

Appendix A CEQA Checklist

Supporting documentation of all California Environmental Quality Act (CEQA) checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment (IS/EA). Documentation of “No Impact” determinations is provided at the beginning of Chapter 2. Discussion of all impacts avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapter 2.

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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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"/>
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. 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. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- 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?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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 checked="" type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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"/>
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>
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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

I. AESTHETICS

The potential for the Project to result in impacts related to aesthetics was assessed in the *Visual Impact Assessment* (VIA) (November 2013), the results of which inform the discussion provided in Section 2.6 of this Environmental Document. The following is based on that information.

a) No Impact. While the La Loma Hills and Blue Mountain are located within the viewshed of the Project, existing views of the La Loma Hills and/or Blue Mountain are obstructed by existing development. Because of the visual obstructions, there are no outstanding scenic vistas and/or visual features that would potentially be impacted by any of the Build Alternatives. No mitigation is required.

b) No Impact. There are no State-designated Scenic Highways in the Project area. Visual resources in the viewshed of the Project include Blue Mountain and the La Loma Hills; however, the Project would not damage these resources. Therefore, the Project would not result in substantial impacts to scenic highways or resources. No mitigation is required.

c) Less Than Significant Impact. Temporary visual impacts during construction, such as from construction activity, staging sites, truck hauling, excavation activity, and detour signage, are anticipated under Alternatives 3, 6, and Modified Alternative 7. These construction impacts would occur over a relatively short duration (within a projected construction time frame of 24 months) and would cease upon Project completion. The Project would require Temporary Construction Easements (TCEs) from private property owners for access and staging purposes. Impacts would be minimized through compliance with the California Department of Transportation (Caltrans) Standard Construction Specifications.

Although the visual quality of most of the key views would be reduced, the key views would be consistent with views of and around a freeway. Additionally, implementation of any of the Build Alternatives would be consistent with the I-215 Bi-County Aesthetic Concept as discussed in Minimization Measures VIS-1 and VIS-2. None of the key views currently have unobstructed views of visual resources such as the La Loma Hills or Blue Mountain. Therefore, implementation of any of the Build Alternatives would have a low-level visual impact on the Project area due to the level of existing visual quality, and any impact to visual resources resulting from the Build Alternatives would not be considered substantial. Implementation of

Measures VIS-1 and VIS-2, provided in Section 2.6, would minimize visual impacts during construction and operation of the Project. No mitigation is required.

d) Less Than Significant Impact. The Project area receives light at night from traffic, street lighting, and lighted parking lots; signalization at the intersections and freeway on- and off-ramps; and commercial zone and limited light sources from residential development. Existing lighting on the streets and along the ramps would be modified or relocated as a part of the Build Alternatives. Minimization Measure VIS-3 would minimize potential impacts regarding light and glare. No mitigation is required.

II. AGRICULTURE AND FOREST RESOURCES

a), b), c), d), and e) No Impact. There are no farmlands, agricultural resources, forest lands, or timberlands within or immediately adjacent to the disturbance limits of the Project. Areas adjacent to the Project area are not zoned for agricultural or timberland uses, and there are no Williamson Act contracts in effect within or adjacent to the Project limits. The Project would not result in impacts related to the direct or indirect conversion of farmlands or timberlands to nonagricultural or nontimberland uses. Additionally, the Project would not conflict with agricultural/timberland land use designations or Williamson Act contracts. No mitigation is required.

III. AIR QUALITY

The potential for the Project to result in impacts related to air quality was assessed in the *Air Quality Analysis* (September 2013), the results of which inform the discussion provided in Section 2.12 of this Environmental Document. The following is based on that information.

a) No Impact. Alternatives 3, 6, and Modified Alternative 7 would not conflict with or obstruct implementation of any applicable air quality plan. No mitigation is required.

b) Less Than Significant Impact. Historical air quality data show that existing carbon monoxide (CO) levels for the Project area and the general vicinity do not exceed either the State or federal ambient air quality standards. The Project would help to improve traffic flow and reduce congestion on roadway links in the Project vicinity. The Project is located in an attainment/maintenance area for federal CO standards. Using the Caltrans Transportation Project-Level Carbon Monoxide Protocol, a screening and a CO hot-spot analysis were conducted to determine

whether the Project would result in any CO hot spots. It was determined that Alternatives 3, 6, and Modified Alternative 7 would not result in any exceedances of the 1-hour or 8-hour CO standards.

The Project is within a nonattainment area for federal PM_{2.5} and PM₁₀ (particulate matter less than 2.5 microns and 10 microns, respectively, in size) standards. Therefore, per 40 Code of Federal Regulations (CFR), Part 93, analyses are required for conformity purposes. However, the United States Environmental Protection Agency (EPA) does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The project-level particulate matter (PM) hot-spot analysis was presented to Southern California Association of Governments (SCAG's) Transportation Conformity Working Group (TCWG) for discussion and review on May 28, 2013. Per Caltrans' Headquarters policy, all nonexempt projects are required to go through review by the TCWG. This Project was approved and concurred upon by Interagency Consultation at the TCWG meeting as a project not having substantial impacts on air quality, and it meets the requirements of the Clean Air Act (CAA) and 40 CFR 93.116. A copy of the TCWG finding is included in Chapter 3.

Compliance with South Coast Air Quality Management District (SCAQMD) Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions.

Because the Project does not generate new regional vehicular trips, no new regional vehicular emissions would occur. The Project may have a beneficial effect in helping to reduce congestion on roadway links in the Project vicinity.

It is expected that there would be similar or lower Mobile Source Air Toxics (MSAT) emissions in the study area under any of the Build Alternatives relative to the No Build Alternative in the design year (2040) due to the improvement in the level of service (LOS) and reduction of the delay at Project intersections. Therefore, Alternatives 3, 6, and Modified Alternative 7 would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. No mitigation is required.

c) Less Than Significant Impact. As previously described, Alternatives 3, 6, and Modified Alternative 7 are not expected to result in any concentrations exceeding the 1-hour or 8-hour CO standards. In addition, the Project would not delay the

attainment of the PM_{2.5} or PM₁₀ air quality standards within the South Coast Air Basin (Basin). No mitigation is required.

d) Less Than Significant Impact. The majority of the sensitive receptors within or adjacent to the Project area are residential uses; however, Grand Terrace Elementary School is located on Barton Road, adjacent to Interstate 215 (I-215). As discussed above, Alternatives 3, 6, and Modified Alternative 7 may result in temporary, short-term construction-related increases in pollutant concentrations specifically associated with construction equipment emissions and fugitive dust. The implementation of SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, provided in Measures AQ-1–AQ-5 in Section 2.12, would minimize potential short-term air quality impacts to sensitive receptors. No mitigation is required.

e) Less Than Significant Impact. Alternatives 3, 6, and Modified Alternative 7 may result in temporary, short-term construction-related increases in objectionable odors. Implementation of the SCAQMD Standard Conditions and Caltrans Standard Construction Specifications, as described in Section 2.13, would minimize this potential short-term impact. No mitigation is required.

IV. BIOLOGICAL RESOURCES

The potential for the Project to result in impacts to biological resources was assessed in the *Natural Environment Study (Minimal Impacts)* (NES[MI]) (October 2013), the results of which inform the discussion provided in Sections 2.14, 2.15, 2.16, 2.17, and 2.18 of this Environmental Document. The following is based on that information.

a) No Impact. An on-site assessment was conducted to evaluate the biological condition of the Biological Study Area (BSA), including vegetation, wildlife, and suitability of habitat for the presence of various sensitive species. The BSA represents the area of potential direct and indirect Project impacts to biological resources and is predominantly a mixture of nonnative ruderal and ornamental vegetation. There is a drainage with associated riparian habitat at the north end of the BSA, along southbound I-215, approximately 1,000 feet (ft) south of Newport Avenue (Drainage F). Another drainage located at the south end of the BSA also consists of riparian habitat (Drainage B). Both drainages were determined not to have potential suitable habitat for the federally and State listed as endangered least Bell's vireo (*Vireo bellii pusillus*); however, the drainages have marginal habitat for the nonlisted San Bernardino aster (*Corethrogyne filaginifolia*), a species of special concern.

Additionally, a vacant field southeast of the I-215/Barton Road interchange potentially has marginal habitat for the northwestern San Diego pocket mouse (*Chaetodipus fallax*), a nonlisted species of special concern. This area has been substantially disturbed for equipment staging for the I-215 Bi-County HOV Lane Gap Closure Project. Neither of the nonlisted species of special concern is anticipated to occur within the BSA or be affected by the Project due to the high level of disturbance in the BSA. The western burrowing owl (*Athene cunicularia hypugaea*) was determined to be absent based on results of the burrow survey; however, a preconstruction focused survey will be required for this species. Alternatives 3, 6, and Modified Alternative 7 are not expected to result in any impacts to threatened or endangered species or other species of special concern, and no mitigation is required.

b) Less Than Significant Impact. Alternatives 3, 6 and Modified Alternative 7 would not result in direct impacts to riparian habitat because there would be no impacts to Drainages B or F. The Project has the potential to result in indirect permanent impacts through the degradation of riparian habitat. Permanent indirect impacts include impacts to adjacent habitats caused by storm water runoff, traffic, and litter. In addition, construction has the potential to indirectly affect riparian habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species.

Storm water and litter indirect impacts would be avoided through compliance with the Caltrans Storm Water Management Plan (SWMP), the Caltrans and City National Pollutant Discharge Elimination System (NPDES) permits, and implementation of Project-specific BMPs as required in Minimization Measure WQ-2. The Project would reduce local traffic congestion, and regional exhaust emissions would be the same as the No Build Alternative, or would increase slightly. Therefore, the Build Alternatives would not cause new indirect impacts to sensitive natural communities from exhaust. Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in Avoidance Measure INV-1. Implementation of these measures would avoid or minimize permanent indirect impacts to riparian habitat, and no substantial impacts would occur.

c) Less Than Significant Impact. Alternatives 3 and 6 would not result in temporary impacts to potential United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), or Regional Water Quality Control Board

(RWQCB) jurisdiction. Modified Alternative 7 would result in < 0.01 ac of temporary impacts to potential USACE and RWQCB jurisdiction and < 0.01 ac of temporary impacts to CDFW jurisdiction within Drainage E.

Alternative 3 would result in permanent impacts to 0.01 ac of potential USACE nonwetland waters and 0.08 ac of potential CDFW jurisdiction. Impacts to potential RWQCB jurisdiction would be the same as impacts to USACE jurisdiction.

Alternative 6 would not permanently impact potential USACE, CDFW or RWQCB jurisdiction.

Modified Alternative 7 would result in permanent impacts to 0.01 ac of potential USACE jurisdictional nonwetlands and 0.08 ac of potential CDFW jurisdiction. Impacts to potential RWQCB jurisdiction would be the same as impacts to USACE jurisdiction.

Temporary and permanent impacts to jurisdictional areas are minimal; however, they would require authorization from the CDFW and RWQCB prior to construction as specified in Measures WET-1 and WET-2. Construction of the Project, whether Alternative 3, 6, or Modified Alternative 7, would not result in impacts to federally protected wetlands, as defined by Section 404 of the Clean Water Act, No mitigation is expected to be required.

d) No Impact. The site does not appear to function as a wildlife movement corridor, and Alternatives 3, 6, and Modified Alternative 7 would not affect any wildlife movement corridors. The Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites. No mitigation is required.

e) No Impact. There are no local policies or ordinances relevant to the Project site. No mitigation is required.

f) No Impact. There are no Multispecies Habitat Conservation Plans (MSHCPs) or any other adopted Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) within the Project area. No mitigation is required.

V. CULTURAL RESOURCES

The potential for the Project to result in impacts related to cultural resources was assessed in the *Historic Property Survey Report* (July 2011); the *Archaeological*

Survey Report (July 2011); the *Historical Resources Evaluation Report* (July 2011); the *Paleontological Identification and Evaluation Report* (July 2010); the Addendum to the *Paleontological Identification and Evaluation Report* (July 2011); the results of which inform the discussions provided in Sections 2.7 and 2.10 of this Environmental Document. The following is based on that information.

a) and b) No Impact. It was determined that the only cultural resources within the Project Area of Potential Effects (APE) do not appear to be eligible for inclusion in the National Register, do not qualify as a “historical resource” pursuant to CEQA, or are exempt per the Section 106 Programmatic Agreement (PA). In addition, it has been determined that a finding of no impact is appropriate because there are no historical resources within the Project area limits, or there are no impacts to historical resources pursuant to CEQA Guidelines Section 15064.5(b)(3).

No archaeological resources requiring evaluation were identified through archival research, consultation, or field survey, and the APE does not appear to be sensitive in terms of archaeological resources.

Although considered unlikely, there is the potential to encounter unknown buried cultural materials or human remains within the APE during construction of Alternatives 3, 6, and Modified Alternative 7. If buried archaeological or cultural materials are exposed during construction, it is Caltrans policy that work in the area must halt until a qualified archaeologist can evaluate the nature and significance of the find. In the event that previously unknown buried cultural materials or human remains are encountered during construction, compliance with standard Measures CR-1 and CR-2 would avoid and/or minimize potential impacts to previously unknown cultural resources or human remains, and no mitigation is required.

c) No Impact. The results of the research and field surveys conducted for this Project show that fossiliferous Pleistocene sediments deposited during the last 2 million years may be encountered during excavation of undisturbed sediments. Consequently, during construction, there would be a potential for significant, unrenewable paleontological resources to be encountered at depths greater than 3 ft below ground surface (bgs). It is very likely that sensitive sediments would be encountered during construction in areas that do not contain deep fill. Measure PAL-1, provided in Section 2.10, requires preparation and implementation of a Paleontological Mitigation Plan, which would provide the specific procedures to avoid impacts to

paleontological resources during construction of Alternatives 3, 6, and Modified Alternative 7, and no mitigation is required.

d) No Impact. No human remains are known to exist within the Project APE. Therefore, Alternatives 3, 6, and Modified Alternative 7 would not impact any known human resources. If human remains are exposed during construction, State Health Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. In addition, the Caltrans District 8 Environmental Branch Chief would be immediately notified. The above requirements are included in Measure CR-2 for cultural resources, provided in Section 2.7. No mitigation is required.

VI. GEOLOGY AND SOILS

The potential for the Project to result in impacts related to geology and soils was assessed in the *Revised Preliminary Geotechnical Report/Structures Design Report* (March 4, 2009), the *Revised Addendum to Structure Preliminary Geotechnical Report* (June 2011), and the *Structure Preliminary Geotechnical Report* (June 2012), the results of which inform the discussion provided in Section 2.9 of this Environmental Document. The following is based on that information.

a-i) Less Than Significant Impact. No active or potentially active faults have been identified on the Project site. In addition, the site is not located within a designated Alquist-Priolo Earthquake Fault Zone (Bryant and Hart 2007), and a site-specific fault investigation is not required. No known active fault traces project toward or across the Project site. Additionally, the potential for ground surface rupture is considered to be low. No mitigation is required.

a-ii) No Impact. The Project site is located in the highly seismic Southern California region within the influence areas of several fault systems. These fault systems are considered active and well-defined and are capable of producing potentially damaging seismic groundshaking. Therefore, it is anticipated that the Project site will periodically experience ground acceleration as the result of moderate to large seismic events. Therefore, the structures (e.g., bridges, culverts) constructed for Alternatives 3, 6, and Modified Alternative 7 would be potentially subject to substantial impacts related to seismic ground shaking. The Project would be designed in accordance with the requirements of the Caltrans Seismic Design Criteria and the Uniform Building Code. With implementation of Minimization Measure GEO-1,

potential impacts due to earthquakes would be less than significant. No mitigation is required.

a-iii) Less Than Significant Impact. Due to the depth to groundwater, which is anticipated to be greater than 30 ft bgs, and based on a preliminary screening-level liquefaction analysis, the site has a low-to-moderate liquefaction potential. However, as detailed in Measure GEO-2, the potential for liquefaction effects on the structures constructed for Alternatives 3, 6, and Modified Alternative 7 would be further investigated during final design. If recommended by the geotechnical investigation, final design will include design features related to liquefiable soils. Therefore, potential impacts related to liquefiable soils would not be substantial. No mitigation is required.

a-iv) No Impact. The Project site and the surrounding area are relatively flat and lack natural slopes. Therefore, Alternatives 3, 6, and Modified Alternative 7 would not result in substantial impacts related to landslides. No mitigation is required.

b) Less Than Significant Impact. Construction activities for Alternatives 3, 6, and Modified Alternative 7, such as grading and cut-and-fill slopes, would disturb soil and alter existing landforms. Temporary impacts would include soil compaction and an increased possibility of soil erosion. Exposed soils could potentially be particularly prone to erosion during construction of Alternatives 3, 6, and 7, especially during heavy rains. Erosion impacts related to water quality are evaluated in Section 2.8, Water Quality and Storm Water Runoff. In addition, Measures WQ-1 and WQ-2, described in Section 2.8, Water Quality and Storm Water Runoff, would minimize impacts during construction and operation related to erosion. No mitigation is required.

c) and d) Less Than Significant Impact. Construction of the Project, whether Alternative 3, 6, or Modified Alternative 7 could subject the Project area to impacts associated with expansive and collapsible soils. Caltrans' Standard Conditions require the preparation of a detailed geotechnical investigation during Final Design phase of the Project, which is specified in Measure GEO-2 in Section 2.9. The detailed geotechnical investigation would address the potential for expansive and collapsible soils in the Project area. If expansive and/or collapsible soils are identified, Final Design would include design features related to expansive and collapsible soils. No mitigation is required.

e) **No Impact.** No septic or alternative waste treatment systems would be required for the I-215/Barton Road Interchange Improvement Project under Alternatives 3, 6, and Modified Alternative 7 because it is a transportation facility and would not generate sewer demand. Therefore, no impacts would occur, and no mitigation is required.

VII. GREENHOUSE GAS (GHG) EMISSIONS

An assessment of GHG emissions and climate change is included in the body of the environmental document. Carbon dioxide (CO₂) emissions are projected to increase over existing levels in both the No Build and Project conditions. 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. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS

The potential for the Project to result in impacts related to hazards and hazardous materials was assessed in the *Initial Site Assessments* (ISAs) (February 2010 and November 2013 [Modified Alternative 7]), Aerially Deposited Lead Investigation Report (ADL Report) (May 2010), Asbestos Containing Materials and Lead Based Paint Survey Report (ACM and LBP Report) (September 2011), Phase II Site Investigation Report, Agricultural Properties, La Crosse Avenue and De Berry Street (February 2014a), Phase II Site Investigation Report, Automotive FBR Generator/Pas Tex Plastics, 21823 and 21825 Barton Road (February 2014b), Phase II Site Investigation Report, Quick Stop, 22087 Barton Road (February 2014c), Phase II Site Investigation Report, A-1 Cleaners, 21900 Barton Road (February 2014d), Phase II Site Investigation Report Arco Station, 22115 Barton Road (February 2014e), and Phase II Site Investigation Report, Shell Station, 22045 Barton Road (February 2014f). the results of which inform the discussion provided in Section 2.9 of this Environmental Document. The following is based on that information.

a) **Less Than Significant Impact.** During construction, there is the potential to encounter hazardous materials in the soils and existing road materials. Alternatives 3, 6, and Modified 7 would involve disturbance of soils and demolition of existing buildings and structures; therefore, hazardous soil contaminants such as aerially

deposited lead (ADL) and structural materials (polychlorinated biphenyls [PCBs], creosote, lead chromate, lead-based paint [LBP], and asbestos-containing material [ACM]) may be encountered during Project construction. In addition, soil impacted by petroleum hydrocarbons, halogenated compounds, or other hazardous materials could be encountered at the properties that would be partially or fully acquired for the Project.

PSIs were conducted in November 2013 through January 2014, after circulation of the Draft IS/EA, to characterize the contamination on the properties of concern and to meet the requirements of the measures included in the ISA and the Draft IS/EA. Soil sampling was conducted at the following properties and separate PSI reports were prepared for each property: Automotive FBR Generator/Pas Tex Plastics, Quick Stop, A-1 Cleaners, Arco Station, Shell Station, and Agricultural Properties. The PSI reports determined that no further investigation was warranted at any of the sites except for 21900 Barton Road (former A-1 Cleaners).

Typical hazardous materials used during construction (e.g., solvents, paints, fuels) would be handled in accordance with standard procedures. There are standard regulations and Caltrans policies (avoidance and minimization measures) that must be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction of Alternatives 3, 6, and Modified Alternative 7 to protect human health and the environment.

Avoidance and Minimization Measures HAZ-1 through HAZ-12 require site investigations of potentially impacted properties and proper handling of hazardous waste and materials. Measures HAZ-1, HAZ-9, and HAZ-12 were completed as part of the PSIs conducted in November 2013 through January 2014. As recommended by the PSIs, Measures HAZ-13 through HAZ-16 have been incorporated to require remediation of the volatile organic compound contamination at 21900 Barton Road (former A-1 Cleaners) prior to grading. With implementation of these measures, potential impacts related to hazardous materials would not be substantial.

Routine maintenance activities during Project operation would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, Project operation would not result in significant impacts related to hazardous waste or materials. No mitigation is required.

b) No Impact. Alternatives 3, 6, and Modified Alternative 7 would not create a significant hazard to the public or the environment through any reasonably foreseeable upset or accident conditions involving the release of hazardous materials. As discussed above in Response VIII.a, routine hazardous materials such as paint, solvents, and fuel would be used, handled, stored, disposed of, and transported during construction of the Project in accordance with applicable local, State, and federal regulations. No mitigation is required.

c) Less Than Significant Impact. Grand Terrace Elementary School is located in the Project area in the northeast quadrant of the interchange at 12066 Vivienda Avenue. However, Alternatives 3, 6, and Modified Alternative 7 do not involve the potential for release of hazardous emissions or handling of acutely hazardous materials. Therefore, the Project would not result in substantial impacts to Grand Terrace Elementary School related to hazardous materials. There are no other schools located within 0.25 mi of the areas of construction for the Project. No mitigation is required.

d) Less Than Significant Impact. The records search for the *Initial Site Assessment* (ISA) prepared for Modified Alternative 7 (November 2013) identified four sites listed on the Historical Cortese list located within 0.5 mi of the Project site. Two of these sites, the Grand Terrace Gas-Up and Quick Stop ARCO, are located within the Project area. These two sites are identified as leaking underground storage tank (LUST) sites, which may have impacted soils and groundwater in the Project area. A third LUST site, the Former Shell/Texaco Service Station, is located in the Project area. In addition, four sites, identified as A-1 Cleaners, Automotive FBR Generator, Pas Tex Plastics Facility, and Orkin Pest Control, are located within the Project area and have used or stored hazardous materials. As specified in Measure HAZ-9, detailed in Section 2.11 of this Environmental Document, subsurface investigations at the sites that may have been impacted by hazardous waste, was required. The subsurface investigations required by Measure HAZ-9 were completed as part of the PSIs conducted in November 2013 through January 2014. The PSI reports determined that no further investigation was warranted at any of the sites except for 21900 Barton Road (former A-1 Cleaners). As recommended by the PSIs, Measures HAZ-13 through HAZ-16 have been incorporated to require remediation of the volatile organic compound contamination at 21900 Barton Road (former A-1 Cleaners) prior to grading. Implementation of Measures HAZ-9 and HAZ-13 through HAZ-16 includes all necessary action(s) to avoid and/or minimize potential impacts. No mitigation is required.

e) and f) No Impact. The Project is not located within 2 miles (mi) of a public airport, public use airport, or private airstrip. Therefore, Alternatives 3, 6, and Modified Alternative 7 would not result in the construction of any features that would pose a hazard to air traffic in the vicinity of the Project area. Therefore, the Project would not result in aviation-related safety impacts. No mitigation is required.

g) Less Than Significant Impact. Traffic delays are expected during Project construction. In addition, travel times through the Project area could increase due to construction staging. As a result, some impairment to emergency response times may occur. Implementation of a Caltrans-required Transportation Management Plan (TMP), as outlined in Measure TR-1, provided in Section 2.5 of this Environmental Document, would minimize these impacts during construction. No mitigation is required.

h) No Impact. The Project site is in an urbanized area surrounded by existing commercial, industrial, and residential development. There are no wildlands or fire hazard areas in the vicinity of the Project site, and no impacts are anticipated. No mitigation is required.

IX. HYDROLOGY AND WATER QUALITY

The potential for the Project to result in impacts related to hydrology and water quality was assessed in the *Water Quality Technical Study (WQAR)* (October 2013), the results of which inform the discussion provided in Section 2.9 of this Environmental Document. The following is based on that information.

a) Less Than Significant Impact. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. The total disturbed area under Alternatives 3, 6, and Modified Alternative 7 would be approximately 40.4 ac, 33.6 ac, and 29.5 ac, respectively. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction of the Project with the potential to be transported via storm runoff into receiving waters.

Alternative 3 would result in a permanent decrease in impervious surface area of 5.9 ac compared to the footprint of the existing interchange, which would result in a decrease in runoff and pollutant loading in the interchange area. Alternatives 6 and Modified Alternative 7 would increase the impervious surface area by 3.2 ac and 1.2 ac, respectively. An increase in impervious area would increase the volume of

runoff during a storm, which would more effectively transport pollutants to receiving waters. Compared to existing conditions, runoff under the Project would be expected to contain higher concentrations of sediments, trash, petroleum products, metals, and chemicals, which are pollutants associated with road runoff. The Project would be required to comply with applicable National Pollution Discharge Elimination System (NPDES) permit requirements for construction and operation to protect the beneficial uses of waters. In addition, Best Management Practices (BMPs) would be implemented during construction, and as determined necessary, BMPs will be implemented in conjunction with completion of the Project. Measures WQ-1 and WQ-2, provided in Section 2.8, are regulatory requirements that would minimize Project impacts to water quality. No mitigation is required.

b) No Impact. Dewatering is not anticipated during Project construction. Alternatives 3, 6, and Modified Alternative 7 would not use groundwater during operation, and no substantial groundwater supply impacts would occur. No mitigation is required.

c) and d) Less Than Significant Impact. The area drainage patterns are anticipated to be similar to the existing condition, with minor modifications to accommodate the improvements to the freeway interchange facilities. These modifications would include extension of culverts, construction of drainage inlets, and minor alignment of freeway-adjacent channels. Alternatives 3, 6, and Modified Alternative 7 would result in additional impervious surface with increased runoff in the Project area. However, routine implementation of the Caltrans Storm Water Management Program would prevent a substantial increase in the rate or amount of surface runoff that could lead to erosion, siltation, or flooding. In addition, applicable BMPs would be implemented during construction of the Project, and as determined necessary, BMPs will be implemented in conjunction with completion of the Project. Measures WQ-1 and WQ-2, provided in Section 2.8 of this Environmental Document, are regulatory requirements that would minimize impacts to water quality. No mitigation is required.

e) Less Than Significant Impact. The Project involves modification of an existing transportation facility. The Project would not increase peak storm flows such that they would impact downstream drainage facilities. Compliance with the Caltrans National Pollutant Discharge Elimination System (NPDES) permit requirements, as noted in Measure WQ-2, provided in Section 2.8, would minimize any incremental pollutant loading associated with the increased surface area of Alternatives 6 and Modified Alternative 7. No mitigation is required.

f) No Impact. As discussed above, runoff associated with the Project would be treated to remove pollutants of concern, as required; detailed in Measures WQ-1 and WQ-2 in Section 2.8 of this Environmental Document. No substantial degradation to water quality will occur. No mitigation is required.

g) and h) No Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C8687H (August 28, 2008), there are no 100-year floodplains within the Project area. The Project does not propose the construction of housing or structures in a 100-year flood hazard area. The Project would not result in impacts related to the 100-year floodplain. No mitigation is required.

i) No Impact. The increased runoff associated with the Project would be controlled through minor modifications to the drainage system and the Project would not encroach in the 100-year floodplain. The Seven Oaks Dam is located several miles upstream of the Santa Ana River. According to the City of Grand Terrace General Plan (April 2010), in the event that this dam failed, it would eventually enter the Santa Ana River floodplain, and the increased water volume could potentially flood the lower elevations of the northwest corner of the City along the river's course; however, this area is not within the Project area. The Project would not expose people or structures to a significant risk of flooding, and no mitigation is required.

j) No Impact. Due to the distance of the Project site from the ocean, there is no foreseeable risk of tsunami inundation. There is also low risk from seiches (oscillations in enclosed bodies of water caused by seismic waves) or mudflows in the Project area due to the lack of bodies of water or hillsides in the Project area. No mitigation is required.

X. LAND USE AND PLANNING

The potential for the Project to result in impacts specific to land use and planning was discussed in Sections 2.1 and 2.3 of this Environmental Document. The following is based on that information.

a) Less Than Significant Impact. The I-215/Barton Road interchange is an existing freeway interchange within a largely developed area. Construction of the interchange improvements, whether under Alternative 3, 6, or Modified Alternative 7, would result in no further division of the established community. A few residents and businesses are anticipated to be displaced from within the Project area, however, the Project area is a very small portion of the two cities in which the Project is located,

and it is anticipated that all relocated residences and businesses will remain within the limits of one of the two cities in which the Project area is located. No mitigation is required.

b) No Impact. Alternatives 3, 6, and Modified Alternative 7 are consistent with the pertinent goals and policies of the current General Plans of the City of Grand Terrace and the City of Colton, the design concept and scope of the Project are consistent with the project description in the Southern California Association of Government's 2012 Regional Transportation Plan and the 2013 Federal Transportation Improvement Program. Additionally, the Project is included in the Nexus Study that is appended to San Bernardino Associated Governments' 2009 Congestion Management Program (CMP). No mitigation is required.

c) No Impact. There are no habitat conservation plans or natural community conservation plans that include the area of the Project. Accordingly, Alternatives 3, 6, and Modified Alternative 7 would not conflict with any such plans. No mitigation is required.

XI. MINERAL RESOURCES

The potential for the Project to result in impacts specific to mineral resources was assessed based on review of the City of Grand Terrace and City of Colton General Plans.

a) and b) No Impact. According to the Cities' General Plans, the Project area is not in a mineral resource zone. In addition, the Project would be constructed within and adjacent to an existing freeway interchange. Alternatives 3, 6, and Modified Alternative 7 would not result in the loss of availability of known mineral resources or a mineral resource recovery site. No mitigation is required.

XII. NOISE

The potential for the Project to result in noise impacts was assessed in the *Noise Study Report* (NSR) (February 2012) and the *Supplemental Noise Study Report* (September 2013), the results of which inform the discussion provided in Section 2.13 of this Environmental Document. The following is based on that information.

a) Less Than Significant Impact. Sensitive receivers would be exposed to construction noise during construction of the Project. The closest sensitive receivers are within 50 ft of the Project construction areas and may be subject to short-term noise levels of 91 A-weighted decibels (dBA) maximum instantaneous noise level

(L_{max}) or higher generated by construction activities. In addition to standard construction equipment, the construction may include the use of pile drivers. Pile driving generates noise levels of approximately 93 dBA L_{max} at 50 ft. If pile driving is conducted concurrently with site preparation, the construction site could potentially generate noise levels of 95 dBA L_{max} at a distance of 50 ft.

Minimization Measures N-1 and N-2, detailed in Section 2.13.4 of this Environmental Document, stipulate compliance with the construction hours specified in the City of Colton's Bid and Contract template and City of Grand Terrace Municipal Code, as well as adherence to the Cities' ordinances and the Caltrans Standard Special Provisions (SSP) pertinent to minimizing potential noise impacts during construction. Implementation of measures N-1 and N-2, detailed in Section 2.13.4 of this Environmental Document, the short-term noise impacts during Project construction would not be substantial.

b) Less Than Significant Impact. During construction, the Project could generate groundborne vibration and groundborne noise in conjunction with pile driving. If pile driving takes place, potential impacts would be minimized through implementation of the minimization measures N-1 and N-2, referenced above. No mitigation is required.

c) Less Than Significant Impact. Potential long-term noise impacts after construction is completed would only be associated with vehicular traffic. A 3 dBA difference is generally the point at which the human ear will perceive a difference in noise level. To determine whether the Project could result in a substantial permanent increase in ambient noise levels in the Project vicinity, a comparison of the baseline noise level to the projected build noise level was made. Traffic noise was evaluated for the worst-case traffic condition. Future traffic noise levels for Alternatives 3, 6, and Modified Alternative 7 were determined at 144 receiver locations, using the worst-case traffic operations (prior to speed degradation) along the I-215 mainline.

In the future (2040) build condition, one or more receivers would experience up to a 10 dBA increase in noise levels under Alternative 3, up to a 9 dBA increase in noise levels under Alternative 6, and up to an 8 dBA increase in noise levels under Modified Alternative 7, each in comparison to baseline noise levels. Based on the projected comparative increases identified, a perceptible increase in noise may be experienced at some receiver locations. However, none of the receivers in the Project area are expected to experience a 12 dBA increase, and because their existing locations are in close proximity to the existing I-215 and/or Barton Road facilities,

these sensitive receptors are recognized as already being in an area—or in close proximity to an area—that is regularly subject to noticeable noise associated with vehicular traffic. After construction is completed, the noise associated with vehicular traffic is not expected to be perceived as substantially changed. No mitigation is required.

d) Less Than Significant Impact. As discussed in the follow-up to checklist item XIIa above, in addition to standard construction equipment, the Project may involve the use of pile drivers. Pile driving generates noise levels of approximately 93 dBA L_{max} at 50 ft. If pile driving is conducted concurrently with site preparation, the construction site could potentially generate noise levels of 95 dBA L_{max} at a distance of 50 ft. However, construction noise levels are expected to be minimized through compliance with Caltrans and City standards for construction, which is stipulated in Measures N-1 and N-2 in Section 2.13.4 of this Environmental Document.

e) and f) No Impact. The Project is not located within an airport land use plan and is not located within 2 mi of a public airport, a public use airport, or a private airstrip. In addition, Alternatives 3, 6, and Modified Alternative 7 would not expose people residing or working in the Project area to excessive noise levels due to its proximity to an airport. Therefore, there would be no aviation-related noise impacts. No mitigation is required.

XIII. POPULATION AND HOUSING

The potential for the Project to result in impacts related to population and housing is discussed in Sections 2.2 and 2.3 of this Environmental Document. The following is based on that information.

a) No Impact. Alternatives 3, 6, and Modified 7 are consistent with the General Plans of the Cities of Colton and Grand Terrace, respectively, as well as applicable regional transportation plans. The I-215/Barton Road Interchange Improvement Project would improve an existing freeway interchange, in an area already substantially developed. Alternatives 3, 6, and Modified Alternative 7 would accommodate approved and planned growth in the associated study area. The Build Alternatives would not contribute to new, unplanned growth in the Project area and would not induce substantial population growth in the area. No mitigation is required.

b) and c) No Impact. Alternative 3 would result in 8 residential displacements and Alternatives 6 and Modified Alternative 7 would result in 2 residential displacements

each. As discussed in Section 2.3 of this Environmental Document, there are sufficient residential resources available for the residents potentially displaced by the Project within the Cities of Grand Terrace and Colton. The Build Alternatives would not necessitate the construction of replacement housing elsewhere. No mitigation is required.

XIV. PUBLIC SERVICES

The potential for Alternatives 3, 6, and Modified Alternative 7 to result in impacts related to provision of emergency services is discussed in Section 2.4 of this Environmental Document. The following is based on that information.

a) Less Than Significant Impact. During construction, traffic would be temporarily detoured in conjunction with short-term ramp closures and/or delayed due to lane closures, which could potentially result in a temporary increase in emergency response times in the Project area. Implementation of TR-1, detailed in Section 2.5.4 of this Environmental Document, is expected to minimize these potential impacts.

After completion of construction, the Project is expected to reduce congestion at the I-215/Barton Road interchange. The Project would not substantially affect the provision of police or emergency services in the Project area. The Project would not result in substantial physical impacts to government facilities in the study area. In addition, the Project does not include the construction of housing or other uses that would necessitate the construction of additional public facilities such as schools or parks in the study area. No mitigation is required.

XV. RECREATION

The potential for the Project to impact recreational resources is discussed in Section 2.1 of this Environmental Document. The following is based on that information.

a) Less Than Significant Impact. There are no parks or recreational facilities within the Project area; however, there is one park, Grand Terrace Fitness Park, located immediately adjacent to a portion of the northwestern limits of the Project. The Project involves modifications to an existing freeway interchange and components of the local circulation system directly related to the operation of the freeway interchange. While the Project is not expected to directly impact Grand Terrace Fitness Park, the improvements to the freeway interchange, which includes improvements to associated local streets directly related to the operation of the I-215/Barton Road interchange, will result in construction of a local street, a portion

of which will be immediately adjacent to the southern limits of Grand Terrace Fitness Park. Although no additional parking is planned to be constructed for visitors to the Park, the change to the Park's overall proximity to local streets is anticipated to modestly increase the Park's visibility to the local community, which may result in an increase in the use of the park. However, because the capacity of the existing parking lot for the park will not be increased, and because the planned primary means of access to the park is not by driving; it is not expected that substantial physical deterioration of this Park facility will result, or that the Project will contribute to a substantially accelerated deterioration of Grand Terrace Fitness Park due to the Park's visibility being slightly increased. No mitigation is required.

b) No Impact. Alternatives 3, 6, and Modified Alternative 7 do not include the construction of recreation facilities or expansion of recreational facilities. No mitigation is required.

XVI. TRANSPORTATION/TRAFFIC

The potential for Alternatives 3, 6, and Modified Alternative 7 to result in impacts related to traffic was assessed in the *Interstate 215/Barton Road Traffic Operations Analysis* (December 2011) and the Barton Road Interchange Improvement Project Roundabout Analyses (August 2013), the results of which inform the discussion provided in Section 2.5 of this Environmental Document. The following is based on that information.

a) No Impact. The Project is consistent with the pertinent goals and policies of the current General Plans of the City of Grand Terrace and the City of Colton. Alternatives 3, 6, and Modified Alternative 7 include design features to reduce congestion at the I-215/Barton Road interchange, improve operational performance of local intersections in immediate proximity and directly related to the operational performance of the I-215/Barton Road interchange, while also accommodating pedestrians, bicycles, and mass transit.

Traffic delays are expected during construction of the new ramps and Barton Road overcrossing, as well as realignment of local streets and modifications to local intersections. Construction of Alternatives 3, 6, and Modified Alternative 7 would delay traffic on Barton Road, La Crosse Avenue, Grand Terrace Road, Commerce Way, Vivienda Avenue, Michigan Street, the I-215 mainline, and the I-215/Barton Road ramps. No extended ramp closures and no full local road closures are anticipated. All potential construction-related traffic impacts associated with the

Build Alternatives would be short term, and are expected to be minimized by implementation of the TMP, as discussed in Section 2.5 of this Environmental Document. No mitigation is required.

b) No Impact. Alternatives 3, 6, and Modified Alternative 7 would reduce congestion and improve the operational performance of the I-215/Barton Road interchange. The Project is included in the Nexus Study that is appended to San Bernardino Associated Governments' 2009 Congestion Management Program (CMP). The Project would not conflict with the CMP for San Bernardino County. The design concept and scope of the Project are consistent with the project description in the Southern California Association of Governments 2012 Regional Transportation Plan and the 2013 Federal Transportation Improvement Program. No mitigation is required.

c) No Impact. The closest airports in the vicinity of the Project are the San Bernardino International Airport and the Flabob Airport. Both of these airports are almost 5 mi from the Project site. Alternatives 3, 6, and Modified Alternative 7 would not result in the construction of any features that would affect air traffic patterns and would not result in any operational effect that would result in a change in air traffic patterns in the vicinity of the Project area. No mitigation is required.

d) No Impact. Alternatives 3, 6, and Modified Alternative 7 would be constructed in compliance with Caltrans' Standard Construction Specifications. The planned improvements do not include any hazardous design features or incompatible uses. No mitigation is required.

e) Less Than Significant Impact. During construction of Alternatives 3, 6, and Modified Alternative 7, traffic would be temporarily delayed, and travel times would increase due to construction staging and closures along the freeway. Inadequate emergency access is not expected to result, even during construction of the Build Alternatives. However, a temporary increase in emergency response times within or through the Project area is possible during construction. Measure TR-1, detailed in Section 2.5 of this Environmental Document, requires preparation of a TMP. The TMP is expected to minimize Project impacts during construction. No mitigation is required.

f) No Impact. Alternatives 3, 6, and Modified Alternative 7 would not conflict with any adopted policies, plans, or programs supporting alternative transportation in the Cities of Colton and Grand Terrace, and these Alternatives are consistent with those

Cities' General Plans. The Build Alternatives include Class 2 bicycle lanes and sidewalks, and would not impact public transit routes. No mitigation is required.

XVII. UTILITIES AND SERVICE SYSTEMS

The potential for Alternatives 3, 6, and Modified Alternative 7 to result in impacts specific to utilities and service systems is discussed in Section 2.4 of this Environmental Document. The following is based on that information.

a) No Impact. Alternatives 3, 6, and Modified Alternative 7 would not result in the generation of wastewater. Therefore, the Project would not exceed wastewater treatment requirements that would require the construction of new wastewater treatment facilities. In addition, the Project would comply with the requirements of the Caltrans NPDES permit. No mitigation is required.

b) No Impact. The Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. No mitigation is required.

c) Less Than Significant Impact. The Project includes drainage modifications to accommodate the reconstructed interchange. In conjunction with implementation of the measures identified in Section 2.8.4 of this Environmental Document, the construction of these modifications will not result in significant environmental effects. No mitigation is required.

d) No Impact. The Project involves improvements to an existing interchange. No new or expanded water entitlements would be needed as a result of the Project, and no mitigation is required.

e) No Impact. The Project would not generate wastewater that requires treatment.

f) Less Than Significant Impact. The solid waste disposal requirements for the Project would be minor, temporary, and limited to the construction phase of the Project. The amount of waste material generated during construction would be limited and would be properly disposed of and/or recycled, as appropriate. No mitigation is required.

g) No Impact. Construction waste would be disposed of in accordance with federal, State, and local regulations related to recycling, which would minimize the amount of waste material entering local landfills. No mitigation is required.

XVIII. Mandatory Findings of Significance

a) Less Than Significant Impact. The potential for Alternatives 3, 6, and Modified Alternative 7 to result in significant impacts to biological or cultural resources specific is discussed in Sections 2.14, 2.15, 2.16, 2.17, 2.18, 2.7 and 2.10 of this Environmental Document. Alternatives 3, 6, and Modified Alternative 7 would not degrade the quality of the environment or substantially impact any animal or plant species or associated habitat. The Project is expected to result in only minimal impacts to areas under the jurisdiction of CDFW, RWQCB and ACOE; however, the Project will not impact wetlands. Measures WET-1 through WET-3, detailed in Section 2.15 of this Environmental Document, stipulate compliance with the applicable permit processes for any impacts to jurisdictional areas resulting from this Project.

Based on the results of the Historic Property Survey Report, Archaeological Survey Report, and Historical Resources Evaluation Report, it was determined that the cultural resources within the Project APE do not appear to be eligible for inclusion in the National Register, do not qualify as “historical resources” pursuant to CEQA, or are exempt per the Section 106 Programmatic Agreement (PA). In addition, it has been determined a finding of No Historic Properties Affected is appropriate because there are no historical resources within the Project Area limits, pursuant to CEQA Guidelines section 15064.5(b)(3).

To avoid impacts to any paleontological resources that may be present within the Project area where excavation may take place in areas of undisturbed soils, a Paleontological Mitigation Plan, detailed in measure PAL-1 in Section 2.10.4 of this Environmental Document, would be developed during the Final Design phase of the Project and implemented during the Construction phase of the Project.

No mitigation is expected to be required.

b) Less Than Significant Impact. As discussed in Section 2.21 of this Environmental Document, construction of the I-215/Barton Road Interchange Improvement Project, whether through Alternative 3, 6, or Modified Alternative 7, would not result in any impacts that are individually limited, but cumulatively considerable.

c) Less Than Significant Impact. As discussed in Section 2.1 (Land Use), Section 2.2 (Growth), Section 2.3 (Community Impacts), Section 2.4 (Utilities and Emergency Services), Section 2.5 (Traffic and Transportation/Pedestrian and Bicycle

Facilities), Section 2.6 (Visual/Aesthetics), Section 2.8 (Water Quality and Storm Water Runoff), Section 2.9 (Geology/Soils/Seismic/Topography), Section 2.11 (Hazardous Waste/Materials), Section 2.12 (Air Quality), and Section 2.13 (Noise) of this Environmental Document, the Project will not result in environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.