultural resources associated with the construction or operation of the proposed project.

### 3.2.2.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to agricultural resources associated with the construction or operation of the proposed project.

### 3.2.2.4 Mitigation Measures

Mitigation is not required.

## 3.2.3 Air Quality

### 3.2.3.1 Less than Significant Effects of the Proposed Project

**Impact AIR-1** The proposed project is consistent with the 2004 RTP and has been included in the 2006 RTIP which was developed in compliance with state and federal requirements. Therefore the project would have *no impact* on the implementation of the applicable air quality plans

**Impact AIR-2** The proposed project would have a *less than significant impact* on the creation of objectionable odors within the project area.

See Section 2.2.6, Air Quality, for more information.

### 3.2.3.2 Significant Environmental Effects of the Proposed Project

**Impact AIR-3** Once complete, the proposed project would improve traffic operations at the I-5/Ortega Highway interchange therefore reducing impacts to air quality. The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant or expose sensitive receptors to substantial pollutant concentrations; although temporary, construction related impacts are expected to occur, therefore, the project would have a *less than significant impact with incorporated mitigation* on air quality standards.

See Section 2.2.6, Air Quality, for more information.

### 3.2.3.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to air quality associated with the construction or operation of the proposed project.

### 3.2.3.4 Mitigation Measures

Mitigation measures under CEQA are the same as those discussed in Section 2.2.6, Air Quality.

## 3.2.4 Biological Resources

### 3.2.4.1 Less than Significant Effects of the Proposed Project

**Impact BIO-1** The proposed project would occur within an existing transportation corridor in an urbanized area, therefore would have *no impact* on candidate, sensitive, or special-status species, federally protected wetlands, or the movement of native, resident, or migratory fish or wildlife species in the project area.

**Impact BIO-2** The proposed project would occur within an existing transportation corridor in an urbanized area, therefore would have *no impact* on local, regional or state policies, ordinances or conservation plans protecting biological resources in the project area.

**Impact BIO-3** The proposed project would occur within an existing transportation corridor in an urbanized area, therefore would have *no impact* on any riparian habitats or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFG or USFWS.

**Impact BIO-4** There are no federally protected wetlands within the proposed project area, therefore there would be *no impact* to the wetland resources.

**Impact BIO-5** The proposed project would occur within an existing transportation corridor in an urbanized area, therefore would not interfere with the movement of any native resident or migratory fish or wildlife species.

As a result, the proposed project would have *no impact* on migratory fish or wildlife movements.

**Impact BIO-6** Construction of the proposed project would require the removal of vegetation in the project area. The effect of this action would be *less than significant*.

Impacts to biological resources attributable to direct effects on plants in the project study area would not constitute a loss of regional significance because the existing assemblage of plants is already greatly disturbed by surrounding development. See Section 2.3, Biological Environment, for more information.

#### **3.2.4.2 Significant Environmental Effects of the Proposed Project**

There are no significant environmental effects related to biological resources associated with the construction or operation of the proposed project.

#### **3.2.4.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to biological resources associated with the construction or operation of the proposed project.

#### **3.2.4.4 Mitigation Measures**

Mitigation measures under CEQA are the same as those discussed in Section 2.3, Biological Environment.

### **3.2.5 Cultural Resources**

#### **3.2.5.1 Less than Significant Effects of the Proposed Project**

**Impact CR-1** The proposed project does not have the potential to cause substantial adverse change in the significance of a historical or unique archaeological resource and impacts would be *less than significant*.

Both Alternatives 3 and 5 include the replacement of a curb and sidewalk within the existing public right-of-way (ROW) on Ortega Highway along the frontage of the Forster Mansion site, which is listed on the National Register of Historic Places. This action would not alter any historic feature or contributing element on the Forster Mansion site and access to the property would be maintained at all times during project construction and operation. See section 2.1.6, Cultural Resources for more information.

**Impact CR-2** The proposed project does not have the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature and impacts would be *less than significant*.

**Impact CR-3** The proposed project area does not lie within an area where human remains are known to occur, although excavation during project construction could result in the disturbance of unanticipated human remains and impacts are considered *less than significant*.

### 3.2.5.2 Significant Environmental Effects of the Proposed Project

There are no significant environmental effects related to cultural resources associated with the construction or operation of the proposed project.

### 3.2.5.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to cultural resources associated with the construction or operation of the proposed project.

### 3.2.5.4 Mitigation Measures

There are no significant impacts under CEQA and no mitigation is required. However, minimization measure(s) proposed for this issue area are the same as those discussed in Section 2.1.6, Cultural Resources.

## 3.2.6 Geology and Soils

### 3.2.6.1 Less than Significant Effects of the Proposed Project

**Impact GEO-1** The proposed project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides. This impact is considered *less than significant* and does not require mitigation.

See Section 2.2.3, Geology/Soils/Seismic/Topography for more information.

**Impact GEO-2** Soil erosion and loss because of project grading and other construction activities is expected to be minimal. This impact is considered *less than significant* and does not require mitigation.

See Section 2.2.1 Hydrology and Floodplain, for more information.

**Impact GEO-3** No structures would be constructed as part of the proposed project that would increase the current risk of loss, injury, or death because of landslides, ground shaking, and other seismically induced effects. This impact is considered *less than significant*.

See Section 2.2.3, Geology/Soils/Seismic/Topography for more information.

**Impact GEO-4** The proposed project would have *no impact* to the existing septic and wastewater disposal systems.

See Section 2.1.3 Utilities/Public & Emergency Services for more information.

**Impact GEO-5** The proposed project is located in an existing transportation corridor and is not located on a geologic unit or soil that is unstable, or that is anticipated to become unstable as a result of the project, therefore the project would result in a *less than significant impact*.

See Section 2.2.3, Geology/Soils/Seismic/Topography for more information.

**Impact GEO-6** The proposed project is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property therefore, resulting in *no impact*.

See Section 2.2.3, Geology/Soils/Seismic/Topography for more information.

### **3.2.6.2 Significant Environmental Effects of the Proposed Project**

There are no significant environmental effects related to geology and soils associated with the construction or operation of the project.

### **3.2.6.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to geology and soils associated with the construction or operation of the project.

### **3.2.6.4 Mitigation Measures**

There are no significant impacts under CEQA and no mitigation is required. However, minimization measure(s) proposed for this issue area are the same as those discussed in Section 2.2.3, Geology/Soils/Seismic/Topography.

## **3.2.7 Hazards/Hazardous Wastes and Materials**

### **3.2.7.1 Less than Significant Effects of the Proposed Project**

**Impact HWM-1** The proposed project would have *no impact* on significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

**Impact HWM-2** The proposed project would have *no impact* on the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

**Impact HWM-3** The proposed project would have *no impact* on the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands.

### **3.2.7.2 Significant Environmental Effects of the Proposed Project**

**Impact HWM-4** The I-5/Ortega Highway interchange is used as an emergency access route; consequently, emergency response plans and emergency evacuation plans are likely to be impacted by project construction. This impact is considered *less than significant with incorporated mitigation*.

**Impact HWM-5** Several types of hazardous chemicals are known to exist within the project area. This impact is considered *less than significant with incorporated mitigation*.

See Section 2.2.5, Hazardous Waste/ Materials, for more information.

**Impact HWM-6** The proposed project site includes areas included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and impacts are considered *less than significant with incorporated mitigation*.

Five hazardous materials were identified to be present in the proposed project area. See Section 2.2.5, Hazardous Waste/Materials, for more information.

### 3.2.7.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to hazardous wastes or materials associated with the construction or operation of the proposed project.

### 3.2.7.4 Mitigation Measures

For mitigation for construction impacts on emergency response in the project area, see Section 2.1.3, Utilities/Public & Emergency Services.

All other mitigation measures for Hazards/Hazardous Wastes and Materials under CEQA would be the same as those discussed in Section 2.2.5, Hazards/Hazardous Waste/Materials.

## 3.2.8 Hydrology and Water Quality

### 3.2.8.1 Less than Significant Effects of the Proposed Project

**Impact HYD-1** The proposed project would not substantially degrade water quality or violate any water quality standards or waste discharge requirements. Impacts to water quality are considered *less than significant*.

See Section 2.2.2, Water Quality and Storm Water Runoff, for more information.

**Impact HYD-2** The proposed project would alter an existing transportation facility but would result in *less than significant impact* on existing drainage patterns and is not located in a 100-year floodplain.

**Impact HYD-3** The proposed project entails improvements to an existing transportation facility and would have *no impact* on groundwater supplies or substantially interfere with groundwater recharge.

**Impact HYD-4** The proposed project would increase the amount of impervious surfaces within the project area but would result in a *less than significant impact* on the creation of runoff.

**Impact HYD-5** The proposed project is not located near a levee or dam and would therefore have *no impact* on the exposure of people or structures to a significant risk of loss, injury, or death due to the failure of a levee or dam nor would it increase the risk of people or structures to the threat of seiche, tsunami, or mudflow.

See Section 2.2.1, Hydrology and Floodplain, for more information.

### **3.2.8.2 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to water quality and storm water runoff associated with construction and operation of the proposed project.

### **3.2.8.3 Mitigation Measures**

This project would not result in any significant impacts; therefore, *no mitigation is required*; however, minimization measure(s) for this issue area are discussed in Section 2.2.1, Hydrology and Floodplain, as well as in Section 2.2.2, Water Quality and Storm Water Runoff.

## **3.2.9 Land Use**

### **3.2.9.1 Less than Significant Effects of the Proposed Project**

**Impact LAN-1** The proposed project is located in an urbanized area and would have *no impact* related to the physical division of an established community or the implementation of any applicable habitat conservation or natural community conservation plan.

**Impact LAN-2** The proposed project would be constructed within an existing transportation corridor and would have a *less than significant effect* on applicable land use plans, policies, and regulations of agencies with jurisdiction over the project.

### **3.2.9.2 Significant Environmental Effects of the Proposed Project**

There are no significant environmental effects related to land use associated with the construction or operation of the proposed project.

### **3.2.9.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to land use associated with the construction or operation of the proposed project.

### **3.2.9.4 Mitigation Measures**

Mitigation is not required.

## **3.2.10 Mineral Resources**

### **3.2.10.1 Less than Significant Effects of the Proposed Project**

**Impact MIN-1** No mineral resources that would be of value to the region or residents of the state have been identified near the project site, and the State Department of Conservation has not designated the project site as a Significant Mineral Aggregate Resources Area; therefore, the project would have *no impact* upon mineral resources.

### 3.2.10.2 Significant Environmental Effects of the Proposed Project

There are no significant environmental effects associated with mineral resources.

### 3.2.10.3 Unavoidable Significant Environmental Effects

There are no unavoidable significant environmental effects related to mineral resources associated with the construction or operation of the proposed project.

### 3.2.10.4 Mitigation Measures

Mitigation is not required.

## 3.2.11 Noise

### 3.2.11.1 Less than Significant Effects of the Proposed Project

**Impact N-1** The proposed project is not located within an airport land use plan or near a private airstrip and would have a *less than significant impact* on the generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

**Impact N-2** The existing noise level measured at sensitive receptors R2 and R3 (three residences and a church) is 73 dBA. Predicted future noise levels at R2 and R3 under the No Build Alternative, Alternative 3 and Alternative 5 would remain unchanged at 73 dBA. Therefore, the proposed project would have a *less than significant impact* on noise levels at receptors R2 and R3.

See Section 2.2.7, Noise for more information.

### 3.2.11.2 Significant Environmental Effects of the Proposed Project

**Impact N-3** Construction of the proposed project would cause temporary noise impacts to the surrounding community. This impact is considered *less than significant with incorporated mitigation*.

Mitigation measures to minimize temporary construction noise under CEQA would be the same as those discussed in Section 2.2.7, Noise.

**Impact N-4** Alternative 5 would impact sensitive noise receptors at locations R5, R6, R9 and R11 (San Juan Elementary School and recreation fields). Existing peak hour noise levels for R5 and R6=61 dBA, R9=68 dBA and R11=69 dBA. The predicted future noise levels under Alternative 5 are: R5=68 dBA, R6=71 dBA, R9=71 dBA and R11=67 dBA. With inclusion of Soundwall S523 required by mitigation measure MM N-3, future noise levels at the sensitive receptors would be equal to or less than the existing noise levels. Predicted noise levels at the sensitive receptors subsequent to construction of Soundwall S523 would be: R5=60 dBA, R6=64 dBA, R9=66 dBA and R11=66 dBA. Therefore,

Alternative 5 noise impacts at sensitive noise receptor locations R5, R6, R9 and R11 (San Juan Elementary School and recreation fields) are considered *less than significant with incorporated mitigation*.

See Section 2.2.7, Noise for more information.

### **3.2.11.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to noise associated with the construction or operation of the proposed project.

### **3.2.11.4 Mitigation Measures**

**MM N-3:** If Alternative 5 is selected as the project build alternative, construct proposed Soundwall S523 in the form of a new 10-ft barrier to be located along the I-5 ramp shoulder to Ortega Highway extending south to Ortega Highway. The soundwall shall be designed to connect to or overlap the existing soundwall at this location.

### **3.2.12 Paleontology**

#### **3.2.12.1 Significant Environmental Effects of the Proposed Project**

**Impact PAL-1** Construction of the proposed project requires excavation and the project area has potential to contain fossil deposits. Potential impact is considered *less than significant with incorporated mitigation*.

See Section 2.2.4, Paleontology, for more information.

#### **3.2.12.2 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to paleontology associated with the construction or operation of the proposed project.

#### **3.2.12.3 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.2.4, Paleontology.

### **3.2.13 Population and Housing**

#### **3.2.13.1 Less than Significant Effects of the Proposed Project**

**Impact POP-1** The temporary construction work force for this project would come from the existing labor pool in the southern California area, and construction of the project would not require any relocation or new housing for construction workers. The proposed project does not include residential housing, commercial, office, industrial, or institutional uses, nor would it create any long-term employment or sustain future economic or population growth in this area. No residential housing would be displaced because of the proposed project; therefore, no development of replacement residential housing

would not be necessary. Based on this, the proposed project would have *no impact* on the population and housing in the community.

### **3.2.13.2 Significant Environmental Effects of the Proposed Project**

There are no significant environmental effects related to population and housing associated with the construction or operation of the proposed project.

### **3.2.13.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to population and housing associated with the construction or operation of the proposed project.

### **3.2.13.4 Mitigation Measures**

Mitigation is not required.

## **3.2.14 Public Services**

### **3.2.14.1 Significant Environmental Effects of the Proposed Project**

**Impact PS-1** The project site is situated within an existing transportation corridor that is used as an emergency route access route; consequently, emergency response plans and emergency evacuation plans are likely to be impacted by project construction. This impact would be temporary and is considered *less than significant with incorporated mitigation*.

### **3.2.14.2 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to public services associated with the construction or operation of the proposed project.

### **3.2.14.3 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.1.3, Utilities/Public & Emergency Services.

## **3.2.15 Recreation**

### **3.2.15.1 Less than Significant Effects of the Proposed Project**

**Impact REC-1** The proposed project would improve an existing transportation facility, does not include the construction or expansion of any new or existing facilities, and would have *no impact* on the increase in use of the existing parks and recreational facilities in the project area..

**Impact REC-2** Alternative 5 would require acquisition of a strip of the San Juan Elementary school property on its eastern border where the school property lines up with I-5, just north of the I-5/Ortega Highway interchange. The portion of the school site that would be affected by Alternative 5 consists of two buildings, a grassy portion of the school's open space area, and part of the playground blacktop. This impact is

considered *less than significant* with adherence to the established laws and regulations governing property acquisition and relocations.

See Section 2.1.2, Community Impacts, for more information.

### **3.2.15.2 Significant Environmental Effects of the Proposed Project**

There are no significant environmental effects related to recreation associated with the construction or operation of the proposed project.

### **3.2.15.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to recreation associated with the construction and operation of the proposed project.

### **3.2.15.4 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.1.2, Community Impacts.

## **3.2.16 Transportation/Traffic**

### **3.2.16.1 Less than Significant Effects of the Proposed Project**

**Impact TC-1** The proposed project would result in *no impact* upon air traffic patterns or to adopted policies, plans, and programs that support alternative transportation.

**Impact TC-2** The proposed project would accommodate for previously anticipated growth in the community therefore, it would result in *no impact* to the increase in traffic.

**Impact TC-3** The proposed project would improve the level of service at the project interchange. The project would have *a less than significant impact* to the level of service.

**Impact TC-4** The proposed project would result in the displacement of parking spaces in the project area. The amount of spaces displaced is considered *less than significant*.

See Section 2.1.2, Community Impacts, for more information

**Impact TC-5** The proposed project does not include hazardous design features or incompatible uses therefore would result in *no impacts* to safety as a result of hazardous design features or incompatible uses.

See Section 2.1.4, Traffic and Transportation for more information.

### **3.2.16.2 Significant Environmental Effects of the Proposed Project**

**Impact TC-6** Construction of the proposed project would cause temporary delays in traffic and circulation within the interchange area. This impact is considered *less than significant with incorporated mitigation*.

### **3.2.16.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to traffic and circulation associated with the construction or operation of the proposed project.

### **3.2.16.4 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.1.4, Traffic & Transportation/Pedestrian and Bicycle Facilities.

### **3.2.17 Utilities and Service Systems**

#### **3.2.17.1 Less than Significant Effects of the Proposed Project**

**Impact USS-1** The proposed project would not require any additional wastewater, storm-drain, landfill, or water supply services and would result in no increase (*no impact*) in need for utility services.

#### **3.2.17.2 Significant Environmental Effects of the Proposed Project**

**Impact USS-2** The proposed project would require the extension of an existing reinforced concrete box culvert. This impact is considered *less than significant with incorporated mitigation*.

See Section 2.3, Biological Environment, for more information.

#### **3.2.17.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to utilities and service systems associated with the construction and operation of the proposed project.

#### **3.2.17.4 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.1.3 Utilities/Public & Emergency Services.

### **3.2.18 CEQA Mandatory Findings of Significance**

#### **3.2.18.1 Less than Significant Effects of the Proposed Project**

**Impact CEQA-1** The proposed project would improve an existing transportation facility and is located within an urbanized area therefore there would have *no impact* to the degradation of the quality of the environment.

**Impact CEQA-2** The relocation of utility lines could temporarily interrupt service while a changeover from the existing to relocated facilities occurs. It is also possible that construction activities associated with other projects near the I-5/Ortega Highway interchange could also interrupt utilities serving the immediate vicinity. If a service interruption were to occur simultaneously with an interruption produced by the project construction, this would constitute an additive temporary cumulative impact. Impacts related to the cumulative interruption of utilities services in the project area are unlikely to occur and, if so, then these

impacts would only be temporary; therefore, this impact is considered *less than significant*.

### **3.2.18.2 Significant Environmental Effects of the Proposed Project**

**Impact CEQA-3** Construction-related impacts to traffic because of the proposed project could result in greater cumulative impacts when considered with other projects in the vicinity. Coordination among the responsible parties would be maintained to reduce the likelihood of significant delays as much as possible, but temporary cumulative effects would be expected. These impacts would be considered *less than significant with incorporated mitigation*.

### **3.2.18.3 Unavoidable Significant Environmental Effects**

There are no unavoidable significant environmental effects related to the CEQA Mandatory Findings of Significance associated with the construction or operation of the proposed project.

### **3.2.18.4 Mitigation Measures**

Mitigation measures under CEQA would be the same as those discussed in Section 2.1.3, Utilities/Public & Emergency Services and Section 2.1.4, Traffic & Transportation/Pedestrian and Bicycle Facilities.

### **3.2.19 Climate Change**

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas<sup>1</sup> (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin

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<sup>1</sup> Greenhouse gases related to human activity include: Carbon dioxide, Methane, Nitrous oxide, Tetrafluoromethane, Hexafluoroethane, Sulfur hexafluoride, HFC-23, HFC-134a\*, and HFC-152a\*.

implementing AB 32, including the recommendations made by the state's Climate Action Team.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change.

According to a recent white paper by the Association of Environmental Professionals<sup>2</sup>, "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases

The Department and its parent agency, the Business, Transportation, and Housing 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, the Department has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in the Department's Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

The Department recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, the Department is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and AB 32. As part of the Climate Action Program at Caltrans (December 2006), the Department 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. The Department is working closely with local jurisdictions on planning activities; however, the Department does not have local land use planning authority. The Department is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel

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<sup>2</sup> Hendrix, Micheal and Wilson, Cori. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), p. 2.

economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the University of California Davis.

### **3.3 Mitigation Measures for Significant Impacts under CEQA**

To reduce potential impacts resulting from the implementation of the proposed project, a range of avoidance, minimization and/or mitigation measures have been proposed. For all environmental issue areas with the exception of Noise, mitigation measures under CEQA would be the same as those measures discussed in the Chapter 2 sections referenced above.

If Alternative 5 is selected and implemented as the build alternative, the following mitigation measure shall be incorporated in accordance with CEQA guidelines to mitigate noise impacts to less than significant levels at San Juan Elementary School and recreation fields:

**MM N-3:** If Alternative 5 is selected as the project build alternative, construct proposed Soundwall S523 in the form of a new 10-ft barrier to be located along the I-5 ramp shoulder to Ortega Highway extending south to Ortega Highway. The soundwall shall be designed to connect to or overlap the existing soundwall at this location.

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