buildings were all designed to satisfy the guidelines of the Eastvale I-15 Corridor Specific Plan and the design goals and polices of the Design Elements of the City of Eastvale's General Plan (City of Eastvale 2013). Furthermore, because the I-15 Express Lanes Project has been designed to be consistent with the Department's highway landscape and design policies and BMPs, the added express lanes would be consistent in form and scale with the visual character of the surrounding existing urban landscape. As detailed in Section 2.18.2 (Cumulative Impacts), the proposed project would potentially result in cumulatively considerable effects when combined with past, present, and reasonable foreseeable future projects; however, the proposed project would not contribute to cumulative impacts in combination with the planned and programmed projects listed in Table 2-11.

c) Less than Significant Impact. Operation of the project would not result in the exposure of persons to any substantially adverse natural or human-made hazards that could directly or indirectly cause substantial adverse effects on human beings, such as geologic hazards, air emissions, noise, hazardous materials, or flooding. All potential effects that could result in substantial exposure of persons to hazards during construction of the project are fully addressed with recommended avoidance and minimization measures, and no permanent impacts have been identified as significant in this Initial Study. Avoidance and minimization measures would be incorporated into the project in order to reduce and control the effects the project would have on the environment.

2.19.2 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR), Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

The cumulative study area includes projects within vicinity of the project site. Table 2-11 summarizes recent and currently planned developments, as obtained from the city planning and development departments.

Table 2-11. Cumulative Projects List

Name	Jurisdiction	Description	Status
I-15 Express Lanes Project (EA 0J080)	RCTC	The project would construct one to two tolled express lanes between Cajalco Road to SR-60, post miles (PM) 36.8 and 51.4 in Riverside County, for a distance of 14.6 miles	The draft Environmental Document was circulated for public review July 29, 2015 through August 28, 2015. Adoption of the environmental document is anticipated in early 2016.
Riverside Transmission Reliability Project (RTRP)	City of Riverside	Proposed Project includes the construction, operation, and maintenance of a new approximately 10-mile double- circuit 230,000-volt (230 kV) transmission line, a new 230 kV substation (Wildlife Substation), a new 230/69 kV substation (Wilderness substation), and five new 69 kV subtransmission line segments integrated into Riverside Public Utilities' existing subtransmission system. The project is bordered to the north by SR-60, to the west by I-15, and to the south by SR-91.	Construction to start in 2017 and be completed in 2019.
Silverlakes Equestrian and Sports Park—5555 Hamner Avenue	Norco	Development of a 122-acre equestrian center and sports facility that would be used for various recreational uses, such as equestrian events, soccer, football, lacrosse, etc.	Project has been partially constructed.
Nexus by William Lyon Homes— southwest corner of Limonite Avenue and Hamner Avenue	Eastvale	Construction of 224 multi-family dwelling units.	Currently under construction and units are being sold.
The Lodge—north of Limonite Avenue, east of Sumner Avenue, west of Scholar Way	Eastvale	Construction of 350 single-family attached residential dwellings.	Homes are under construction and being sold.
Eastvale Business Park—southwest corner of Limonite Avenue and Archibald Avenue	Eastvale	Construction of 11 industrial and warehouse buildings totaling 694,770 square feet.	Approved in April 2014.
Estancia—southeast corner of Sumner Avenue and Citrus Street	Eastvale	Construction of 196 single-family residential development.	Homes are under construction and being sold.
The Trails at Eastvale by Richmond Communities (TR 36423)	City of Eastvale	A housing project located at the corner of Archibald Ave. and 65 th Street. Consists of 224 single family lots on 49 gross acres.	Approved by the City in May 2013. Homes are under construction and being sold.

Jurisdiction	Description	Status
City of Eastvale	40.01-acre development located at Schleisman Rd. and Scholar Way. Consists of 224 condo units including a tot lot, 2 community facilities, park, one detention basin, 448 garaged parking spaces, 47 off street spaces, and 87 on street spaces.	Approved by Riverside County in 2007. Homes are under construction and being sold.
City of Eastvale	Located on the south side of Limonite Ave as part of Eastvale Gateway South. The project consists of two, two-story medical buildings totaling 69,562 square feet and 327 parking spaces to be constructed in two phases on a 5.4-acre project site. Phase II is anticipated to begin one to two years after completion of Phase I. No emergency services or ambulances on site.	Construction completed in 2015 and facility is now open.
Riverside County Transportation Department	Widening along Limonite Avenue from Etiwanda Avenue to Bain Street.	Construction to start in late-2015 to early 2016
City of Eastvale	Subdivision of approximately 193- acres into 10 parcels located at Eastside of Hamner Avenue between Cantu-Galleano Ranch Road and Bellegrave Avenue. Consists of two industrial buildings totaling 2,040,897 sq. ft. on two of the ten parcels. The remaining land use consists of 2 detention basins, business park, and other mixed	Construction underway. Anticipated project completion on 2020.
	Jurisdiction City of Eastvale City of Eastvale City of Eastvale Riverside County Transportation Department City of Eastvale	JurisdictionDescriptionCity of Eastvale40.01-acre development located at Schleisman Rd. and Scholar Way. Consists of 224 condo units including a tot lot, 2 community facilities, park, one detention basin, 448 garaged parking spaces, 47 off street spaces, and 87 on street spaces.City of EastvaleLocated on the south side of Limonite Ave as part of Eastvale Gateway South. The project consists of two, two-story medical buildings totaling 69,562 square feet and 327 parking spaces to be constructed in two phases on a 5.4-acre project site. Phase II is anticipated to begin one to two years after completion of Phase I. No emergency services or ambulances on site.Riverside County Transportation DepartmentWidening along Limonite Avenue from Etiwanda Avenue to Bain Street.City of EastvaleSubdivision of approximately 193- acres into 10 parcels located at Eastside of Hamner Avenue between Cantu-Galleano Ranch Road and Bellegrave Avenue. Consists of z detention basins, business park, and other mixed use

Table 2-11. Cumulative Projects List

The following analysis evaluates the project's potential to contribute considerably to a cumulative impact.

As discussed previously, the proposed project would have no effect on land use, mineral resources, and recreation, and would not contribute either directly or indirectly to a cumulatively considerable impact in these resource areas. The potential for the proposed project to result in cumulative impacts that would be considered significant in the above mentioned resource areas is considered low, and the proposed project does not have the potential to result in cumulative impacts that would affect the health or sustainability of any of these resource areas.

For resources identified as having a less than significant impact with mitigation or a less than significant impact, a preliminary review of the potential impacts identified was conducted to determine if a reasonably foreseeable cumulative impact could occur. Based on this review, it was determined that the resources that could potentially contribute to significant cumulative

impacts to a considerable degree when combined with past, present, and reasonably foreseeable future projects are: aesthetics, agricultural resources, air quality, biological resources, cultural resources, paleontological resources, hazards/hazardous materials, hydrology and water quality, geology/soils, land use and planning, noise, transportation/traffic, and public services and utilities. A cumulative evaluation for these environmental resource topic areas is provided below.

Aesthetics

The resource study area (RSA) for aesthetics is considered to be the area within one mile of the project. The typical land uses within this area include residential, commercial, agricultural, and undeveloped land. Cumulative projects within the visual study area include the San Antonio Medical Plaza, I-15 Express Lanes Project, William Lyon Homes Residential Project, the Lodge Residential Project, and the Silverlakes Equestrian Project, and RTRP. The EIR for RTRP concluded that the project's incremental effect on visual resources would not be cumulatively considerable or significant given the urban character of the study area and because the facilities that are being introduced are not uncommon in urban areas and would not result in a noticeable change to the area's overall visual resource (City of Riverside 2012). The IS/MND for the Eastvale San Antonio Medical Plaza also concluded that the project's incremental effect on visual resources would not be cumulatively considerable or significant because the medical buildings were all designed to satisfy the guidelines of the Eastvale I-15 Corridor Specific Plan and the design goals and polices of the Design Elements of the City of Eastvale's General Plan (City of Eastvale 2013). The Lodge Residential Project would also comply with the zoning and land use designations for residential development in the area. The I-15 Express Lanes Project has been designed to be consistent with the Department's highway landscape and design policies/BMPs. The added express lanes would be consistent in form and scale with the visual character of the existing urban landscape that surrounds the existing I-15 corridor. Furthermore, the express lanes would have continuity with the existing I-15, which is the dominant feature along the majority of the project corridor. The overall visual character of the project corridor is considered to be low; visual resources would not be altered by the project (ICF 2014). Although the project is pending, the Silverlakes Equestrian Project Final EIR indicates that the project is not expected to have significant cumulative aesthetic impacts, and would not make a significant contribution to cumulatively considerable visual impacts or impacts related to light and glare.

For this project, it has been determined that the cumulative visual impacts would not be significant. By constructing an improved interchange and incorporating aesthetic medians, hardscape, and aesthetic railing on the Overcrossing, the project would have a slightly improved visual resource change and cumulative effects on the surrounding area would be less than significant.

Agricultural Resources

Agricultural resources are present throughout Riverside County; however, through the years there has been a reduction in agricultural resources as a result of development and urbanization in the County. Cumulative projects within the study area include the San Antonio Medical Plaza, I-15 Express Lanes Project, The Lodge Residential Project, William Lyon Homes Residential Project, the Silverlakes Equestrian Project, and RTRP. The San Antonio Medical Plaza is constructed on an existing retail center location and conforms to the requirements of the City of Eastvale General Plan and Zoning Code. The Lodge Residential Project would comply with the

City's General Plan and Zoning Code and compatible with the land use designation for residential units. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available. RTRP, as indicated in the Final EIR, would contribute incrementally to the decline of agricultural resources and permanently affect 1.5 acres of Farmland. Implementation of measures by the RTRP project to reduce these impacts, such as locating access roads, spur roads, staging areas, and construction sites to areas that minimize impacts on agricultural operations, would minimize impacts on agricultural resources but would not, however, reduce impacts related to the permanent reduction of agricultural land, which would be a significant and unavoidable impact. Furthermore, the Silverlakes Equestrian Project also contains prime agricultural soil; however, the project uses are consistent with agricultural uses in the City of Norco and the project would not construct substantial permanent buildings on the site. As such, the Silverlakes Equestrian Project would not make a significant cumulative contribution to agricultural resources, as the site could be used in the future for agriculture other than the equestrian uses. The proposed I-15/Limonite Avenue Interchange project would not result in the conversion of farmland, nor would it contribute to the cumulative impact on agricultural resources, as the area is committed for non-agricultural urban uses as designated in the City of Eastvale and City of Jurupa Valley General Plans.

Air Quality

The Resource Area for the project is within the South Coast Air Basin (SCAB), which includes the western portion of Riverside County, as well as all of Orange County, and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The nearest monitoring station to the proposed project is the Mira Loma-Van Buren Station, which is approximately 3.5 miles northeast of the project site. Criteria pollutants monitored at this station include ozone, NO₂, CO, PM₁₀, and PM_{2.5}. The ARB has classified the SCAB as an extreme nonattainment area for the state one-hour ozone standard and as a nonattainment area for the state eight-hour ozone standard. For the state CO standard, ARB has classified the SCAB as an attainment area. ARB has classified the SCAB as an extreme nonattainment area. ARB has classified the SCAB as an attainment area. ARB has classified the SCAB as an attainment area. ARB has classified the SCAB as an attainment area. ARB has classified the SCAB as an extreme nonattainment area for the federal eight-hour ozone standard. For both the one-hour and eight-hour federal CO standard, U.S. EPA has classified the SCAB as a serious nonattainment area for the federal PM₁₀ standard and as a nonattainment area for the federal PM_{2.5} standard.

The construction schedule for some of the projects in Table 2-11 is uncertain, or some of the projects will be completed prior to or after completion of the proposed project. Therefore, there is the potential that construction of some of these projects would occur at the same time and would meet the cumulative project criteria for air quality. Measures for dust control during construction, as stipulated by SCAQMD Rule 403, would be implemented to ensure that the proposed project would not substantially contribute to potential cumulative impacts on air quality. Adherence to these regulations by each project in the project vicinity would also be required. Cumulative impacts, should they occur, would be minor and temporary.

The project is listed in the conforming 2015 FTIP and 2012–2035 RTP/SCS as well as the 2015 draft FTIP. The design concept and scope proposed are the same as the design concept and scope in the RTP and FTIP listings, and the project meets the regional and project-level air quality

conformity requirements. The air quality analysis is based on future traffic conditions in 2040. This accounts for future development in the project area and the region, as envisioned in local general plans; SCAG projections, amendments, and 2012–2035 RTP/SCS; and the roadway improvements listed in the 2015 FTIP. As a result, the analysis contained in Section 2.3 constitutes the operational cumulative analysis for the project. The analysis concluded that the proposed project would not conflict with or obstruct implementation of the applicable air quality management plan, violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment status under an applicable federal or state ambient air quality standard.

Biological Resources

The cumulative study area for biological resources includes Western Riverside County. This part of the county is primarily developed, with undeveloped areas planned for future development. The proposed project is located within a mix of residential, commercial, and agricultural lands, which are also planned for future development. Implementation of the projects listed in Table 2-11 will facilitate new growth and development on undeveloped lands that contain sensitive habitat or species. Increased population growth as permitted by the City and County's General Plans would increase disturbance on open space lands from human use, vehicle travel, and domestic and opportunistic animals.

The preservation of land through the MSHCP would limit any cumulatively considerable regional disruption of wildlife. Given that sensitive species currently occur within the cumulative study area, development proposals will be required to adequately mitigate impacts on wildlife and habitat before development is permitted. Participation and enforcement of the MSHCP will reduce cumulative impacts on sensitive species, and its implementation will protect habitat for these species. These activities would reduce cumulative impacts on biological resources to less than significant levels. In addition, present and future projects would comply with requirements of the MBTA to avoid, minimize, and /or mitigate potential impacts on protected nests and, pursuant to existing federal and state regulations, would be required to implement restoration and replacement efforts for any impacts on special-status plants and wildlife. After the incorporation of measures provided in this IS related to biological resources, the proposed project's incremental contribution would not result in a cumulatively considerable impact.

Cultural Resources

The project vicinity represents an area of high paleontological sensitivity. In particular, the young eolian deposits (Qye) and very old alluvial channel deposits (Qoa) within the project site have the potential to contain paleontological resources. Project-related excavations and ground disturbance activities could potentially result in impacts in areas with high paleontological resource sensitivity. Mitigation measures have been proposed to reduce these impacts. Cumulative project impacts on cultural and paleontological resources would vary based on the footprint of each project. All projects that could potentially affect cultural and paleontological resources would be required to evaluate and assess impacts and, if necessary, provide mitigation measures.

Paleontological Resources

The RSA includes the project site and the areas immediately surrounding the project site. As detailed in the PIR/PER, the proposed project is located in an area of high paleontological sensitivity. The young eolian deposits (Qye) and very old alluvial channel deposits (Qoa) within the project site have the potential to contain paleontological resources. It is possible that construction of the proposed project, in particular excavation for widening and replacement of the Overcrossing structure, would potentially result in negative impacts on these deposits, which have been assigned a high paleontological resource sensitivity. In order to reduce these impacts, a PMP (Measure **PALEO-1**) will be prepared and implemented.

There are several other projects in the immediate vicinity of the project that were reviewed for paleontological impacts: the I-15 Express Lanes Project, the San Antonio Medical Plaza, the Lodge, RTRP, and the William Lyon Homes Residential Project. The San Antonio Medical Plaza was built, and the Lodge Residential Project is being built, on previously approved retail center sites and land use designated for residential development, respectively. The EIR for RTRP concluded that impacts on paleontological resources would be less than significant with mitigation. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available. It is expected that the William Lyon Homes Residential project and I-15 Express Lanes Project site. However, because the projects would be discretionary actions and subject to CEQA, the project would be required to incorporate measures to reduce impacts on unknown, nonrenewable paleontological resources. Therefore, construction activities associated with the project, in conjunction with other projects, would not result in cumulative impacts related to unknown and nonrenewable paleontological resources.

Once the proposed project and other projects are operational, they would not have the potential to affect unknown and nonrenewable paleontological resources. Therefore, operation of the proposed project, in conjunction with other projects, would not result in significant cumulative impacts under CEQA related to unknown and nonrenewable paleontological resources.

Hazards/Hazardous Materials

The RSA for hazards/hazardous materials includes the area within 0.5 mile of each side of the proposed project. The cumulative projects in the RSA for hazards/hazardous materials include the San Antonio Medical Plaza, I-15 Express Lanes Project, the Lodge, RTRP, and the William Lyon Homes Residential Project. As a condition of approval for the San Antonio Medical Plaza the owner and tenant are required to store, handle, and dispose of any hazardous or medical waste in a manner that is in accordance with all applicable federal, state, County, and City laws, regulations, and rules. Furthermore, prior to issuance of a certificate of occupancy, copies of medical waste transportation permits issued by the County of Riverside Department of Environmental Health shall be provided to the City of Eastvale Planning and Building departments. The Lodge Residential Project would not result in the storage, handling, or transport of hazards or hazardous materials. The environmental documents for the William Lyon Homes Residential Project and I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017.

According to the ISA prepared for the proposed project, several RECs are located within the proposed project boundaries (see Table 2-4). These include ACM, potential lead, and heavy metals associated with pavement striping; potential PCBs in pole- or pad-mounted electrical transformers; and a potential explosive hazard associated with the Gas Company pipeline should construction activities extend into the pipeline easement adjacent and parallel to the north side of Limonite Avenue. The EIR for RTRP concluded that the project would have less than significant impacts because it includes measures to ensure that hazardous wastes and materials are stored in a responsible manner and meet all regulatory requirements.

The proposed project, in conjunction with other projects, could expose the public to ACMs, LBP, PCBs, medical wastes, and pesticides during construction activities, should these materials be present. If construction of the William Lyon Homes were to occur at the same time, the potential would exist for additional exposure. However, adherence to project-specific requirements and measures would limit the potential for simultaneous exposure. Cumulative effects, should they occur, would be minor and temporary. Therefore, the proposed project, when combined with other projects, would not result in significant cumulative impacts under CEQA related to ACMs, LBP, PCBs, medical wastes, and pesticides.

Hydrology and Water Quality

The cumulative study area for hydrology and water quality is the Middle Santa Ana Hydrologic Area (HA), which encompasses approximately 520 square miles and includes portions of San Bernardino and northwestern Riverside County and is within the Santa Ana Hydrologic Basin Planning Area of the Santa Ana RWQCB. The Santa Ana River is the major drainage course in the Santa Ana Hydrologic Basin Planning Area.

The proposed project and other planned projects within the watershed are subject to compliance with the RWQCB's Santa Ana River Basin Plan, NPDES Permits, Riverside County codes, and pertinent city codes. Compliance with these plans and regulations would help minimize impacts on surface water runoff, groundwater recharge, groundwater elevations, and water quality impacts. As stated in the Final EIR for RTRP, with implementation of Environmental Protection Elements, BMPs as required by the SWPPP, and conformance to the standard Best Available Control Measures of both SCE and RPU, impacts on water resources would be less than significant and no mitigation measures would be required. Furthermore, the Final EIR for the Silverlakes Equestrian Project, which is pending, indicated that the project would not result in cumulatively considerable impacts on water resources, flood control, or water quality. Continued development in the project area is a continuation of the existing pattern of urban development that has resulted in extensive modifications to watercourses. The area's watercourses have been channelized, and drainage systems have been constructed in response to the urbanization and associated impervious surface area that has been created. The projects being considered for the cumulative analysis related to hydrology and water quality include all planned developments that would discharge to the Santa Ana River Hydrologic Unit. Because cumulative hydrology and water quality impacts are caused by the buildout of projects that increase the amount of impervious areas as well as pollutant loads, cumulative development is considered to be the development of all available parcels with plans for development within the Santa Ana River Hydrologic Unit over an extended period of time.

New development and redevelopment can increase urban pollutants in dry weather as well as stormwater runoff from project sites in wet weather. Each project must comply with NPDES permitting requirements and include BMPs to minimize impacts on water quality and local hydrology in compliance with local ordinances and plans adopted to comply with the MS4 Permit, Drainage Area Master Plan (DAMP), and Local Implementation Plan (LIP) as well as other applicable regulatory permits (e.g., De Minimus Permit, Construction General Permit, Section 404 Permit, 401 Water Quality Certification, CDFW Section 1600 Streambed Alteration Agreement). Each project must consider impaired receiving waters and the annual TMDL. The TMDL program identifies all constituents that adversely affect the beneficial uses of water bodies. It also identifies appropriate reductions in pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses found in the Basin Plan. Thus, by complying with TMDLs, the project's contribution to overall water quality improvement in the watershed, in context of the regulatory program, accounts for cumulative impacts.

The proposed project would include BMPs that would reduce pollutant concentrations in runoff from the roadway. In addition, the proposed storm drains would include longitudinal drainage systems and inlets and/or graded line drains that would be sized to accommodate runoff in the tributary watershed under buildout conditions.

Regional programs and BMPs, such as TMDL programs, the DAMP/LIP, and the MS4 Permit, have been designed in anticipation of future urbanization within the region. The regional control measures contemplate the cumulative effects of proposed development. The proposed project would be required to comply with the regulations in effect at the time the grading permits are issued. Compliance with these regional programs and the Construction General Permit constitutes compliance with programs to address cumulative water quality impacts. Therefore, the proposed project's contribution to cumulative hydrology and water quality impacts would not be substantial. The proposed project would not contribute to cumulative hydrology, floodplain, water quality, and/or stormwater runoff impacts in combination with the planned and programmed projects listed in Table 2-11.

Geology/Soils

The RSA includes the area within 0.5 mile of each side of the project. The cumulative projects in the RSA for geology and soils include the I-15 Express Lanes Project, San Antonio Medical Plaza, the Lodge, RTRP, and the William Lyon Homes Residential Project. Based on adoption of an Initial Study/Mitigated Negative Declaration, the San Antonio Medical Plaza would not have a significant effect on the environment, including geology and soils. The Lodge Residential Project would not result in significant effects on the environment, as the project would be built on land that is approved for residential development and built to standard engineering requirements. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. Construction of RTRP and the proposed project have the potential to overlap. The EIR for RTRP concluded that the project would result in less than significant impacts on geology and soils.

The proposed project, in conjunction with other planned projects in the vicinity, may result in short-term increases in erosion due to grading activities. Increased development density in the surrounding areas could expose persons and property to potential impacts due to seismic activity.

However, construction in accordance with the accepted engineering standards and building codes, on a project-by-project basis, will reduce the potential for structural damage due to seismic activity to the maximum extent feasible.

Noise

The RSA for noise includes the area within 0.5 mile of each side of the project. The cumulative projects in the noise RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, the Lodge, RTRP, and the William Lyon Homes Residential Project. The San Antonio Medical Plaza is constructed within a retail center and complies with the City of Eastvale General Plan and Zoning Code and consistent with the development of the vicinity. Based on adoption of an Initial Study/Mitigated Negative Declaration, significant noise impacts are not anticipated to occur. The Lodge Residential Project would comply with applicable City construction noise standards to limit noise exposure to surrounding sensitive receptors. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. The Final EIR for RTRP concludes less than significant impacts related to noise impacts, and no significant unavoidable impacts associated with noise. The timing of construction and potential alignment of RTRP and the proposed project could overlap. Compliance with city and county municipal codes would place restrictions and time limits on construction activities. Due to adherence to these codes, the cumulative impact associated with the two projects' construction noise would be less than significant. In addition, because construction-related noise generated under the proposed project would be addressed by implementation of the noise control measures provided in NOI-1, construction-related impacts from the proposed project would not result in a cumulatively considerable impact.

Cumulative noise impacts were considered for the future design year 2040, which accounts for future development in the project area. As a result, the analysis contained in Section 2.12 constitutes the operational noise cumulative analysis for the project.

Traffic/Transportation

The RSA for construction traffic includes the area within 0.5 mile of each side of the project. The cumulative projects in the RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, RTRP, and the William Lyon Homes Residential Project. Construction of the San Antonio Medical Plaza conforms to the requirements of the City of Eastvale General Plan and Zoning Code for its permitted use and was designed to meet and exceed the minimum development standards of the zoning district. The San Antonio Medical Plaza project does not conflict with on-street vehicular traffic of adjacent land uses. The Lodge Residential Project would comply with the General Plan and Zoning Code for residential development and be subjected to fair share improvements to lessen any impacts related to traffic. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. The Final EIR for RTRP states that mitigation measures would reduce all potential transportation-related impacts to less than significant levels and a statement of overriding considerations would not be required. Construction of RTRP and the proposed project could occur at the same time. The proposed project includes the preparation of a TMP to reduce potential construction-related traffic conflicts, detours, and delays. The TMP would include identification of detour routes within the construction area, placement of appropriate signs, cones, and barricades in the vicinity of construction, scheduling

of construction activities during off-peak hours, and development of plans that ensure emergency access and entry to existing residences and businesses within the construction areas. Traffic control during construction may include off-peak lane closures and nighttime traffic detours to allow falsework construction. A staged construction plan would be implemented to keep the existing bridge and ramps open to traffic. This impact would be temporary and would be less than significant with the implementation of Measure **PS-1** in Section 2.14.2. Construction-related impacts from the proposed project would not result in a cumulatively considerable traffic impacts.

The traffic analysis for the proposed project is based on future traffic conditions in the Year 2040, which accounts for future development in the project area. As a result, the analysis in Section 2.16 constitutes the operational cumulative analysis for the proposed project. In 2040, without the proposed project, the northbound I-15 off-ramp to Limonite Avenue would function at an unacceptable LOS (E and F) during both the AM and PM peak hours. With the proposed project, the northbound I-15 off-ramp to Limonite Avenue would function at an acceptable LOS (A for both AM and PM peak hours, and the northbound on-ramp would function at an acceptable LOS B for both AM and PM peak hours in 2040. The proposed project would generally reduce vehicle delays and improve LOS in the project area. Therefore, the proposed project is not anticipated to contribute to permanent cumulative impacts that affect mobility in the project area.

Other projects in the area may be under construction in the same timeframe as the proposed project. To the extent that construction periods overlap, there is a potential for cumulative local level traffic impacts from multiple project detours and lane reductions occurring simultaneously in and adjacent to the project area, potentially resulting in deterioration of traffic operations on local roadways. The Cities and County would coordinate the timing of project detours and lane closures for all projects in the area in order to minimize traffic impacts. With minimization Measure **PS-1**, the proposed project would have no adverse short-term impacts on traffic/transportation; therefore, the project would not contribute either directly or indirectly to a cumulatively considerable impact.

Public Services and Utilities

The RSA for the project includes the project site and properties immediately adjacent to the project. The cumulative projects in the RSA include the I-15 Express Lanes Project, San Antonio Medical Plaza, RTRP, and the William Lyon Homes Residential Project. Based on adoption of an Initial Study/Mitigated Negative Declaration, the San Antonio Medical Plaza would not result in significant impacts to public service and utilities. As a condition of approval, the developer would be required to submit a plan of water and sewer service to determine connection points. The Jurupa Community Services District will provide services contingent upon approval of an availability letter by the Board of Directors, compliance with Jurupa Community Service District rules, regulations, and payment of appropriate fees. The Lodge Residential Project would require approval and service agreements from utilities prior to permitting approval. The environmental documents for the William Lyon Homes Residential Project and the I-15 Express Lanes Project are not yet available, and RTRP is scheduled for construction in 2017. As stated in the Final EIR for RTRP, significant impacts on public services and utilities are not anticipated to occur. Furthermore, RTRP would not result in any significant unavoidable impacts on public services or utility systems. Construction of RTRP and the proposed project could occur at the same time.

Construction activities of one or more projects at the same time in the project area could result in temporary, localized, site-specific disruptions, including partial and/or complete street and lane closures, and detours. This could lead to an increase in delay times for emergency response vehicles during construction. The potential for disruption or obstruction of emergency services access in the project area to occur as a result of construction activities would be avoided with Measure **PS-1.** Cumulative effects of construction, if they occur, would be minor and temporary.

2.18.3 Avoidance, Minimization, and/or Mitigation Measures

No additional avoidance, minimization, or mitigation measures are needed beyond those proposed under the individual resource discussions.

Chapter 3 Coordination and Comments

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this proposed project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings, and coordination with resource agencies and Native American individuals and organizations. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Consultation with several agencies occurred in conjunction with preparation of the proposed project technical reports and this Initial Study. These agencies are identified in the various technical reports and include CDFW, USFWS, and NAHC.

Members of the local government agencies have also attended monthly Project Development Team (PDT) meetings. The PDT meetings involve discussions, status, and progress of the proposed project. The representative attendees included the Department, the County of Riverside, City of Jurupa Valley, the City of Eastvale, and various consultants.

3.1 Coordination with Resource Agencies

The Department, as a State Permittee to the MSHCP, is responsible for following the State Permittee Project Review process (MSHCP, Vol. 1, Section 6.0, pages 6-84). The Department submitted the NES (MI) to CDFW and USFWS for MSHCP consistency review. Following review and consultation, the Wildlife Agencies provided the Department with a concurrence e-mail documenting MSHCP consistency (see Appendix F). An updated USFWS species list was received on October 12, 2015. One new species, thread-leaved brodiaea (Brodiaea filifolia), was identified on the list. However, this species is a fully covered species under the MSHCP and no suitable habitat is present, thus no survey or additional evaluation is necessary.

The NAHC was contacted on October 17, 2012 and was sent a letter and map depicting the project location. A Sacred Lands Data Files search and list of potentially interested Native American Groups and Individuals was requested. The NAHC responded on October 18, 2012. They stated that a search of their Sacred Lands Database did not yield any sacred lands or traditional cultural properties within the APE. In addition, the NAHC provided a list of Native American contacts in the region. On February 25, 2013, the Department sent letters and maps showing the project location, and a project layout map, to the contact received from the NAHC. Follow-up phone calls and emails were sent on April 10, 2013 and May 6, 2013. As of October 12, 2015, no additional responses have been received.

3.2 Coordination with Property Owners

3.2.1 Park and Ride

Coordination Meetings have also occurred to discuss the Park and Ride Facility. These meetings occurred on January 8, 2013 and March 26, 2013. The layout of the Park and Ride Facility was also presented and discussed during multiple PDT meetings. All stakeholders were in agreement with the proposed reconstruction of the Park and Ride Facility. A summary of the coordination meeting discussion is included below.

January 8, 2013 Park and Ride Facility Coordination Meeting

This meeting was attended by the property owner's representative, consultants, and the County of Riverside. Due to the impacts of the interchange project, a discussion took place to either relocate or reconfigure the Park and Ride Facility. Two options were presented for review. Option 1 places the Park and Ride Facility in a similar footprint to existing conditions, but moved slightly northerly. Option 2 places the Park and Ride Facility under the proposed utility corridor easement with an access road along the Limonite Avenue frontage. As a result of current or planned land uses, relocation would not be feasible.

March 26, 2013 Park and Ride Coordination Meeting

This meeting was attended by the property owner's representative, consultants, and the County of Riverside. A status update meeting between the Department and the project team indicated a willingness to incorporate the Park and Ride Facility parking spaces into the adjacent planned commercial development. An interim condition would be required until the adjacent commercial development is built. A preliminary interim layout was presented and discussed. The preliminary interim layout discussion topics included bus access, entrance driveways, cell tower access, grading, parking spaces, retaining wall, sidewalks, and the development proposed for the northwest quadrant of the Wineville Avenue/Limonite Avenue intersection.

3.2.2 Request for Documents

Two adjacent property owners requested copies of the technical reports that have been prepared for the project. These documents were provided to the property owners in August 2014 and November 2014, respectively.

3.3 Circulation

The Initial Study (with Proposed) Mitigated Negative Declaration (IS/MND) was circulated for public review from July 20, 2015 to August 19, 2015. The document was made available for review at the Riverside County Transportation Department, Eastvale Public Library, Glen Avon Public Library, and also made available online at www.dot.ca.gov/dist8/Project-I-15-Limonite-Interchange.html. Notices regarding the document availability were published in the Press Enterprise and La Prensa (see Appendix G). A Public Meeting was held on August 6, 2015 from 6:30 pm to 8:30 pm at Dr. Augustine Ramirez Intermediate School in the City of Eastvale and a Public Outreach Meeting was held on August 19, 2015 from 6 pm to 8 pm at the Jurupa Valley City Hall in the City of Jurupa Valley.

A total of fifteen comment letters/e-mails were received during the availability period for the Draft IS/MND. Copies of the letters/e-mails and comments, along with the responses, are

provided in Appendix H. A CD containing the Final ISMND document will be sent to those who submitted a comment (between the public review comment submittal deadline period of July 20, 2015 to August 19, 2015) and provided a valid mailing address.

Commenter		Date
A.	State Clearinghouse and Planning Unit	August 19, 2015
В.	South Coast Air Quality Management District	August 19, 2015
C.	CA Department of Fish and Wildlife	August 18, 2015
D.	Southern California Edison	August 18, 2015
E. Dist	Riverside County Flood Control and Water Conservation trict	August 18, 2015
F.	Public Works Department, City of Eastvale	August 19, 2015
G.	Albert A. Webb Associates	August 20, 2015
H.	Soboba Band of Luiseno Indians	August 17, 2015
I.	Diane Vencek	July 27, 2015
J.	Mike Ritchie	August 5, 2015
K.	Betty Anderson	August 6, 2015
L.	Stephen Anderson	August 6, 2015
М.	R. O' Quinn	August 6, 2015
N.	Robert Zavana	August 6, 2015
О.	Diane Vencek	August 7, 2015

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4.1 California Department of Transportation, District 08

Rafih Achy	Project Manager
Kurt Heidelberg	Senior Environmental Planner
Kerrie Hudson	Senior Environmental Planner
Candice Hughes	Associate Environmental Planner
Tony Calvillo	Landscape Associate
Will Kuo	Storm Water
Mohammed Rahman	Design Oversight
Bahram Karimi	Associate Environmental Planner/Paleontology
Laura Chaffin	Associate Environmental Planner/Cultural Studies
Gabrielle Duff	Senior Environmental Planner/Cultural Studies
Kyle Myrick	Associate Environmental Planner/Biology
Scott Quinnell	Senior Environmental Planner/Biology
Farhana Islam	Environmental Engineering Oversight
Donald Cheng	Environmental Engineering Oversight
Olufemi Odufalu	Senior Environmental Planner/Environmental Engineering
Roy King	Floodwater

4.2 Riverside County

Marcia Frances Rose	Riverside County Transportation Department, Environmental Project Manager
John Marcinek	Riverside County, Project Manager
Susan Vombaur	Riverside County, Project Manager

4.3 City of Eastvale

Ruben Castaneda Assistant Engineer

4.4 Dokken Engineering

Pamela Dalcin-Walling	Project Manager
Juann Ramos	Project Engineer

4.5 ICF International

Brian Calvert	Project Director
Christy Corzine	Principal Environmental Planner/Document Reviewer
Youji Yasui	Environmental Planner
Mari Piantka	Environmental Planner
Daniela Sanaryan	Environmental Planner
Keith Cooper	Environmental Specialist/Air Quality
Peter Hardie	Environmental Specialist/Noise
Tricia Campbell	Fellow Technical Director/Biology
Marisa Flores	Environmental Planner/Biologist
Zackry West	Senior Regulatory Specialist/Biologist
Soraya Swiontek	GIS Analyst

Chapter 5 Distribution List

The IS or an NOP was distributed to local and regional agencies; and utility providers affected by the proposed project. In addition, property owners directly affected by the project were provided with Notice of Availability of the document. Updates to the names/address under Local Elected Officials indicate changes that have occurred since the draft IS/MND was circulated.

Federal and State Agencies

U.S. Fish & Wildlife Service 2800 Cottage Way Room W-2605 Sacramento CA 95825

U.S. Fish & Wildlife Service 777 E. Tahquitz Canyon Way, Suite 208 Palm Springs California 92262

California Department of Conservation Director 801 K Street, 24th Floor Sacramento CA 95814

California Department of Water Resources 1416 9th Street Sacramento CA 95814

California Air Resources Board 1001 I Street Sacramento CA 95812

State Water Resources Control Board 1001 I Street Sacramento CA 95814 U.S. Army Corps of Engineers Los Angeles District P.O. Box 532711 Los Angeles CA 90053-2325

California Dept. of Fish & Wildlife, Region 6 3602 Inland Empire Boulevard, Suite C-220 Ontario CA 91764

California Highway Patrol Inland Division (801) 847 East Brier Drive San Bernardino CA 92408-2820

Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento CA 95814

State Clearinghouse Executive Officer Office of Planning and Research 1400 Tenth Street Sacramento CA 95814

California Transit Association Director 1415 L Street, Suite 200 Sacramento CA 95814

Regional/County/Local Agencies

Southern California Association of Governments 3600 Lime Street, Suite 216 Riverside CA 92501

Water Quality Control Board Santa Ana Region 3737 Main Street #500 Riverside CA 92501

South Coast AQMD IGR Coordinator 21865 East Copley Drive Diamond Bar CA 91765

City of Eastvale Public Works Department 12363 Limonite Ave., Suite 910 Eastvale CA 91752

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Glen Avon Library 9244 Galena Jurupa Valley CA 92509 Riverside County Fire Department 2300 Market Street, Suite 150 Riverside CA 92501

Cal Fire/Riverside County Fire Department 210 West San Jacinto Ave, Perris CA 92570

Riverside County Sheriff's Department Jurupa Valley Station Danny Feltenberger, Captain 7477 Mission Blvd Riverside CA 92509

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Regional Water Quality Control Board (8) 3737 Main Street, Suite 500 Riverside CA 92501 Jurupa Community Services District 8621 Jurupa Rd Riverside CA 92509

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Local Elected Officials

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Hon. Laura Roughton, Council Member City of Jurupa Valley 8304 Limonite Avenue, Suite "M" Jurupa Valley CA 92509

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Pechanga Cultural Resources Department Anna Hoover, Cultural Analyst P.O. Box 2183 Temecula CA 92593 Rincon Band of Mission Indians Bo Mazzetti, Chairperson P.O. Box 68 Valley Center CA 92082

Ramona Band of Cahuilla Indians John Gomez, Jr., Cultural Resources P.O. Box 391670 Anza CA 92539

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AT&T Cellular Matt Kang Cable Engineering Services 10640 Sepulveda Blvd., Suite 1 Mission Hills CA 91345

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Jurupa Community Services District Keith Backus 11201 Harrel Street Mira Loma CA 91752 Southern California Gas Company Albert Cardoza Planning Department P.O. Box 3003 Redlands CA 92373-0306

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McDonalds USA C/O Jim Mnouian P.O. Box 661238 Arcadia CA 91066

County of Riverside C/O Assistant Director Real Estate P.O. Box 1180 Riverside CA 92502

Mira Loma JC C/O Farmers & Merchants Bank 302 Pine Ave Long Beach CA 90802 Mr. Rick Bondar McCune & Associates, Inc. 12080 Bellegrave Ave. Jurupa Valley-Mira Loma, CA 91752

APV INV PA 16 C/O Anthony P Vernola P.O. Box 217 Upland CA 91784

Kohls Department Stores Inc C/O Accting 1156 N Mountain Avenue Upland CA 91786

WLPX Eastvale C/O Accounting P.O. Box 670 Upland CA 91785

Michael Jason Hull P.O. Box 292102 Phelan CA 92329

MGP X Vernola C/O Merlone Geir Management 425 California St 11th Fl San Francisco CA 94104

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Eastvale Gateway I C/O Lewis Operating Corp P.O. Box 670 Upland CA 91785 Eastvale San Antonio Mob C/O San Antonio Comm Hospital 999 San Bernardino Rd Upland CA 91786

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Santa Ana River Water Co 10530 54th ST Mira Loma CA 91752

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CFT Dev C/O Legal Dept 1683 Walnut Grove Ave Rosemead CA 91770

Lowes HIW Inc C/O Legal Dept P.O. Box 1111 North Wilkesboro NC 28659

Homecoming II at Eastvale C/O Lewis Operating Corp P.O. Box 670 Upland CA 91785

HD Dev of Maryland Inc C/O Home Depot USA Inc Prop Tax De P.O. Box 105842 Atlanta GA 30348

Chino Basin Desalter Authority C/O Jurupa Comm Services Dist 11201 Harrel St Mira Loma CA 91752

12071 Bellegrave Ave C/O IDI Inc 3424 Peachtree Rd No 1500 Atlanta GA 30326

Target Corp RE Existing Purchase Agreement Ca 1000 Nicollet Mall TPN 12 Minneapolis MN 55403 Regal Cinemas Inc C/O Real Estate Dept 7132 Regal Ln Knoxville TN 37918

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James C McGrew P.O. Box 493 Fawnskin CA 92333

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Vons Companies Inc C/O Donn Matsuzaki 1371 Oakland Blv No 200 Walnut Creek CA 94596

Eastvale Gateway C/O Lewis Operating Corp P.O. Box 670 Upland CA 91785

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Jojo's Pizza Kitchen Miguel Hernandez 6237 Pats Ranch Rd Mira Loma CA 91752

Denny's General Manager 6285 Pats Ranch Rd Mira Loma CA 91752

Del Taco Store Manager 6269 Pats Ranch Rd Mira Loma CA 91752

Lowe's Home Improvement Tim Overon 6413 Pats Ranch Rd Mira Loma CA 91752

Fitness 19 Store Manager 6429 Pats Ranch Rd Mira Loma CA 91752

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Yogurtland Mira Loma Store Manager 12530 Limonite Ave Eastvale CA 91752

Starbucks Karl Smith 6170 Hamner Ave Riverside CA 92505 Petco Animal Supplies Roger P. 6301 Pats Ranch Rd Mira Loma CA 91752

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Ross Dress for Less Rosie, Store Manager 6317 Pats Ranch Rd Mira Loma CA 91752

Five Guys Burgers and Fries Store Manager 6285 Pats Ranch Rd Jurupa Valley CA 91752

Michaels Store Manager 6381 Pats Ranch Rd Mira Loma CA 91752

Kristie Vo Optometrist: Vo Kristie OD Kristie Vo 6445 Pats Ranch Rd Mira Loma CA 91752

Walgreens Store Eastvale Suya Xie 12574 Limonite Ave Eastvale CA 91752

Vons Marwan Dababanh 6170 Hamner Ave Eastvale CA 91752

The Home Depot A Qiang 6140 Hamner Ave Mira Loma CA 91752 Starbucks Store Manager 6170 Hamner Avenue Mira Loma CA 91752

Sport Chalet Michael Berlock 12399 Limonite Ave Mira Loma CA 91752

Kohl's Mira Loma Nancy Neal 12315 Limonite Ave Mira Loma CA 91752

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Tutor Time in Eastvale CA Tammie, Director 6020 Hamner Ave Eastvale CA 91752

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Banfield Pet Hospital Office Manager 12483 Limonite Ave Mira Loma CA 91752

Carino's Italian Grill Tad Stockery 12447 Limonite Ave, Mira Loma CA 91752 T.J. Maxx Julia P. 12387 Limonite Ave Mira Loma CA 91752

Buffalo Wild Wings Store Manager 12411 Limonite Ave #650 Mira Loma CA 91752

Edwards Theaters Eastvale Gateway Stadium 14 Movie Theater Store Management 12285 Limonite Ave Mira Loma CA 91752

DV Urgent Care & Family Practice Office Manager 6080 Hamner Ave #100 Mira Loma CA 91752

One Touch Beauty Store Manager 12552 Limonite Ave Mira Loma CA 91752

GNC Jerome Watts 12523 Limonite Ave Mira Loma CA 91752

The UPS Store Robert Wang 12523 Limonite Ave Mira Loma CA 91752

Target Store Manager 12471 Limonite Ave Mira Loma CA 91752

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Nutrishop Store Manager 12303 Limonite Ave Mira Loma CA 91752

Best Buy Jimmy Morris 12281 Limonite Ave Eastvale CA 91752

Staples Tom Johnson 12495 Limonite Ave Mira Loma CA 91752

Applebee's Rafael Vasquez 12375 Limonite Ave Mira Loma CA 91752 Styles For Less Amanda Gomez 12363 Limonite Ave Eastvale CA 91752

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On the Border Heather Colburn 12269 Limonite Ave Mira Loma CA 91752

Game Stop Chris Acker 12303 Limonite Ave Mira Loma CA 91752

Chase Bank Branch Manager 6060 Hamner Ave Eastvale CA 91752

Chapter 6 References

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- . 2013b. Final Scoping Questionnaire for Water Quality Issues for the I-15/Limonite Avenue Interchange Improvement Project. July.

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______. 2013d. Traffic Validation Data Values Memorandum. August.

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Appendix A – Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0001 PHONE (916) 654-5266 FAX (916) 654-6608 TTY 711 www.dot.ca.gov



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March 2013

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

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

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

MALCOLM DOUGHERTY Director

Appendix B – Environmental Commitment Record
ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

		Environmental Analysis							Enviro Com	nmental pliance
Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
Visual/Aesthetics										
AES-1 Per Department standards regarding erosion control, exposed slopes will be revegetated.	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Construction						
AES-2 Lighting for the project will be shielded.	p. 2-4	VIA	Resident Engineer / Contractor	Construction						
AES-3 The design and implementation of aesthetic elements shall be coordinated between local agencies and the Department and incorporated during final design.	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Final Design						
AES-4 Aesthetic treatments shall be coordinated during final design. At a minimum, decorative railing shall be used at the overcrossing, medians shall be aesthetically treated with hardscaping and wall treatments for the overcrossing and retaining walls shall include fractured rib texture (or other similarly aesthetic texture).	p. 2-4	VIA	Resident Engineer / Contractor, Landscape Architect	Final Design						
AES-5 Existing landscaping will be replaced in-kind (ratio of 1:1) (24- inch box), or if smaller plant material is chosen, then a 5:1 plant replacement ratio and one type of ground cover (grass) will be installed.	p. 2-4	VIA	Resident Engineer/ Contractor, Landscape Architect	Construction						
AES-6 Plant material will be installed with irrigation in a meandering design within the interchange.	p. 2-4	VIA	Resident Engineer/ Contractor, Landscape Architect	Construction						
AES-7 The sound wall shall have front planting vines and an irrigation system (controller included) shall be applied to it.	p. 2-4	ISMND	Resident Engineer/ Contractor, Landscape Architect	Constrution						

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

			Environmental Analysis								Enviro Com	nmental pliance
	Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Meas Comp (Date Initia	sure leted and als)	Remarks	YES	NO
AES-8	3 The meter with non-potable water will be installed as part of this project. The front planting will also be installed.	p. 2-4	ISMND	Resident Engineer/ Contractor, Landscape Architect	Construction							
Air Q	uality		<u> </u>				<u> </u>	I				
AQ-1	 The construction contractor shall comply with Caltrans' Standard Specifications in Section 14 (2010). Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18. 	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction	Standard Specification 14-9						
AQ-2	Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right of way line, depending on local regulations.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction	Standard Specification 19-9.03A						
AQ-3	Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.	p. 2-9	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction							
AQ-4	Wash off trucks as they leave the right of way as necessary to control fugitive dust emissions.	p. 2-10	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction							
AQ-5	Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment, as provided in California Code of Regulations Title 17, Section 93114.	p. 2-10	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction							

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	Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
AQ-6	Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts on existing communities.	p. 2-10	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						
AQ-7	Locate equipment and material storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.	p. 2-10	Air Quality Report	Resident Engineer / Contractor	Grading/ Construction						
AQ-8	Establish Environmentally Sensitive Areas (ESAs) or their equivalent near sensitive air receptors where construction activities involving extended idling of diesel equipment would be prohibited, to the extent feasible.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor/ District Air Quality	Prior to Construction						
AQ-9	Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction						
AQ-10	Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emissions of dust (particulate matter) during transportation.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction						
AQ-11	Promptly and regularly remove dust and mud on paved public roads from construction activity and traffic to decrease particulate matter.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	Grading/ Construction						
AQ-12	Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor, County	Prior to/ During Construction						
AQ-13	Install mulch or plant vegetation as soon as practicable following completion of all site disturbance activities to reduce windblown particulate in the area. Be aware that certain methods of mulch placement, such as straw blowing, may themselves cause dust	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	During/ After Construction						

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and visible emission issues; controls, such as dampened straw, may be needed.											
AQ-14 To control the generation of construction-related fugitive dust emissions, the Department will require construction contractors to comply with SCAQMD's Rule 403 requirements.	p. 2-10	Air Quality Report	Resident Engineer/ Contractor	During Grading/ Construction							
AQ-15 Use of lighter colored pavement where feasible.	p. 2-10	Initial Study	Resident Engineer/ Contractor	Include during Final Design/ Implement during construction							
AQ-16 Use EPA Tier-3 compliant off-road construction equipment during construction.	p.2-10	Initial Study	Resident Engineer/ Contractor	During grading/ construction							
 AQ-17: The following measures would ensure that adverse air quality impacts during construction are minimized: Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained, the lead agency shall use trucks that meet EPA 2007 model year NOx emissions requirements. Require all on-site construction equipment to meet the following: All off road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel 	p.2-10	Initial Study	Resident Engineer/ Contractor, County	During construction/A fter Construction							

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		Source (Technical								Jiance
Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
emissions control strategy for a similarly sized engine a	3	. ,					,			
 A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating perm shall be provided at the time of mobilization of each applicable unit of equipment. 	it									
 Encourage construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: Bhttp://www.aqmd.gov/home/programs/business/busine ss-detail?title=off-road-diesel-engines. 										
 Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, when feasible. 										
 Provide temporary traffic controls such as a flag person, during all phases of significant construction activity to maintain smooth traffic flow. 										
 Reroute construction trucks away from congested streets or sensitive receptor areas, to the extent possible. Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation. 										

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Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Meas Compl (Date : Initia	ure eted and Is) Remarks	YES	NO
- Limit soil disturbance to the amounts analyzed in the Draft	2001		mododro	T Habb		mododio			0	
MND.										
- All materials transported off-site shall be securely covered.										
- Reduce traffic speeds on all unpaved roads to 15 mph or less.										
 Construct or build with materials that do not require painting, to the extent feasible. 										
 Require the use of pre-painted construction materials where possible. 										
Biological Resources									•	
BIO-1 Burrowing Owl Preconstruction Survey and Avoidance. A preconstruction presence/absence survey for burrowing owl following MSHCP protocol must be conducted within 30 days prior to construction. The preconstruction survey will include the project impact area and a 300-foot buffer if between March 1 and August 31 (nesting season), and a 100-foot buffer if outside of this window. If the species is found nesting construction will not occur within a 300-foot buffer until either (1) a qualified ornithologist has confirmed that the pair is no longer nesting and all young (if present) are independently foraging or (2) active relocation by a properly permitted biologist will be performed with concurrence from CDFW and the U.S. Fish and Wildlife Service (USFWS). If active relocation is required then CDFW and USFWS shall be notified prior to any relocation occurring. Development of a relocation plan shall be prepared and concurred with by USFWS, CDFW, and the Riverside Conservation Authority (RCA) prior to relocation. Passive relocation will not be utilized if burrowing owl relocation is required. This measure would be superseded by any burrowing owl preconstruction survey protocol required in an acuttic	p. 2-41	NES/MI	Qualified Biologist	30 days prior to construction. During owl breeding season (March 1 – August 31)	Standard Special Provision 14-6.03A					

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Avoidance, Minimization, and/or Mitigation Measures permit (Clean Water Act [CWA] 401, 404; CDFW 1602) as long	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
BIO 2 MSHCP Construction Guidelines. The project will implement the	n 242		Posidont Engineer/	Construction						
BIO-2 MSHCP Construction Guidelines. The project will implement the construction guidelines in MSHCP Volume I, Section 7.5.3, as applicable. These will be incorporated in conjunction with the BMP measures in BIO-3.	p. 2-42	NES/MI	Resident Engineer/ Contractor/ Qualified Biologist	Construction						
 Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the County of Riverside and participating jurisdiction prior to construction. 										
Cleaning of natural vegetation will be performed outside of the active breeding season for birds as defined in the MSHCP (March 1 through June 30). If work needs to occur during this window, BIO-4 (below) will be implemented.										
 When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities. 										

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Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
 Training of construction personnel will be provided. A qualified biologist will conduct a training session for Project personnel prior to grading. The training will include a description of the species of concern and its habitats, the general provisions of the Federal Endangered Species Act (FESA) and the MSHCP, the need to adhere to the provisions of the FESA and the MSHCP, the penalties associated with violating the provisions of the FESA, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project site boundaries within which the Project activities must be accomplished. The qualified Project biologist will monitor construction activities for the duration of the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint (MSHCP Vol. I, Section 7.5.3). Additionally, ongoing monitoring and reporting will occur for the duration of the construction activities, vehicles, equipment, and construction materials to the proposed Project footprint and designated staging areas and routes of travel. The construction area(s) will be the minimal area necessary to complete the Project and will be specified in the construction plans. Construction limits will be 										
demarcated using environmentally sensitive area fencing (e.g., orange snow screen). Exclusion fencing should be maintained until the completion of all construction activities.										

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A	voidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Complete (Date and Initials)	d d Remarks	YES	NO
0	Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.										
0	Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.										
0	Short-term stream diversions will be accomplished by use of sand bags or other methods that will result in minimal instream impacts. Short-term diversions will consider effects on wildlife.										
0	Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.										
0	No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.										
0	The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre- existing access routes to the greatest extent possible.										
0	The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.										
0	During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint will be avoided.										

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 Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices. Active construction areas shall be watered regularly to 										
control dust and minimize impacts to adjacent vegetation (MSHCP Vol. I, Section 7.5.3).										
 All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off. 										
 BIO-3 Standard Best Management Practices. MSHCP best management practices (BMPs) will be implemented during construction (MSHCP Volume I, Appendix C), as applicable. Some of the measures in BIO-2 would also be considered BMPs and would apply in conjunction with the measures below. o Water pollution and erosion control plans shall be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements. 	p. 2-43	NES/MI	Resident Engineer/ Contractor/ Qualified Biologist	Construction						
 The footprint of disturbance shall be minimized to the maximum extent feasible. Employees will be instructed that their activities are restricted to the construction areas. Access to sites shall be via pre-existing access routes to the greatest extent possible. 										
 When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of 										

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sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the		. ,			,					
sediment from reentering the stream.										
 Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream. 										
 Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas. 										
 The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint. 										
 The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species. 										
 I o avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All 										

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	 food related trash items shall be enclosed in sealed containers and regularly removed from the site(s). The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs. 											
BIO-4	A pre-construction nesting bird survey will be conducted no more than 3 days prior to vegetation clearing, ground disturbance, or construction activities(including staging) during the breeding season (March 1 to August 31 for nonraptors, January 15 to June 30 for raptors). The survey will occur within the 300-foot buffer area for raptors and within the 200-foot buffer area for other birds. If nesting birds (or raptors) are found, an avoidance buffer will be established by a qualified biologist and will remain until a qualified biologist has determined that young have fledged or nesting activities have ceased. This measure will be superseded by any preconstruction nesting bird survey measure(s) required in an aquatic permit (CWA 401, 404; CDFW 1602).	p. 2-44	NES/MI	Qualified Biologist	Prior to Construction (30 days prior to vegetation clearing, ground disturbance, or construction if work would occur between January 15 to August 31 [remainder of measure would apply only if nesting birds or raptors are found])	Standard Special Provision 14-6.03A						
BIO-5	Preconstruction Bat Survey. To prevent impacts on daytime bat roosts and maternity roosts, a qualified biologist experienced	p. 2-45	NES/MI	Qualified Biologist	Prior to Construction							

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 Avoidance, Minimization, and/or Mitigation Measures with southern California bat species will conduct bat and bat roosting site surveys prior to removal of mature trees. This preconstruction survey will be conducted at any mature tree proposed for removal and within any man-made structure (e.g. bridges and culverts) that would be suitable for bat species within 100 feet of the PIA. If roosting sites or bats are not found, a report confirming their absence will be sent to the CDFW and no further mitigation will be required. If the preconstruction survey determines bats are roosting, and tree removal is scheduled to occur between October 1 and March 30 (outside of the maternity season of April 1 through September 30), the following two-step cutting process would occur: 1. Surrounding branches that do not house bats at the time that the eviction would occur would be removed. This would alter the condition of the roost tree, causing bats to abandon the roost. 2. The tree can then be fully removed. A visual inspection of the roost tree would be required prior to removal to verify that all bats have been successfully excluded. This work will be completed by a bat exclusion professional. If the preconstruction survey finds bats to be roosting and tree removal is scheduled to occur during the maternity season (April 1 through September 30), a qualified biologist will monitor the roost to determine if the roost site is a maternal roost. This may be determined by either visual inspection of the roost for bat 	Doc.	Discipline)	Measure	(Surveys to be conducted prior to removal of any mature trees [remainder of measure would be implemented if any bats are found])	standard)	Measure		Remarks	YES	NO
pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats will be evicted as described above. If the roost is determined to be a maternal										

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 roost, eviction cannot occur during the nursery season, as bat pups cannot leave the roost until they have reached maturity. In this case, a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will be established around the roosting site, within which no construction-related impacts will occur until the bat pups are mature enough to permanently leave the roost. If bat roosts are found within man-made structures during the maternity season (April 1 through September 30), no work will be permitted. In this case, a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will be established around the roosting site, within which no construction-related impacts will occur until the bat pups are mature enough to permitted. In this case, a 250-foot-wide buffer zone (or an alternative width, as determined in consultation with CDFW) will be established around the roosting site, within which no construction-related impacts will occur until the bat pups are mature enough to permanently leave the roost. If the roost is determined to not be a maternal roost, then bats will be evicted by a bat exclusion professional. 										
Cultural Resources										
CR-1 If cultural materials are discovered during construction, all earth- moving activity within and around the immediate discovery area will be diverted until a qualified archeologist can assess the nature and significance of the find.	p. 2-48	HPSR/ASR	Resident Engineer / Contractor	All ground disturbing activities/ Construction	Standard Specification 14-2.02A					
CR-2 In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning:	p. 2-48	HPSR/ASR	Resident Engineer / Contractor	All ground disturbing activities/ Construction						

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Avoidance, Minimization, and/or Mitigation Measures Gabrielle Duff, DEBC: (909)383-6933 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
followed as applicable.										
Paleontology	T	Γ	[I	I		I		
 PALEO-1 A Paleontological Mitigation Plan (PMP) shall be developed and implemented prior to commencement of project construction. The PMP shall follow the guidelines of the Department and the recommendations of the Society of Vertebrate Paleontology (SVP). These recommendations include: Attendance by a qualified paleontologist at the preconstruction meeting to consult with the grading and excavation contractors. On-site presence of a paleontological monitor to inspect for paleontological resources on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential and on a part-time basis during the original cutting of previously undisturbed deposits of low paleontological resources by the qualified paleontologist or paleontological monitor. Collection of stratigraphic data by the qualified paleontologist and/or paleontological resources a stratigraphic context for recovered paleontological resources. Preparation (repair and cleaning), sorting, and cataloguing of recovered paleontological resources. 	p. 2-48	PIR/PER	Qualified Paleontologist	During PS&E						

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 Donation of prepared fossils, field notes, photographs, and maps to a scientific institution with permanent paleontological collections, such as the San Bernardino county Museum (SBCM). Completion of a final summary report that outlines the results of the mitigation program. The PMP shall also incorporate the general guidelines for conformable impact mitigation to significant nonrenewable paleontological resources as developed by the SVP (1995). A PMP shall be prepared and submitted to the Department for review during the Plans, Specifications, and Estimates (PS&E) phase of the project 								-			
Hazards and Hazardous Materials											
HAZ-1 To avoid impacts from pavement striping during construction, testing and removal requirements for yellow striping and pavement marking materials shall be performed in accordance with Caltrans Standard Special Provision 15 2.02C(2) "REMOVE TRAFFIC STRIPES AND PAVEMENT MARKINGS CONTAINING LEAD". This Standard Special Provision requires a lead compliance plan for removal when residue is non- hazardous.	p. 2-69	ISA	Resident Engineer/ Contractor	Prior to Construction							
HAZ-2 Any leaking transformers observed during the course of the project shall be considered a potential PCB hazard. Should leaks from electrical transformers (that will either remain within the construction limits or will require the removal and/or relocation) be encountered during construction, the transformer fluid shall be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer shall be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations	p. 2-69	ISA	Resident Engineer/ Contractor	During Construction							

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Avoidance, Minimization, and/or Mitigation Measures and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCBs shall also be handled and disposed of in accordance with Title 22. Division 4.5 of the California Code of Regulations	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
and any other appropriate regulatory agency.										
 HAZ-3 Based on preliminary plans, right-of-way acquisition is not expected at the Chevron Gas Station, which is immediately adjacent to the project on the southwest corner of Limonite Avenue and Eastvale Gateway. Should final plans indicate that a portion of this parcel will be acquired for new right-of-way, a preliminary environmental screening (limited subsurface sampling and laboratory analysis) shall be performed for potentially elevated levels of petroleum hydrocarbons and MTBE contamination within the limits of proposed construction, and/or right-of way acquisition, adjacent to the existing Chevron Gas Station. Should the preliminary screening encounter elevated levels of petroleum hydrocarbons and/or MTBE a limited Phase II ISA shall be performed. The Phase II ISA shall consist of subsurface sampling and laboratory analysis and be of sufficient quantity to define the extent and concentration of contamination within the areal extent and depths of planned construction activities adjacent to the existing Chevron Gas Station. The Phase II ISA shall also provide both a Health and Safety Plan for worker safety and a Work Plan for handling and disposing contaminated soil during construction. 	p. 2-69	ISA	Resident Engineer	Prior to Construction						
HAZ-4 Should any previously unknown hazardous waste/material be encountered during construction, Caltrans Hazards Procedures for Construction shall be followed.	p. 2-70	ISA	Resident Engineer/ Contractor	During Construction						

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

			Environmental Analysis							Enviro Com	nmental pliance
	Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
HAZ-5	: In accordance with Section 112 of the Clean Air Act, which established the National Emission Standards for Hazardous Air Pollutants (NESHAP), specific work practices will be followed during demolitions and renovations of all facilities. As such, written notification to the South Coast Air Quality Management District is required ten working days prior to commencement of any demolition.	P 2-70	ED	Resident Engineer/ Contractor	Prior to demolition						
Hydro	logy and Water Quality				L.						
WQ-1	Construction site BMPs shall be implemented during construction for controlling potential pollutants on construction sites. The following BMP categories shall be considered and implemented, where feasible: Soil Stabilization Practices; Sediment Control Practices; Tracking Control Practices; Wind Erosion Control; Non-Storm Water Controls; and Waste Management and Material Pollution Controls.	p. 2-78	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor	Final Design (incorporate BMPs into project), Prior to/ during grading and construction (implement BMPs)	Standard Specification 13-4.01					
WQ-2	Implement Design Pollution Prevention, Low Impact Development (LID), source control, and treatment control BMPs (where feasible and applicable) in compliance with NPDES permit requirements.	p. 2-78	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary	Resident Engineer / Contractor	Final Design (incorporate BMPs into Project), Prior to/ during grading and construction (implement BMPs)						

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

		Environmental Analysis								Enviro Comp	nmental pliance
Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline) Materials	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Mea Comp (Date Initi	sure bleted e and ials)	Remarks	YES	NO
WQ-3 Construction will be scheduled to minimize soil-disturbing work during the rainy season.	p. 2-78	Report. Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor	During ground- disturbing activities and construction							
WQ-4 A Notice of Intent will be filed with the Santa Ana Regional Water Quality Control Board (SARWQCB) for coverage under the state-wide NPDES permit for construction-related discharges. The contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP) that sets forth the BMPs that will be implemented on site. The BMPs will be implemented to minimize spills and keep potentially contaminated materials used during construction out of the drainage waterways as documented in the SWPPP.	p. 2-79	Location Hydraulic Study, Water Quality Questionnaire, Preliminary Geotech Design Report, Preliminary Materials Report.	Resident Engineer / Contractor/ District Stormwater, NPDES	Final Design(incorp orate BMPs into project), Prior to/ during grading and construction (implement BMPs)							
Noise	1	1		1		-		T	1		
NOI-1 As directed by the Department, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity,	p. 2-97	NSR, NADR	Resident Engineer / Contractor	Post PS&E	Standard Special Provision 14-8.02						
			Page 19 of 22								

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

Page # Source (Technical Environment) and/or finance of the page # Source (Technical Environment) and/or finance of the page # Responsible for Development and/or finance of the page # Measure Measure finance of the page # Measure (Completed finance of the page #) No notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources. Image # No No Measure VES No Public Services, Transportation and Traffic Development Call No No<				Environmental Analysis								Enviro Com	nmental oliance
and installing actuate barlies and/on statuonally construction initial status initial status <th></th> <th>Avoidance, Minimization, and/or Mitigation Measures notifying adjacent residents in advance of construction work,</th> <th>Page # in Env. Doc.</th> <th>Source (Technical Study, Environmental Document, and/or Technical Discipline)</th> <th>Responsible for Development and/or Implementation of Measure</th> <th>Timing/ Phase</th> <th>If applicable, corresponding construction provision: (standard, special, non- standard)</th> <th>Action(s) Taken to Implement Measure</th> <th>Mea Comp (Date Initi</th> <th colspan="2">Measure Completed (Date and Initials) Remark</th> <th>YES</th> <th>NO</th>		Avoidance, Minimization, and/or Mitigation Measures notifying adjacent residents in advance of construction work,	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Mea Comp (Date Initi	Measure Completed (Date and Initials) Remark		YES	NO
Public Services, Transportation Management Plan (TMP) shall be developed by the Department to minimize potential impacts to emergency services and commuters during construction. p. 2-104 CIA Resident Engineer/ Contractor, County Final Design/ prior to construction Standard Specification adopted the California Murc D) 2014 edition to provide for uniform standards and specifications for all official traffic control Devices (California MUTCD) 2014 edition to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Traffic Control Devices Committee (CTCDC). The Department requested and has received a letter to confirm substantial conformance from the Federal Highway Administration (FHWA) for California MUTCD 2014 edition. The California MUTCD 2014 edition includes all policies on traffic control devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents. p. 2-104 Initial Study Resident Engineer/ Contractor Final Design/ Uning construction PS-3 Use lighting systems that are energy efficient, such as LED technology. p. 2-104 Initial Study Resident Engineer/ Contractor Final Design/ During construction Initial Study Resident Engineer/ Contractor <		noise sources.											
PS-1 A Transportation Management Plan (TMP) shall be developed by the Department to minimize potential impacts to emergency services and commuters during construction. p. 2-104 CIA Resident Engineer/ Contractor, Countly Final Design/ Prior to Standard Specification PS-2 As of November 7, 2014 California Department of Transportation has adopted the California Manual on Uniform Traffic Control Devices (California MUTCD) 2014 edition to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Vehicle Code Section 21400 and the recommendation of the California MUTCD 2014 edition to provisions of California Traffic Control Devices Committee (CTCDC). The Department requested and has received a letter to confirm substantial conformance from the Federal Highway Administration (FHWA) for California MUTCD 2014 edition. The California. The California MUTCD 2014 adition includes FHWA's MUTCD 2009 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 adition includes FHWA's MUTCD 2019 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 adition includes FHWA's MUTCD 2019 edition devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents. p. 2-104 Initial Study Resident Engineer / Contractor Final Design/ During Final Design/ During Standard PS-3 Use lighting systems that are energy efficient, such as LED technology. p. 2-104 Initial Study Resident Engineer / Contractor Final Design/ Du	Publi	c Services, Transportation and Traffic											
PS-2 As of November 7, 2014 California Department of Transportation has adopted the California Manual on Uniform Traffic Control Devices (California MUTCD) 2014 edition to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Vehicle Code Section 21400 and the recommendation of the California requested and has received a letter to confirm substantial conformance from the Federal Highway Administration (FHWA) for California MUTCD 2014 edition. The California. Thic 2009, as amended for use in California. The California MUTCD 2014 adition includes FHWA's MUTCD 2009 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 also includes all policies on traffic control devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents. p. 2-104 Initial Study Resident Engineer / Contractor Final Design/ During construction PS-3 Use lighting systems that are energy efficient, such as LED technology. p. 2-104 Initial Study Resident Engineer / Contractor Final Design/ During construction Final Design/ During construction	PS-1	A Transportation Management Plan (TMP) shall be developed by the Department to minimize potential impacts to emergency services and commuters during construction.	p. 2-104	CIA	Resident Engineer/ Contractor, County	Final Design/ Prior to construction	Standard Specification 12-4.01						
PS-3 Use lighting systems that are energy efficient, such as LED p. 2-104 Initial Study Resident Engineer / Final Design/ technology. During construction	PS-2	As of November 7, 2014 California Department of Transportation has adopted the California Manual on Uniform Traffic Control Devices (California MUTCD) 2014 edition to provide for uniform standards and specifications for all official traffic control devices in California. This action was taken pursuant to the provisions of California Vehicle Code Section 21400 and the recommendation of the California Traffic Control Devices Committee (CTCDC). The Department requested and has received a letter to confirm substantial conformance from the Federal Highway Administration (FHWA) for California MUTCD 2014 edition. The California MUTCD 2014 edition includes FHWA's MUTCD 2009 edition dated December 19, 2009, as amended for use in California. The California MUTCD 2014 also includes all policies on traffic control devices issued by the Department since January 13, 2012, and other corrections and format changes that were necessary to update the previous documents.	p. 2-104	Initial Study	Resident Engineer / Contractor	Final Design/ During construction							
	PS-3	Use lighting systems that are energy efficient, such as LED technology.	p. 2-104	Initial Study	Resident Engineer / Contractor	Final Design/ During construction							
PS-4 Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow. p. 2-104 Initial Study Resident Engineer/ Contractor, County Final Design/ Prior to construction	PS-4	Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.	p. 2-104	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction							

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ENVIRONMENTAL COMMITMENTS RECORD (I-15/Limonite Avenue Interchange Improvements Project)

			Environmental Analysis							Enviro Com	nmental pliance
	Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc.	Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non- standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	YES	NO
PS-5	Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. This should be implemented in coordination with Measure PS-1 .	p. 2-104	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction						
PS-6	Limiting of lane closures during peak hours to the extent possible.	p. 2-104	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction						
PS-7	Inclusion of detours for bicycles and pedestrians in all areas potentially affected by construction. This should be implemented in coordination with Measure PS-1 .	p. 2-104	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction						
PS-8	Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. This should be implemented in coordination with Measure PS-1 .	p. 2-104	Initial Study	Resident Engineer/ Contractor, County	Final Design/ Prior to construction						

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PERMITS AND AGREEMENTS:

AGENCY	Туре	Issue Date	Expiration Date
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Application to be submitted after approval of Environmental Document.	
State Water Resources Control Board	Clean Water Act Section 402 – National Pollutant Discharge Elimination System (NPDES)	SWPPP to be submitted after approval of Environmental Document.	
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	Application to be submitted after approval of Environmental Document	
U.S. Army Corps of Engineers	Clean Water Act Section 404 Nationwide Permit 14	Permit application to be submitted after approval of Environmental Document	
U.S. Fish and Wildlife Service	Section 7 Consultation, MSHCP Consistency Determination	Obtained, see Appendix F	

Appendix C – Acronyms

AB	Assembly Bill
ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AHERA	Asbestos Hazard Emergency Response Act
APE	area of potential effect
APN	Assessor's Parcel Number
ARB	California Air Resources Board
ASR	Archaeological Survey Report
AULs	Activity and Use Limitations
BMPs	best management practices
BSA	biological study area
Cal/EPA	California Environmental Protection Agency
CARB (ARB)	California Air Resources Board
CCO	Community Overlay
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
CHP	California Highway Patrol
CIA	Community Impact Assessment
CO	carbon monoxide
CO_2	carbon dioxide
County	County of Riverside
CTP	California Transportation Plan
CWA	Clean Water Act
DAMP	Drainage Area Master Plan
dB	decibel
dBA	A-weighted decibel
Department	California Department of Transportation
(Caltrans)	
DOC	California Department of Conservation
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
ELAP	Environmental Laboratory Accreditation Program
EPA (U.S. EPA)	U.S. Environmental Protection Agency
EO	Executive Order
FCAA	Federal Clean Air Act

FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
Guidelines	Section 404(b)(1) Guidelines
H_2S	hydrogen sulfide
HA	Hydrologic Area
HOV	high occupancy vehicles
HPSR	Historic Property Survey Report
I-15	Interstate 15
IGR	Intergovernmental Review
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISA	Initial Site Assessment
ITS	Intelligent Transportation System
kV	kilovolt
LEDPA	least environmentally damaging practicable alternative
$L_{eq(h)}$	hourly equivalent energy noise level
LID	Low Impact Development
LIP	Local Implementation Plan
L _{max}	maximum sound level
LOS	level of service
MBTA	Migratory Bird Treaty Act
mg/kg	milligrams per kilogram
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4s	municipal separate storm sewer systems
MSHCP	Multiple Species Habitat Conservation Plan
MTBE	methyl tertiary butyl ether
MUTCD	Manual on Uniform Traffic Control Devices
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NADR	Noise Abatement Decision Report
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NES (MI)	Natural Environment Study (Minimal Impacts)
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act

NHTSA	National Highway Traffic Safety Administration		
NO ₂	nitrogen dioxide		
NOAA	National Oceanic and Atmospheric Administration		
NOAA Fisheries	National Oceanic and Atmospheric Administration's National Marine		
Service	Fisheries Service		
NOP	Notice of Preparation		
NOx	nitrogen oxide		
NPDES	National Pollutant Discharge Elimination System		
NSR	Noise Study Report		
03	ozone		
OC	Overcrossing		
OPR	Office of Planning and Research		
OSHA	Occupational Safety and Health Act		
OSHA	Occupational Safety and Health Administration		
PA	Programmatic Agreement		
PAC	Presumed Asbestos Containing Materials		
PB	lead		
PCB	polychlorinated biphenyls		
PDT	Project Development Team		
PIA/LOD	project impact area/limits of disturbance		
PIR/PER	Paleontological Identification Report/Paleontological Evaluation Report		
PM	narticulate matter		
PM	post mile		
PM ₁₀	particles of 10 micrometers or smaller		
PM_{25}	particles of 2.5 micrometers and smaller		
PMP	Paleontological Mitigation Plan		
POP	Public/Quasi-Public		
PRC	Public Resources Code		
PS&E	Plans Specifications and Estimates		
Ooa	very old alluvial channel deposits		
Ove	voung eolian deposits		
RAP	Relocation Assistance Program		
RCRA	Resource Conservation and Recovery Act of 1976		
RCTC	Riverside County Transportation Commission		
REC	Recognized Environmental Condition		
ROG	reactive organic gas		
RPU	Riverside Public Utilities		
RSA	resource study area		
RSS	Riversidian Sage Scrub		
RTP	Regional Transportation Plan		
RTRP	Riverside Transmission Reliability Project		
RWOCB	Regional Water Quality Control Board		
SB	Senate Bill		
SBCM	San Bernardino County Museum		
SCAR	South Coast Air Basin		
SCAG	Southern California Association of Governments		
50110			

SCAQMD	South Coast Air Quality Management District		
SCS	Sustainable Communities Strategy		
SDC	Seismic Design Criteria		
SF_6	sulfur hexafluoride		
SHPO	State Historic Preservation Officer		
SO_2	sulfur dioxide		
SSP	Standard Special Provision		
SVP	Society of Vertebrate Paleontology		
SWMP	Storm Water Management Plan		
SWPPP	Storm Water Pollution Prevention Plan		
SWRCB	State Water Resources Control Board		
TMDL	Total Maximum Daily Load		
TMP	Traffic Management Plan		
TSCA	Toxic Substances Control Act		
TTLC	total threshold limit concentrations		
TUMF	Transportation Uniform Mitigation Fee		
U.S.	United States		
U.S. EPA	United States Environmental Protection Agency		
UBC	Uniform Building Code		
USACE	U.S. Army Corps of Engineers		
USC	United States Code		
USDOT	U.S. Department of Transportation		
USFWS	U.S. Fish and Wildlife Service		
UST	Underground Storage Tank		
VIA	Visual Impact Assessment		
VMT	vehicle miles traveled		
WDR	Waste Discharge Requirement		
WoS	Waters of the State		
WoUS	Waters of the U.S.		
WPCP	Water Pollution Control Plan		

Appendix D – USFWS Species List



United States Department of the Interior

FISH AND WILDLIFE SERVICE Carlsbad Fish and Wildlife Office 2177 SALK AVENUE - SUITE 250 CARLSBAD, CA 92008 PHONE: (760)431-9440 FAX: (760)431-5901 URL: www.fws.gov/carlsbad/



Consultation Code: 08ECAR00-2015-SLI-0036 Event Code: 08ECAR00-2016-E-00058 Project Name: I-15 Limonite IC -- created on October 20, 2014 12:24 October 12, 2015

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

To Whom It May Concern:

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

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

http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment



Project name: I-15 Limonite IC -- created on October 20, 2014 12:24

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office 2177 SALK AVENUE - SUITE 250 CARLSBAD, CA 92008 (760) 431-9440_ http://www.fws.gov/carlsbad/

Consultation Code: 08ECAR00-2015-SLI-0036 Event Code: 08ECAR00-2016-E-00058

Project Type: TRANSPORTATION

Project Name: I-15 Limonite IC -- created on October 20, 2014 12:24 **Project Description:** This project will expand the I-15 Limonite IC.

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



Project name: I-15 Limonite IC -- created on October 20, 2014 12:24

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-117.5512511 33.9803607, -117.5464016 33.9803625, -117.5463587 33.969152, -117.5512082 33.9691537, -117.5512511 33.9803607)))

Project Counties: Riverside, CA



Project name: I-15 Limonite IC -- created on October 20, 2014 12:24

Endangered Species Act Species List

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

Birds	Status	Has Critical Habitat	Condition(s)				
Coastal California gnatcatcher (<i>Polioptila californica californica</i>) Population: Entire	Threatened	Final designated					
Least Bell's vireo (<i>Vireo bellii</i> <i>pusillus</i>) Population: Entire	Endangered	Final designated					
Southwestern Willow flycatcher (Empidonax traillii extimus) Population: Entire	Endangered	Final designated					
Fishes							
Santa Ana sucker (<i>Catostomus</i> santaanae) Population: 3 CA river basins	Threatened	Final designated					
Flowering Plants							
San Diego ambrosia (Ambrosia pumila)	Endangered	Final designated					
Santa Ana River woolly-star (Eriastrum densifolium ssp.	Endangered						



Project name: I-15 Limonite IC -- created on October 20, 2014 12:24

sanctorum)							
Thread-Leaved brodiaea (Brodiaea	Threatened	Final designated					
Insects							
Delhi Sands flower-loving fly	Endangered						
(Rhaphiomidas terminatus							
abdominalis)							
Population: Entire							
Mammals							
Stephens' kangaroo rat (Dipodomys	Endangered						
stephensi)							
Population: Entire							



Project name: I-15 Limonite IC -- created on October 20, 2014 12:24

Critical habitats that lie within your project area

There are no critical habitats within your project area.

http://ecos.fws.gov/ipac, 10/12/2015 09:06 AM
Appendix E – Air Quality Information



MEMORANDUM

То:	File
From:	Keith Cooper Senior Technical Specialist, Air Quality
Date:	October 21, 2015
Re:	Supplemental Analysis for Interstate 15/Limonite Interchange Improvements Project

Using the construction equipment, duration and phasing assumptions presented in the Draft IS/MND Air Quality Report, this analysis expands upon the original analysis to show construction emissions after implementation of project minimization measures. Emissions were calculated using the SCAQMDrecommended CalEEMod Land Use Emissions Model, version 2013.2.2. Model output sheets are attached. The summary of project construction emissions with implementation of minimization measures is provided below in Table 1.

Table 1: Estimate of Maximum Emissions during Construction

Emissions and Thresholds		Criteria P	ollutant Emiss	ions in Pound	s per Day	
	ROG	NO _x	CO	SO2	PM ₁₀	PM _{2.5}
Maximum Emissions with Rule 403 compliance only	15	171	96	<1	8	7
Maximum Emissions with Minimization Measures	4	71	91	<1	3	3
SCAQMD Regional Emissions Threshold	75	100	550	150	150	55
SCAQMD Localized Emissions Threshold	N/A	118	674	N/A	4	3
Exceed Regional or Localized Threshold?	No	No	No	No	No	No

Attachment:

CalEEMod Modeling Outputs

I-15/Limonite Ave Interchange

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population	
Other Non-Asphalt Surfaces	4.40	Acre	4.40	191,664.00	0	

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2017
Utility Company	Statewide Average				
CO2 Intensity (Ib/MWhr)	1001.57	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Phase assumptions derived from Road Construction Emissions Model program estimates.

Off-road Equipment - Road Construction Emissions Model defaults

Construction Off-road Equipment Mitigation - Rule 403 implimentation, plus EPA Tier 3 compliant off-road equipment.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	50

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	230.00	91.00
tblConstructionPhase	NumDays	8.00	104.00
tblConstructionPhase	NumDays	18.00	39.00
tblConstructionPhase	NumDays	5.00	26.00
tblConstructionPhase	PhaseStartDate	2/6/2016	2/8/2016
tblConstructionPhase	PhaseStartDate	11/5/2016	11/7/2016
tblGrading	AcresOfGrading	624.00	4.00
tblGrading	AcresOfGrading	13.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType	[Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	[Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType	,	Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	,	Rollers
tblOffRoadEquipment	OffRoadEquipmentType	,	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	· · · · · · · · · · · · · · · · · · ·	Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType	· · · · · · · · · · · · · · · · · · ·	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType	· · · · · · · · · · · · · · · · · · ·	Pumps
tblOffRoadEquipment	OffRoadEquipmentType	· · · · · · · · · · · · · · · · · · ·	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType	۲	Signal Boards

tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/d	Jay		
2016	14.6409	170.9082	95.9734	0.1548	1.1004	7.7971	8.4527	0.2958	7.1767	7.3442	0.0000	15,860.84 07	15,860.84 07	4.5972	0.0000	15,957.38 12
Total	14.6409	170.9082	95.9734	0.1548	1.1004	7.7971	8.4527	0.2958	7.1767	7.3442	0.0000	15,860.84 07	15,860.84 07	4.5972	0.0000	15,957.38 12

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.7832	70.5243	91.2304	0.1548	0.6362	3.0872	3.4427	0.1819	3.0869	3.1852	0.0000	15,860.84 07	15,860.84 07	4.5972	0.0000	15,957.38 12
Total	3.7832	70.5243	91.2304	0.1548	0.6362	3.0872	3.4427	0.1819	3.0869	3.1852	0.0000	15,860.84 07	15,860.84 07	4.5972	0.0000	15,957.38 12

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	74.16	58.74	4.94	0.00	42.19	60.41	59.27	38.52	56.99	56.63	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/c	lay		
Area	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.0119	0.0000	4.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000	0.0000	1.0200e- 003

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Area	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	5.0119	0.0000	4.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000	0.0000	1.0200e- 003

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	2/5/2016	5	26	Grubbing/Land Clearing
2	Grading	Grading	2/8/2016	6/30/2016	5	104	Grading/Excavation
3	Building Construction	Building Construction	7/1/2016	11/4/2016	5	91	Drainage/Utilities/Subgrade
4	Paving	Paving	11/7/2016	12/29/2016	5	39	Paving

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	1	8.00	208	0.43
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Site Preparation	Excavators	2	8.00	162	0.38
Site Preparation	Signal Boards	1	24.00	6	0.82
Building Construction	Cranes	0	7.00	226	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Grading	Excavators	4	8.00	162	0.38

Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	1	6.00	80	0.38
Grading	Cranes	1	6.00	226	0.29
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	2	8.00	174	0.41
Paving	Paving Equipment	1	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Building Construction	Welders	0	8.00	46	0.45
Grading	Crawler Tractors	2	8.00	208	0.43
Grading	Rollers	3	8.00	80	0.38
Grading	Rubber Tired Loaders	3	8.00	199	0.36
Grading	Scrapers	4	8.00	361	0.48
Grading	Signal Boards	1	24.00	6	0.82
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Graders	2	8.00	174	0.41
Building Construction	Plate Compactors	1	8.00	8	0.43
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	1	8.00	100	0.40
Building Construction	Scrapers	4	8.00	361	0.48
Building Construction	Signal Boards	1	24.00	6	0.82
Paving	Signal Boards	1	24.00	6	0.82

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	22	55.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	14	81.00	31.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	Jay							lb/c	lay		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.6563	19.4795	10.6040	0.0204		0.8458	0.8458		0.7815	0.7815		2,048.104 8	2,048.104 8	0.5885		2,060.463 7
Total	1.6563	19.4795	10.6040	0.0204	0.0000	0.8458	0.8458	0.0000	0.7815	0.7815		2,048.104 8	2,048.104 8	0.5885		2,060.463 7

3.2 Site Preparation - 2016

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0383	0.0453	0.5671	1.3400e- 003	0.1118	7.0000e- 004	0.1125	0.0296	6.4000e- 004	0.0303		110.9582	110.9582	4.7900e- 003		111.0587
Total	0.0383	0.0453	0.5671	1.3400e- 003	0.1118	7.0000e- 004	0.1125	0.0296	6.4000e- 004	0.0303		110.9582	110.9582	4.7900e- 003		111.0587

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Fugitive Dust		4 F			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		, , ,	0.0000			0.0000
Off-Road	0.4499	8.6975	12.1358	0.0204		0.3820	0.3820		0.3820	0.3820	0.0000	2,048.104 8	2,048.104 8	0.5885	r	2,060.463 7
Total	0.4499	8.6975	12.1358	0.0204	0.0000	0.3820	0.3820	0.0000	0.3820	0.3820	0.0000	2,048.104 8	2,048.104 8	0.5885		2,060.463 7

3.2 Site Preparation - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0383	0.0453	0.5671	1.3400e- 003	0.0632	7.0000e- 004	0.0639	0.0177	6.4000e- 004	0.0184		110.9582	110.9582	4.7900e- 003		111.0587
Total	0.0383	0.0453	0.5671	1.3400e- 003	0.0632	7.0000e- 004	0.0639	0.0177	6.4000e- 004	0.0184		110.9582	110.9582	4.7900e- 003		111.0587

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust		1			0.0408	0.0000	0.0408	4.4000e- 003	0.0000	4.4000e- 003			0.0000			0.0000
Off-Road	14.4302	170.6593	92.8543	0.1474		7.7933	7.7933		7.1732	7.1732		15,250.57 08	15,250.57 08	4.5709		15,346.55 86
Total	14.4302	170.6593	92.8543	0.1474	0.0408	7.7933	7.8341	4.4000e- 003	7.1732	7.1776		15,250.57 08	15,250.57 08	4.5709		15,346.55 86

3.3 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2107	0.2489	3.1191	7.3800e- 003	0.6148	3.8400e- 003	0.6186	0.1630	3.5300e- 003	0.1666		610.2699	610.2699	0.0263		610.8227
Total	0.2107	0.2489	3.1191	7.3800e- 003	0.6148	3.8400e- 003	0.6186	0.1630	3.5300e- 003	0.1666		610.2699	610.2699	0.0263		610.8227

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Fugitive Dust				J	7.9500e- 003	0.0000	7.9500e- 003	8.6000e- 004	0.0000	8.6000e- 004			0.0000		, , ,	0.0000
Off-Road	3.5725	70.2755	88.1113	0.1474		3.0834	3.0834		3.0834	3.0834	0.0000	15,250.57 08	15,250.57 08	4.5709		15,346.55 86
Total	3.5725	70.2755	88.1113	0.1474	7.9500e- 003	3.0834	3.0914	8.6000e- 004	3.0834	3.0843	0.0000	15,250.57 08	15,250.57 08	4.5709		15,346.55 86

3.3 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2107	0.2489	3.1191	7.3800e- 003	0.3475	3.8400e- 003	0.3514	0.0975	3.5300e- 003	0.1010		610.2699	610.2699	0.0263		610.8227
Total	0.2107	0.2489	3.1191	7.3800e- 003	0.3475	3.8400e- 003	0.3514	0.0975	3.5300e- 003	0.1010		610.2699	610.2699	0.0263		610.8227

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Off-Road	10.3875	113.7846	71.8112	0.1006		5.6010	5.6010		5.2336	5.2336		10,216.62 88	10,216.62 88	2.7181		10,273.70 90
Total	10.3875	113.7846	71.8112	0.1006		5.6010	5.6010		5.2336	5.2336		10,216.62 88	10,216.62 88	2.7181		10,273.70 90

3.4 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2411	2.6014	2.7241	6.5200e- 003	0.1950	0.0505	0.2455	0.0557	0.0464	0.1021		654.9686	654.9686	4.2600e- 003		655.0580
Worker	0.3104	0.3665	4.5936	0.0109	0.9054	5.6600e- 003	0.9111	0.2401	5.2000e- 003	0.2453		898.7611	898.7611	0.0388		899.5752
Total	0.5514	2.9679	7.3176	0.0174	1.1004	0.0562	1.1566	0.2958	0.0516	0.3475		1,553.729 7	1,553.729 7	0.0430		1,554.633 2

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	2.3289	46.9844	58.3595	0.1006		2.2535	2.2535	1 1 1	2.2535	2.2535	0.0000	10,216.62 88	10,216.62 88	2.7181		10,273.70 90
Total	2.3289	46.9844	58.3595	0.1006		2.2535	2.2535		2.2535	2.2535	0.0000	10,216.62 88	10,216.62 88	2.7181		10,273.70 90

3.4 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2411	2.6014	2.7241	6.5200e- 003	0.1243	0.0505	0.1748	0.0384	0.0464	0.0848		654.9686	654.9686	4.2600e- 003		655.0580
Worker	0.3104	0.3665	4.5936	0.0109	0.5118	5.6600e- 003	0.5175	0.1435	5.2000e- 003	0.1487		898.7611	898.7611	0.0388		899.5752
Total	0.5514	2.9679	7.3176	0.0174	0.6362	0.0562	0.6923	0.1819	0.0516	0.2335		1,553.729 7	1,553.729 7	0.0430		1,554.633 2

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	1.7372	17.1114	11.9979	0.0178		1.0721	1.0721		0.9897	0.9897		1,781.193 1	1,781.193 1	0.5080		1,791.861 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7372	17.1114	11.9979	0.0178		1.0721	1.0721		0.9897	0.9897		1,781.193 1	1,781.193 1	0.5080		1,791.861 2

3.5 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0679	0.8507	2.0100e- 003	0.1677	1.0500e- 003	0.1687	0.0445	9.6000e- 004	0.0454		166.4372	166.4372	7.1800e- 003		166.5880
Total	0.0575	0.0679	0.8507	2.0100e- 003	0.1677	1.0500e- 003	0.1687	0.0445	9.6000e- 004	0.0454		166.4372	166.4372	7.1800e- 003		166.5880

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Off-Road	0.3856	8.1550	11.8885	0.0178		0.4933	0.4933		0.4933	0.4933	0.0000	1,781.193 1	1,781.193 1	0.5080		1,791.861 2
Paving	0.0000		, , , , , , , , , , , , , , , , , , ,	,	, , , , , , , , , , , , , , , , , , ,	0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	0.3856	8.1550	11.8885	0.0178		0.4933	0.4933		0.4933	0.4933	0.0000	1,781.193 1	1,781.193 1	0.5080		1,791.861 2

3.5 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0679	0.8507	2.0100e- 003	0.0948	1.0500e- 003	0.0958	0.0266	9.6000e- 004	0.0275		166.4372	166.4372	7.1800e- 003		166.5880
Total	0.0575	0.0679	0.8507	2.0100e- 003	0.0948	1.0500e- 003	0.0958	0.0266	9.6000e- 004	0.0275		166.4372	166.4372	7.1800e- 003		166.5880

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.460962	0.069557	0.176974	0.170659	0.045477	0.007383	0.012841	0.043558	0.000954	0.001056	0.006454	0.000884	0.003242

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	lay							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	- 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	lay							lb/d	Jay		
Mitigated	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003
Unmitigated	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000	 - - - -	0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/e	day		
Architectural Coating	1.2169					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e- 005	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003
Total	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/d	day		
Architectural Coating	1.2169					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.7950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e- 005	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003
Total	5.0119	0.0000	4.6000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		9.6000e- 004	9.6000e- 004	0.0000		1.0200e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation