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Executive Summary

S.1 Overview of the Project Area

The Riverside County Transportation Commission (RCTC), California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA) propose to improve west-east transportation in western Riverside County between Interstate 15 (I-15) in the west and State Route 79 (SR-79) in the east, a distance of approximately 51 kilometers (km) (32 miles [mi]). The proposed project will construct a new parkway¹, known as the Mid County Parkway (MCP), which will provide a direct and continuous route connecting major population/employment centers identified in the Land Use Element of the County of Riverside General Plan and the plans of the cities of Corona, Perris, and San Jacinto.

The MCP project was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use and transportation planning in Riverside County through the Riverside County Integrated Project (RCIP). The purpose of the RCIP was to address the planning, environmental, and transportation issues that would result from the anticipated doubling of population in Riverside County, from 1.5 million residents currently to approximately 3.0 million by 2020. The RCIP included three components: (1) a new General Plan for Riverside County,

The use of the term "parkway" in this document is intended solely as an abbreviated reference to the Mid County Parkway project and should not be construed so as to define the type of roadway anticipated should the project be constructed. It is used because the public has become accustomed to the term during the history of the project; the project proposes "above standard" landscape mitigation, including the planting of native vegetation. A parkway is defined as a divided arterial highway with full control of access and with grade separations at local interchanges with major local arterials. It should be noted that even though the project title is "Mid County Parkway," not all of the alternatives consist of a "parkway" for its entire length. Some of the alternatives include segments that are "expressways and arterials," as defined in the Riverside County General Plan, and are designed to freeway/expressway standards as defined in the Caltrans Highway Design Manual (HDM). The term "parkway" is not used per the definition of parkway in the Caltrans HDM.

adopted in October 2003; (2) a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County (approved in June 2004); and (3) the Community and Environmental Transportation Acceptability Process (CETAP) to identify both intra-county and inter-county transportation corridors needed to support the projected population growth.

Tier 1 analyses and environmental documents were initiated for the two intracounty corridors in fall 2000: a north-south corridor, referred to as Winchester to Temecula, and a west-east corridor known as the Hemet to Corona/Lake Elsinore (HCLE) corridor. The purpose of the Tier 1 efforts was to select preferred alternatives and preserve needed right of way. After a Draft Tier 1 Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was completed for the HCLE Corridor and circulated for public review in 2002 with a suite of 14 "build" alternatives, the RCTC Board accepted a staff recommendation in June 2003 to proceed with the accelerated preparation of a project-level environmental document for an west-east alternative that would follow the existing alignment of Cajalco Road and Ramona Expressway, known as the MCP project. The MCP project is the west-east CETAP corridor envisioned in the RCIP planning process.

S.2 Purpose and Need

S.2.1 Project Purpose

The purpose of the proposed action is to provide a transportation parkway that will effectively and efficiently accommodate regional west-east movement of people and goods between and through Corona, Perris, and San Jacinto. More specifically, the selected Alternative will:

- Provide increased capacity to support the forecast travel demand for the 2035 design year;
- Provide a limited access parkway;
- Provide roadway geometrics to meet State highway design standards;
- Accommodate Surface Transportation Assistance Act (STAA) National Network trucks (these are larger trucks allowed on the federal Interstate system and non-Interstate federal-aid primary system); and
- Provide a parkway that is compatible with a future multimodal transportation system.

The MCP project has logical termini since it connects to two major north-south transportation facilities (I-15 and SR-79) with the Interstate 215 (I-215) in the middle, has independent utility since the project is usable and a reasonable expenditure even if no additional transportation improvements in the area are made, and does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

S.2.2 Project Need

The MCP project is located in an area of western Riverside County that is currently undergoing substantial population and employment growth. Population in Riverside County overall is expected to double between 2000 and 2020 from 1.5 million to 3.1 million. Growth in employment is expected to occur at an even higher rate, with an increase of over 115 percent in the number of jobs. Although currently funded transportation improvements will address some of the projected future demand, additional transportation improvements are needed to provide for the efficient movement of people and goods in the future.

S.2.2.1 Capacity, Transportation Demand and Safety

The existing major west-east facilities in western Riverside County consist of State Routes 60, 91, and 74 (SR-60, SR-91, and SR-74, respectively). These facilities provide linkages between the major north-south facilities of SR-79, I-215, and I-15. In 2035, SR-60 and SR-91, as well as several segments of SR-74, are projected to operate at level of service (LOS) F.

While the Riverside County General Plan (2003) identifies several major west-east arterials south of SR-74 that provide alternative west-east routes, Ramona Expressway and Cajalco Road comprise the only existing and proposed major continuous transportation corridor between SR-74 and SR-60/SR-91. Cajalco Road is a two- to four-lane arterial with no access control, and Ramona Expressway is a two-to six-lane expressway with partial access control.

Level of Service

Existing Cajalco Road already operates at an unacceptable LOS (LOS E/F) through many segments. By 2035, the roadway will experience further delay if additional capacity is not provided.

Transportation modeling based on the adopted Riverside County General Plan (2003) land uses indicates that the LOS on west-east arterials will be degraded without implementation of the MCP project.

Travel Time

A Travel Time Analysis (VRPA, 2008) prepared for the MCP project concluded that under Alternatives 1A (No Project/No Action – Existing Ground Conditions) and Alternative 1B (No Project/No Action - General Plan Circulation Element Conditions) the travel time between I-15 and SR-79 in 2035 would be 193.4 minutes and 92.1 minutes, respectively. Under the MCP Build Alternatives (Alternatives 4, 5, 6, 7 and 9), the travel time would range between 31.1 minutes and 32.5 minutes.

Population/Traffic Forecast

The MCP project would link the existing and growing population centers of the city of Corona on the west, city of Perris in the central portion of the MCP study area, and city of San Jacinto on the east. In addition, the MCP project would link I-15, I-215, and SR-79, thereby facilitating regional traffic movement by providing a west-east connection to these major north-south transportation facilities.

Capacity Needs

Travel patterns in western Riverside County are characterized by large numbers of commuters traveling from western Riverside County to jobs in Los Angeles and Orange Counties. Intercounty commuter traffic is expected to grow substantially in the future as Riverside County's population grows. In addition, the growth of employment opportunities within western Riverside County is expected to result in substantial increases in traffic through and connecting with other employment and population centers in the county. The MCP project will serve as a major west-east connection within western Riverside County and will also provide for regional movement of people and goods to eastern Riverside County, Los Angeles County, and Orange County.

To serve the projected travel demand in this area, there is a need to maximize the capacity of the MCP project by limiting access. There is also a need for the MCP project to accommodate truck traffic, which will be integral to future economic growth in the area.

Safety

While accident rates are not appreciably different from similar facilities, there are locations along existing Cajalco Road and Ramona Expressway where design features

(such as curves and/or steep grades) and land use conflicts (including direct driveway access to the roadway) represent conditions that could contribute to higher accident rates with the growth in traffic volumes on these two roadways. Further, it is not feasible to convert existing Cajalco Road or Ramona Expressway to a parkway that meets Caltrans standards due to the roadway deficiencies discussed below and terrain in some areas. By limiting access and designing a transportation facility that is consistent with current State highway standards, the MCP project will provide an alternative route and relieve regional congestion, thus resulting in an overall improvement in traffic safety and reduction in accidents.

S.2.2.2 Roadway Deficiencies

Existing Cajalco Road and Ramona Expressway combine to form the only existing, continuous west-east facility in the MCP study area. There are certain limitations related to design and capacity that restrict the ability of the existing roadways to meet future travel demand

The Cajalco Road and Ramona Expressway roadway geometric sections do not meet current Caltrans or Riverside County standards for major roadways. The 2001 Caltrans Highway Design Manual identifies key design standards that will be applied in the design of the MCP project. Even if the MCP project is not designated a State highway in the future, compliance with Caltrans design standards will be required at the interchanges with I-15, I-215, and SR-79. These standards include a design speed, a minimum curve radius, and a maximum vertical grade. The existing roadway geometry does not meet Caltrans standards in several areas; therefore, widening the existing facility in these areas without redesign is not feasible. All of the curves on existing Cajalco Road do not meet the Caltrans minimum standards and, similarly, curve radii for the realigned Cajalco Road, as designated in the existing Riverside County General Plan Circulation Element, are also below the standard. Existing Ramona Expressway includes six horizontal curves that do not meet Caltrans standards.

The grade of existing Cajalco Road west of Lake Mathews also has deficiencies, and currently there are numerous direct access points (driveways and local roadways) onto Cajalco Road and Ramona Expressway that could lead to opportunities for conflict that would impede traffic flow on the existing roadways. Uncontrolled access points reduce the overall capacity of the roadways and increase the potential for accidents.

S.2.2.3 Social Demands or Economic Development

The MCP project was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use, habitat conservation, and transportation planning in Riverside County through the RCIP.

The MCP project executes the intent of the prior RCTC and County of Riverside actions with regard to the planning of the HCLE CETAP corridor and is consistent with the intent of the Riverside County Circulation Element, which recognizes that the specific alignment decisions regarding the CETAP corridors may result in amendments to the Riverside County General Plan.

The MCP project is consistent with the 2008 Regional Transportation Plan (RTP), which emphasizes the identification of long-range corridors. The MCP project is also consistent with the Riverside County General Plan (2003), which sets forth the need to incorporate future growth with transportation and multipurpose open space systems in areas that are well served by public facilities and services and preserve significant environmental features.

S.2.2.4 Legislation

Executive Order

On September 18, 2002, President George W. Bush signed Executive Order (EO) 13274 for environmental stewardship and streamlining. This order required transportation and natural, cultural, and historical resource agencies to establish realistic time frames on environmental transportation documents, and required the agencies to work together to provide efficient review of the documents while protecting the environment. CETAP, of which the MCP project is a part, was one of the first seven projects to be placed on the national priority list for review under EO 13274.

County

Riverside County voters approved Measure A in 1988. Measure A permits a half-cent sales tax program to be implemented to collect funding for transportation improvement projects in Riverside County. Measure A was set to expire in 2009; however, voters approved a 30-year extension for the sales tax program in 2002. The MCP project is one transportation project being considered by the RCTC that may receive partial funding from Measure A.

The RCTC may initiate future legislation to designate the MCP as a State highway.

S.2.2.5 Modal Interrelationships and System Linkages

In addition to the rapid population growth in western Riverside County, the employment base is also increasing, particularly in intermodal goods distribution. The MCP project is located between and through the future population and employment centers it will serve from planned development, including Corona, the Perris/Moreno Valley/March Air Reserve Base area, and San Jacinto. Furthermore, the location of the MCP project through the city of Perris offers an opportunity to create a linkage between the MCP project and two major planned transit projects (the Perris Valley Line [PVL] and Perris Multimodal Facility). The proposed PVL will provide commuter rail service from the city of Riverside to the city of Perris by extending existing service (Metrolink 91 Line) that links the city of Riverside with downtown Los Angeles via Fullerton. It is anticipated that the proposed PVL will connect with a new Perris Multimodal Facility to be located in downtown Perris off C Street and will provide for connecting bus (including the Riverside Transit Agency) and rail (including Metrolink) service. The Perris Multimodal Facility is in close proximity to the MCP project. Seven new stations have been identified for construction along the PVL, including one adjacent to the MCP study area. By reducing travel time and congestion in the MCP study area, the MCP project would help improve accessibility to stations serving the PVL.

System Linkages

The MCP project is located between the SR-91/SR-60 corridor and SR-74, and will provide another needed west-east corridor/connection to improve the regional transportation network and to meet future west-east travel demand.

Related Projects

Information concerning related projects provides contextual information for the MCP project and identifies how the transportation agencies have coordinated transportation planning efforts. The MCP project will be implemented in a manner that is consistent with the following programmed and planned improvements:

• Constructing SR-79 as a Four-Lane Expressway: Constructing SR-79 as a four-lane expressway on a new alignment from the SR-79/Sanderson Avenue junction to SR-79/Domenigoni Parkway, generally following an alignment west of Warren Road. This study is in progress by RCTC and Caltrans. Construction of initial phases is tentatively scheduled to begin in 2012.

- **SR-79 Widening:** The SR-79 Interim Widening project will improve SR-79 between Thompson Road and Domenigoni Parkway by extending slopes between Thompson Road and Abelia Street, widening an 8.7 km (5.4 mi) segment of SR-79 from two to four lanes between Abelia Street and Domenigoni Parkway, installing a painted center median, and constructing turn lanes at intersections.
- I-15/Magnolia Avenue Interchange Modifications: The City of Corona plans to reconfigure the existing interchange to add northbound/southbound loops and widen the existing northbound on-ramp.
- Widening of I-215: RCTC plans to widen I-215 to three lanes in each direction from I-15 in Temecula to Eucalyptus Avenue in Perris. This project is programmed in RCTC's Measure A Expenditure Plan. A construction schedule has not been established.
- Widening of I-215 from 60/91/215 Junction to San Bernardino County Line: In cooperation with San Bernardino Associated Governments, RCTC plans to add two lanes in each direction from 60/91/215 to the San Bernardino County line.
- I-15/Cajalco Road Interchange Project: The City of Corona, in cooperation with RCTC and Caltrans, plans to replace the existing two-lane Cajalco Road overcrossing of I-15 with a six-lane overcrossing between Temescal Canyon Road and Bedford Canyon Road and associated ramp modifications. The City of Corona has secured partial funding for this project, and construction is planned for January 2011.
- The Perris Valley Line (PVL): The RCTC Board has adopted an extension of a commuter service line from the city of Riverside to the city of Perris. The project proposes to extend operation of the Metrolink 91 Line, which currently provides commuter rail service from Riverside to downtown Los Angeles via Fullerton by 2011.
- The Perris Multimodal Facility: The Perris Multimodal Facility is intended to support operating rail and bus passenger services originating from the city of Perris. The facility will be located in downtown Perris off C Street and will include platforms, shelters, parking, and lighting to accommodate eight bus bays and additional facilities to serve future passenger train service.

- I-15 Measure A Improvements: Extension of the Measure A Expenditure Plan includes funding to add one lane in each direction on I-15 between SR-60 and the San Diego County line, and to make improvements to the SR-91/I-15 interchange by adding a new connector from I-15 North to SR-91 West.
- Widening of SR-60 from University Avenue to 60/215 Interchange: This project will add one lane in each direction (median) from University Avenue in Riverside easterly to 60/215 interchange in Moreno Valley, including a new interchange and bridges in Riverside. Construction is tentatively scheduled to be completed in 2009.
- **SR-60 Truck-Climbing Lane:** This project will add one truck-climbing lane in the Badlands area east of Moreno Valley.
- Widening of SR-91 from Adams to 60/91/215 Interchange: This project will add one lane in each direction from Adams to the 60/91/215 interchange in Riverside. Construction is tentatively scheduled to be completed in 2011.
- Widening of SR-91 from Pierce Street to Orange County: This project will add one lane in each direction from Pierce Street to the Orange County line.
- I-10/SR-60 Interchange: This project will construct a new interchange at I-10/SR-60.
- **I-10 Truck-Climbing Lane:** This project will add an eastbound truck-climbing lane from the San Bernardino County line to Banning.
- State Route 91/71 Interchange: Improve the connection between SR-91 and State Route 71 (SR-71) by replacing the existing single-lane connection between eastbound SR-91 and westbound SR-71 with a two-lane direct flyover ramp. The project will also build a new, separate eastbound road just north of and parallel to SR-91 to provide improved access between the Green River Road interchange and the SR-91/SR-71 interchange. Construction is planned to be completed in 2015.
- **State Route 74:** This project added one lane in each direction from I-15 to 7th Street.
- Riverside/Orange County Major Investment Study: The Orange County Transportation Authority (OCTA) and RCTC, in cooperation with the Transportation Corridor Agencies (TCA), completed a Major Investment Study

(MIS) under Southern California Association of Governments (SCAG) guidelines to identify and assess alternative ways to improve mobility between Orange and Riverside counties. Following SCAG's guidelines for Regionally Significant Transportation Investment Studies (RSTIS), the Riverside/Orange County MIS was a transportation planning study that concluded in early 2006. It included feasibility planning, travel demand forecasting, conceptual engineering, environmental evaluation, and public involvement. Caltrans Districts 8 and 12, in cooperation with FHWA, were advisory agencies in the study.

The MIS examined a comprehensive range of capital and operational improvement alternatives to SR-91 and other options for intercounty multimodal transportation corridors. The study analyzed the benefits, costs, and consequences (economic, social, and environmental) of alternative transportation investment strategies in the Riverside County-Orange County MIS corridor. Input received throughout the study from the Policy Committee, stakeholders, cities, and elected officials was included in considering recommendations for a Locally Preferred Strategy.

The OCTA Board of Directors met on December 12, 2005, to take action on the recommended Locally Preferred Strategy, and the RCTC Board of Commissioners met on December 14, 2005. Both Boards unanimously approved recommendations for the refined Locally Preferred Strategy. Key elements of the Board's decisions relevant to the MCP project are as follows:

- Establish SR-91 from State Route 55 (SR-55) to I-15 as a priority for improving transportation between Riverside and Orange counties. Emphasize SR-91 improvements between State Route 241 (SR-241) and the I-15 first, followed by improvements between SR-55 and SR-241.
- Continue to work with the Foothill/Eastern TCA in Orange County to develop
 a mutually acceptable plan to improve the connection between the SR-241 and
 SR-91 corridors and accelerate capacity improvements on State Route 133
 (SR-133), SR-241, and State Route 261 (SR-261) to optimize utilization of the
 toll roads to improve transportation between Riverside and Orange counties.
- Continue to evaluate the costs and impacts of Corridor A (a new facility between I-15 and SR-241 with a connection at SR-71) in the SR-91 right of way or north of SR-91, parallel through a future preliminary engineering process in cooperation with other agencies.

- Continue to study the technical feasibility of the Corridor B concept (a new facility between Cajalco Road in Riverside County and SR-133 in Orange County through the Santa Ana Mountains), including costs, risks, joint-use opportunities, benefits, and funding options in cooperation with other interested agencies.
- Incorporate the following: components of the adopted Locally Preferred Strategy that encompass maximization of the MIS corridor transit network; widening of portions of SR-91 (14 to 16 lanes total plus baseline SR-91 improvements); possible managed lane modifications (including reversible lanes) for SR-91 or Corridor A; continued studies in support of a new highway facility in Corridor A; continued studies in support of a new highway (largely in tunnel sections) in Corridor B; and operational improvements (not major widening) of SR-74 (Ortega Highway) in Corridor D.
- Cajalco Road Improvements: While it is anticipated that much of the future travel demand on Cajalco Road would be met by the MCP project, there would be a continued need for Cajalco Road to provide local access and circulation for existing and planned residential uses in the vicinity of Lake Mathews and Mead Valley. For Cajalco Road to function safely and effectively in the short term and long term, safety, capacity, and operational improvements are being planned by the County of Riverside.

Safety and road repair projects that occurred between 2003 and 2005 included pavement projects for specific locations and the installation of street lights at the intersections of Alexander Street, Mead Street, Haines Street, Day Street, Seaton Avenue, and between Brown Street and Clark Street. In addition, the intersection of Harley John Road/Smith Road was resurfaced and widened. Pavement was added east of the intersection to receive a second eastbound through lane to reduce the traffic backup before the intersection. These projects have been completed.

Additional projects recently completed by the County of Riverside include:

- Left-turn lanes added between Harley John Road and 0.40 km (0.25 mi) east of Gustin Lane;
- Pavement reconstruction and intersection widenings between Kirkpatrick Road and La Sierra Avenue;

- Installation of guard rails at various locations east of La Sierra Avenue; and
- Installation of traffic signals at Gavilan Road and Harley John Road/Smith Road.

The County of Riverside also plans to widen portions of Cajalco Road in three segments. The first segment is between Harley John Road on the west and Harvill Avenue on the east. As a result of the Boulder Springs development, Cajalco Road will be widened to four lanes from Wood Road to Alexander Street. The improvements to this segment are considered by the County to be the most needed in the near term and the most feasible to construct. The second segment is between La Sierra Avenue and Harley John Road. Western Riverside County Transportation Uniform Mitigation Fee funding (approximately \$22 million) has been programmed for the widening of approximately 11 km (7.0 mi) of roadway. Final environmental compliance is yet to be achieved for this segment. The third segment is between Temescal Canyon Road and La Sierra Avenue. Transportation Uniform Mitigation Fee funds are currently programmed (approximately \$10 million) to improve approximately 3 miles of Cajalco Road in this area. Topographical and Metropolitan Water District of Southern California (Metropolitan) reserve constraints are to be addressed through a conceptual design and environmental clearance process to be undertaken by the Riverside County Transportation Department.

In addition to the projects listed above that may provide a direct physical connection to the MCP project, additional improvements are also planned to the freeway system in western Riverside County. Implementation of the MCP project will complete an overall network that, absent this facility, would still be deficient. The need for the MCP project exists even with implementation of the improvements described above.

S.3 Proposed Action

S.3.1 Alternatives

The MCP Alternatives were developed through a multiple-agency coordination process, working as a collaborative group referred to as the Small Working Group. The Small Working Group includes representatives from the RCTC, FHWA, County

of Riverside, Caltrans District 8, United States Fish and Wildlife Service (USFWS)¹, United States Environmental Protection Agency (EPA), California Department of Fish and Game (CDFG), and the United States Army Corps of Engineers (USACE).

The range of alternatives is intended to meet the requirements for alternatives analysis under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), Section 404 of the federal Clean Water Act (CWA), and Section 4(f) of the Department of Transportation Act (now codified at 49 United States Code [USC] 303). An initial set of eight alternatives was presented to the public in scoping meetings held in December 2004. This initial set of alternatives was refined in late 2005 after a Value Analysis Study, engineering studies, environmental studies, field work, public scoping meetings, and traffic modeling for the project were completed. The refinements included:

- Two parkway alternatives with alignments north of Lake Mathews (Alternatives 2 and 3) were eliminated as a result of engineering feasibility issues;
- A segment of Alternatives 4 and 6 was rerouted away from the Perris Dam due to dam safety concerns;
- Alternative 8 was renumbered to Alternative 1B (No Action/No Project General Plan Circulation Element Conditions); and
- Alternative 9, the Far South Alternative, which avoids the Metropolitan Habitat Conservation Plan Reserve, was added to the alternatives to be studied.

There is no traffic congestion expected on the Mid County Parkway through the horizon year of 2035. Because there is no congestion, there is no need for high-occupancy vehicle (HOV) lanes as they would not provide any travel benefits. If traffic congestion occurs, the project design does not preclude the addition of HOV lanes.

S.3.1.1 Alternative 1A: No Project/No Action—Existing Ground Conditions

Alternative 1A represents 2035 traffic on the planned street network except for future improvements to Cajalco Road and Ramona Expressway, which would remain as

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The USFWS submitted a letter dated December 9, 2005, stating that it will participate in the MCP process informally (i.e., would not provide formal concurrence on the project purpose and need or project alternatives), with a focus on providing technical assistance.

they exist today. Construction of the MCP project would not be implemented with the No Project/No Action Alternative 1A. The future west-east traffic described in the MCP study area would be served by existing Cajalco Road and El Sobrante Road between I-15 and I-215 and by the existing Ramona Expressway between I-215 and SR-79. This alternative assumes 2035 land use conditions and implementation of planned improvements to the regional and local circulation system, as accounted for in the adopted Riverside County General Plan (2003), RCTC's Measure A program, and other adopted plans and policies.

S.3.1.2 Alternative 1B: No Project/No Action—General Plan Circulation Element Conditions

Alternative 1B represents 2035 traffic levels on the planned street network, according to the Circulation Element of the Riverside County General Plan. Construction of the MCP project would not be implemented with No Project/No Action Alternative 1B. This alternative is the same as Alternative 1A but includes implementation of Cajalco Road and Ramona Expressway consistent with the Riverside County General Plan Circulation Element.

Under this alternative, Cajalco Road and Ramona Expressway would be widened to a four- to six- lane arterial street as needed to meet expected traffic demand and provide local access and circulation for existing and planned residential uses in the vicinity of Lake Mathews and Mead Valley. These improvements would result in the construction of a four-lane roadway along Cajalco Road between Bedford Canyon Road and El Sobrante Road and a six-lane roadway along Cajalco Road and Ramona Expressway between El Sobrante Road and SR-79.

S.3.1.3 Alternative 4: South of Lake Mathews/North Perris (Drain)

Alternative 4 proposes a six- to eight-lane, controlled-access parkway with six mixed-flow lanes for most of its length and up to eight mixed-flow lanes near the I-215 interchange. Alternative 4 is located south of Lake Mathews and follows a northern alignment through the city of Perris (as shown later in Chapter 2, Figures 2.4.1a and 2.4.1b). The Alternative 4 alignment is south of existing Cajalco Road west of Lake Mathews Drive and located north of Ramona Expressway from I-215 to east of Redlands Boulevard, where it then follows the Perris Valley Storm Drain to Placentia Avenue. From that point, Alternative 4 continues easterly and parallel to Ramona Expressway to the point where it connects to SR-79.

System interchanges (interchange of traffic to or from controlled access facilities, with one or more grade separation) are proposed for all of the MCP Build Alternatives, including Alternative 4, at MCP/I-15, MCP/I-215, and MCP/SR-79. This alternative includes a realignment of the I-215 mainline to east of the existing location, from Placentia Avenue to just north of Strata Road, approximately 5.8 km (3.6 mi) in length.

Service interchanges (interchange of traffic to or from a local roadway to or from a freeway) are proposed for Alternative 4 at the following locations: (1) a location approximately 2,000 meters (m) (6,560 feet [ft]) east of Temescal Canyon Road (referred to as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

S.3.1.4 Alternative 5: South of Lake Mathews/South Perris (at Rider Street)

Alternative 5 is a six- to eight-lane, controlled-access parkway with six mixed-flow lanes for most of its length and up to eight mixed-flow lanes near the I-215 interchange. Alternative 5 is south of Lake Mathews and follows a southern alignment through the city of Perris along Rider Street (as shown later in Chapter 2 of this EIR/EIS, Figures 2.4.2a and 2.4.2b). The Alternative 5 alignment is south of existing Cajalco Road, west of Lake Mathews Drive, and located south of the Ramona Expressway from I-215 to just west of Antelope Road. From that point, Alternative 5 continues easterly and parallel to Ramona Expressway to the point where it connects to SR-79.

System interchanges proposed for Alternative 5 are the same as Alternative 4, with connections at MCP/I-15, MCP/I-215, and MCP/SR-79. This alternative includes a realignment of the I-215 mainline to east of the existing location, from Placentia Avenue to Ramona Expressway, that is approximately 3,300 m or 3.3 km (10,826 ft or 2.0 mi) in length.

Service interchanges for Alternative 5 are proposed at the following locations: (1) a location approximately 2,000 m (6,560 ft) east of Temescal Canyon Road (referred to

as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

S.3.1.5 Alternative 6: General Plan North and South of Lake Mathews/North Perris (Drain)

Alternative 6 involves the implementation of General Plan Circulation Element improvements between I-15 and El Sobrante Road and a new six- to eight-lane, controlled-access parkway east of El Sobrante Road to SR-79 (as shown later in Chapter 2, Figures 2.4.3a and 2.4.3b). Alternative 6 is the same as Alternative 4 (described above) east of El Sobrante Road and is located north of Ramona Expressway from I-215 to east of Perris Boulevard. West of El Sobrante Road to I-15, the MCP project includes a four-lane urban arterial north of Lake Mathews¹ and a four-lane, controlled-access expressway south of Lake Mathews. The proposed arterial street improvements north and south of Lake Mathews are consistent with the Riverside County General Plan Circulation Element. The facility south of Lake Mathews would be a controlled-access expressway that ties into the same system interchange configuration at I-15 as the other Build Alternatives.

System interchanges are proposed for all of the MCP Build Alternatives, including Alternative 6, at MCP/I-15, MCP/I-215, and MCP/SR-79.

Service interchanges for Alternative 6 are at the same locations as for Alternative 4, even though the location of the MCP alignment south of Lake Mathews is somewhat different than Alternative 4. These interchanges include: (1) Estelle Mountain; (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to

¹ The Riverside County General Plan provides for up to six lanes in this location; however, traffic forecast modeling indicates that four lanes will meet projected demand.

be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

S.3.1.6 Alternative 7: General Plan North and South of Lake Mathews/South Perris (at Rider Street)

Alternative 7 involves the implementation of General Plan Circulation Element improvements between I-15 and El Sobrante Road and a new six- to eight-lane, controlled-access parkway east of El Sobrante Road to SR-79 (as shown later in Chapter 2 of this EIR/EIS, Figures 2.4.4a and 2.4.4b). Alternative 7 is the same as Alternative 5 (described above) east of El Sobrante Road and follows a southerly alignment through Perris. West of El Sobrante Road to I-15, the Riverside County General Plan includes a four-lane urban arterial north of Lake Mathews and a four-lane, controlled-access expressway south of Lake Mathews. The proposed arterial street improvements north and south of Lake Mathews are consistent with the Riverside County General Plan Circulation Element and are the same as described above for Alternative 6. The facility south of Lake Mathews would be a controlled-access expressway that ties into the same system interchange configuration at I-15 as the other Build Alternatives.

System interchanges are proposed for all of the MCP Build Alternatives, including Alternative 7, at MCP/I-15, MCP/I-215, and MCP/SR-79.

Service interchanges for Alternative 7 are at the same locations as for Alternative 5, even though the location of the MCP alignment south of Lake Mathews is somewhat different than Alternative 5. These interchanges include: (1) Estelle Mountain; (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

S.3.1.7 Alternative 9: Far South/Placentia Avenue

Alternative 9 is a four- to six-lane, controlled-access parkway south of both Lake Mathews and Mead Valley, a six- to eight-lane, controlled-access parkway between Old Elsinore Road and I-215, and a six- to eight-lane, controlled-access parkway between I-215 and SR-79, where it parallels existing Placentia Avenue and Ramona

Expressway. Alternative 9 is approximately 3.2 km (2.0 mi) south of Cajalco Road for much of its length but shares the same connection to I-15 as Alternatives 4 and 5. The alignment and proposed interchange locations for Alternative 9 are shown later in Chapter 2 of this EIR/EIS, Figures 2.4.5a and 2.4.5b.

System interchanges are proposed for all the MCP Build Alternatives, including Alternative 9, at MCP/I-15, MCP/I-215, and MCP/SR-79. System interchanges at I-15 and SR-79 are the same as proposed for Alternatives 4, 5, 6, and 7. The proposed I-215 system interchange differs from the other MCP Build Alternatives, as it connects the MCP project to I-215 approximately 45 m (150 ft) south of Placentia Avenue. This alternative also includes a realignment of the I-215 mainline to east of the existing location, from south of Orange Avenue to just north of Rider Street, that is approximately 3,000 m or 3.0 km (9,842 ft or 1.8 mi) in length.

Service interchanges for Alternative 9 are proposed: (1) at a location approximately 2,000 m (6,560 ft) east of Temescal Canyon Road (referenced as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) Old Elsinore Road; (4) Perris Boulevard; (5) Evans Road; (6) Ramona Expressway; (7) Bernasconi Road; (8) Reservoir Road; (9) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (10) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (11) Warren Road.

S.3.1.8 Design Variations

The Temescal Wash Area and San Jacinto North design variations apply to all of the MCP Build Alternatives. The Rider Street and Placentia Avenue/Perris Boulevard Elevated Grade design variations only apply to Alternative 9.

Temescal Wash Area (TWS) Design Variation

This is a design variation for the MCP/I-15 interchange that partially removes access to I-15 from El Cerrito Road. In this variation, the I-15/El Cerrito Road interchange southbound on-ramp and northbound off-ramp would be closed. A collector-distributor road system is provided from Weirick Road to Cajalco Road with modifications to the existing Weirick Road, El Cerrito Road, and Ontario Avenue interchanges and the proposed Cajalco Road interchange. A collector-distributor road system would provide an intermediate road or segment that collects and feeds traffic between the MCP and local streets and that would be approximately \$29 million per

mile for the MCP project. This design variation would result in a reduction in cost of the MCP project by \$202.6 million.

San Jacinto North (SJN) Design Variation

The SJN Design Variation extends from 1.32 km (0.82 mi) west of Warren Road east to SR-79. It follows an alignment approximately 347.4 m (1,140 ft) north of the existing Ramona Expressway. This segment also extends approximately 1.48 km (0.92 mi) north of the Ramona Expressway along SR-79 and approximately 1.06 km (0.67 mi) south of the Ramona Expressway along SR-79. This design variation would result in a reduction in cost for the MCP project by approximately \$8.9 million.

Rider Street Design Variation

The Rider Street Design Variation begins approximately 125 m (410 ft) east of Haines Street (west of I-215) and terminates about 87 m (291 ft) west of Dawson Street (east of I-215). This design variation also includes the MCP/I-215 interchange similar to Alternatives 5 and 7, with it extending along I-215 north and south of Rider Street. Based on the cost estimates in the Draft Project Report (Jacobs, 2008), this design variation would result in an increase in cost for Alternative 9 by approximately \$9.6 million. However, during preparation of the Draft Section 4(f) Evaluation, it was found that the Rider Street Design Variation would result in additional construction costs of approximately \$300 million due to the cost to acquire and relocate several large intermodal warehouse facilities in the city of Perris that are planned for construction prior to construction of the MCP. Therefore, the Rider Street Design Variation would result in an increase in cost for Alternative 9 by \$309.6 million.

Placentia Avenue/Perris Boulevard Elevated Grade Design Variation (PP-E)

The Placentia Avenue/Perris Boulevard Elevated Grade (PP-E) Design Variation follows Placentia Avenue at a point approximately 272 m (895 ft) west of Patterson Avenue (west of I-215) and extends east to 87 m (291 ft) west of Dawson Street (east of I-215). This segment includes an MCP/I-215 interchange, extending along I-215, approximately 1,570 m (5,150 ft) north and 1,870 m (6,100 ft) south of Placentia Avenue. For this design variation, the road is elevated above grade approximately 8 m (26 ft) from Barrett Avenue to Wilson Avenue. This design variation would result in a reduction in cost for Alternative 9 by approximately \$63.6 million.

S.3.2 Identification of a Locally Preferred Alternative

As the NEPA lead agency, FHWA will identify a Preferred Alternative after comments are received from the public during release of the Draft EIR/EIS.

As the CEQA lead agency, RCTC believed that identifying a Locally Preferred Alternative in the Draft EIR/EIS allowed for better public disclosure and for the public to focus their review and comment on that alternative. After comparing and weighing the benefits and impacts of all of the MCP alternatives, at its regular meeting of September 12, 2007, the RCTC Commissioners approved identification of Alternative 9 TWS DV as the Locally Preferred Alternative in the Draft EIR/EIS since the technical studies completed for the project demonstrated, as described below, that Alternative 9 TWS DV is the least environmentally damaging alternative to both the natural and human environments.

- Alternative 9 TWS DV impacts the least total acres of least Bell's vireo habitat.
- Alternative 9 TWS DV impacts the least total acres of existing Habitat Conservation Plan lands.
- Alternative 9 TWS DV impacts the least amount of jurisdictional wetlands and nonwetland waters of the United States and CDFG riparian habitat.
- Alternative 9 TWS DV does not pass through the Lake Mathews MSHCP Plan Area.
- Alternative 9 TWS DV would have a benefit to parks and recreational facilities by creating a second park in Perris, resulting in 0.65 hectare (ha) (1.57 acres [ac]) more park acreage in Perris than exists today.
- Alternative 9 TWS DV converts the least amount of farmlands with special designations (i.e., Prime, Unique) to nonagricultural uses.
- Alternative 9 TWS DV has the fewest impacts to farmlands under Williamson Act Preserves
- Alternative 9 TWS DV impacts the least amount of land, a total of 1,049.2 ha (2,592.7 ac). The other MCP Build Alternatives impact anywhere from 1,065.9 ha (2,634.0 ac) to 1,331.1 ha (3,289.1 ac) of land.
- Alternative 9 TWS DV results in one of the lower number of residential and business relocations. Alternative 9 TWS DV will acquire a total of 401 residential and business parcels; acquisitions required under the other MCP Build Alternatives range from 396 to 672 parcels.
- Alternative 9 TWS DV will impact fewer minority or low-income populations as defined under EO 12898 regarding environmental justice.

- Alternative 9 TWS DV is routed through less populated areas between I-15 and I-215, and therefore would not impact as many sensitive viewers as Alternatives 4 through 7.
- Alternative 9 TWS DV impacts one sacred cultural site as compared to the other MCP Build Alternatives that impact two sacred sites.
- Alternative 9 TWS DV would have the fewest floodplain encroachments of all of the MCP Build Alternatives.
- Alternative 9 TWS DV would be constructed over the fewest number of streams and therefore would have the lowest probability of pollutants entering the waters from bridge construction.
- Alternative 9 TWS DV is one of the lowest in adding new pavement; therefore, it would result in one of the lowest volumes of additional storm water runoff.
- Alternative 9 TWS DV impacts to existing hazardous waste/materials sites are
 less than the impacts of the other MCP Build Alternatives since a lesser number
 of hazardous waste/materials sites would be affected.
- Direct human exposure to Mobile Source Air Toxics (MSATs) generated by vehicles on the MCP would be lower for the Alternative 9 TWS DV than Alternatives 4 through 7 since Alternative 9 TWS DV is routed through less populated areas.
- The cost for Alternative 9 TWS DV is less than the other MCP Build Alternatives at \$2.98 billion dollars for construction and \$600 million dollars for engineering, for a total of \$3.58 billion dollars (the next lowest MCP Build Alternative is Alternative 9 base case at \$3.83 billion).

S.4 Joint CEQA/NEPA Document

The project is subject to federal as well as state environmental review requirements because the RCTC proposes the use of federal funds from the FHWA, and the project requires FHWA approval of new connections to the federal Interstate highway system at I-15 and I-215. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. The RCTC is the project proponent and lead agency under CEQA and has adopted guidelines for implementing CEQA. FHWA is the lead agency under NEPA, with Caltrans acting as its agent and providing oversight for the NEPA process. The Notice of Intent (NOI) for the MCP project was published in November 2004 (prior to the August 10, 2005, effective date for the Safe, Accountable, Flexible, Efficient Transportation Equity Act [SAFETEA-LU]); therefore, the project is not required to follow the environmental review process required by Section 6002.

USACE is a Cooperating Agency under NEPA for the MCP project, while the County of Riverside, the Cities of Corona, Perris, and San Jacinto, and the CDFG are responsible agencies under CEQA. Following certification of the Final EIR by RCTC and approval of a Record of Decision by FHWA, these agencies intend to adopt the EIR/EIS for purposes of independent CEQA/NEPA compliance responsibilities related to the discretionary state and federal actions, including General Plan Amendments by the County of Riverside and the Cities of Corona, Perris, and San Jacinto or permit approvals by USACE or USFWS. After comments are received from the public and reviewing agencies, the RCTC and the FHWA may undertake additional environmental and/or engineering studies. A Final EIR/EIS will be made available to the public. The Final EIR/EIS will include responses to comments received on the Draft EIR/EIS and will again identify the Preferred Alternative. Following completion of the Final EIR/EIS, if the decision is made to approve the MCP project, a Notice of Determination will be filed with the State Clearinghouse for compliance with CEQA and a Record of Decision will be published in the Federal Register for compliance with NEPA.

S.5 Environmental Consequences

Table S.1 (provided at the end of this Executive Summary) summarizes the impacts documented in the environmental analysis contained in Chapter 3 of this EIR/EIS. The environmental commitments and measures to minimize harm are listed in the Environmental Commitments Record in Appendix F.

S.5.1 Land Use

S.5.1.1 Existing and Future Land Use

Build Alternatives

The MCP Build Alternatives will permanently impact existing residential, commercial (retail/office), industrial, transportation (existing roadways), agricultural, and open space (habitat reserves/parklands/undeveloped lands) land uses. Alternative 9 and its design variations have the lowest impact to agricultural, residential, and commercial land uses due primarily to its routing south of Mead Valley through the Gavilan Hills area. Alternatives 4 and 6 have the highest impact to commercial land uses due primarily to the routing of the parkway alignment through some of the commercial areas in the northern portion of the city of Perris as well as Mead Valley. Alternative 9 and its design variations have the highest impact to industrial land uses due to its routing along Placentia Avenue.

In areas where the MCP Build Alternatives are now located off of the alignments of El Sobrante Road, Cajalco Road, or Ramona Expressway, there are some conflicts with land use compatibility (i.e., south of Lake Mathews [Alternatives 4, 5, and 9], Gavilan Hills [Alternative 9], and the Perris area [all Build Alternatives]).

Temporary construction impacts would include disruption of local traffic patterns and access to residences and businesses; increased traffic congestion; and increased noise, vibration, and dust. Although some businesses could close or relocate during a prolonged construction period, this impact would be localized and would not likely result in long-term changes in land use.

No Build Alternatives

Under the MCP No Build Alternatives, the temporary and permanent impacts discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but would occur for the other transportation improvement projects included in the No Build Alternatives

S.5.1.2 Consistency with State, Regional, and Local Plans Build Alternatives

There are no temporary impacts related to consistency with state, regional, and local plans. Implementation of the MCP project would be consistent with the RTP, as the MCP project is designated as a future transportation corridor in the RTP. Implementation of the MCP project would be consistent with and help further the goals of the Regional Comprehensive Plan (RCP). All of the MCP Build Alternatives will require the County of Riverside and the Cities of Corona, Perris, and San Jacinto to amend their General Plan Land Use and Circulation Elements to reflect the final MCP alignment, interchange locations, and elimination of any land uses that may need to be acquired for the project.

No Build Alternatives

Planned improvements in the regional and local circulation system other than the MCP project are accounted for in the adopted Riverside County General Plan, the RCTC's Measure A program, and other adopted plans and policies, and would not impact any adopted state, regional, or local plans and policies.

S.5.1.3 Parks and Recreational Facilities Build Alternatives

Under the MCP Build Alternatives, no indirect impacts to parks or recreational facilities would occur as a result of any of the MCP Build Alternatives; however,

direct impacts would occur to two parks: the proposed El Cerrito Sports Park and the existing Paragon Park. All MCP Build Alternatives would use 0.95 ha (2.36 ac) from the planned El Cerrito Sports Park. However, because this is a planned park and not yet constructed, it is anticipated that the sports fields used by the MCP Build Alternatives could be shifted to the east, outside the footprint/right of way of the project.

Paragon Park in Perris is only impacted by Alternative 9. Alternative 9 includes a project design feature to construct a detention basin on the north side of the MCP alignment, east of Redlands Avenue. One of the mitigation measures proposed for Alternative 9 is to develop part of the area occupied by that detention basin with active and passive recreation uses and landscaping to replace the impacted area and facilities at Paragon Park, therefore resulting in a benefit to parks and recreational facilities by creating additional park acreage (0.67 ha [1.57 ac]) in Perris. Pedestrian access between Paragon Park and the park facilities at the detention basin site will be provided across the MCP alignment east of Redlands Avenue to ensure that park users can safely walk or ride bicycles between the two facilities. Additional park space would be provided on the south side of the MCP project, east of Redlands Avenue, using remnants of existing residential parcels that would be acquired for the MCP project.

No Build Alternatives

The MCP No Build Alternatives would not result in adverse impacts on park or recreational resources

S.5.2 Growth

S.5.2.1 Build Alternatives

Construction of a new transportation facility such as the MCP project could have growth-related effects by reducing or removing barriers to growth by creating conditions that attract additional residents or new economic activity or by providing a catalyst for future growth in the area. However, based on the review of land development trends within the MCP study area, implementation of the MCP project is expected to have little influence on the overall location, amount, rate, or type of growth in the area. The basis for this conclusion is that: (1) the area has been undergoing rapid development since well before the MCP planning (and prior CETAP corridor planning) had begun; (2) the MCP project has been integrated into the overall planning of the area based on the inclusion of the CETAP corridor overlay

in the Riverside County General Plan Circulation Element (the Draft Tier 1 EIS/EIR for the HCLE corridor concluded that Alternatives 1A and 1B, which parallel the MCP alignments, would remove a barrier to implementation of planned land use in the area, but would not result in unplanned growth in the area); and (3) based on RCTC's monthly meetings with the local land use authorities, there has been no indication of developers intensifying or substantially modifying their development proposals in response to the proposed MCP project.

Alternatives 4 through 7 share the same alignment for much of their length; therefore, the overall growth-related impacts are similar for all four alternatives. Land that is private and vacant or underutilized near the proposed MCP service interchanges (i.e., Alexander Street and Clark Street west of I-215 and Perris Boulevard [Alternative 5], Evans Road, Warren Road east of I-215 and Reservoir Road and Perris Boulevard [Alternative 4]) is the most likely area where future development might change in type as a result of interchange access (i.e., roadway commercial uses rather than residential).

Alternative 9 is unique compared to the other MCP Build Alternatives for the segments between the Lake Mathews Drive and Placentia/Rider Streets. While the possibility of growth-related effects is constrained by the topography of the Gavilan Hills, limited access (only two service interchanges in this area), existing land use patterns, and the overall rural character of the Gavilan Hills and Lake Mathews areas and existing reserves such as the Harford Springs Reserve, Motte-Rimrock Reserve, and Lake Mathews-Estelle Mountain Reserve, the Lake Mathews Drive and Old Elsinore Road interchanges could hasten the build out of these areas or result in the introduction of more intense uses than were considered in the adopted Riverside County General Plan.

S.5.2.2 No Build Alternatives

Under the MCP No Build Alternatives, the growth-related effects discussed above for the MCP Build Alternatives would not occur for the MCP project. However, the other transportation improvement projects included in the No Build Alternatives may result in growth-related effects already considered in the Riverside County General Plan. For example, Alternative 1B would implement the Riverside County General Plan Circulation Element improvements on Cajalco Road and Ramona Expressway and would, therefore, not result in any unplanned growth-related effects.

S.5.3 Farmlands and Timberlands

S.5.3.1 Build Alternatives

Alternative 7 will result in the greatest conversion of Prime Farmland and Unique Farmland, while Alternative 6 will result in the greatest conversion of Farmland of Statewide Importance. Alternative 9 will result in the conversion of the least amount of Prime Farmland and Unique Farmland, while Alternative 5 will result in the conversion of the least amount of Farmland of Statewide Importance. Overall, Alternative 6 will result in the greatest conversion of designated Farmland, and Alternative 9 will result in the conversion of the least amount of designated Farmland. Alternative 9 impacts the fewest acres of Williamson Act Agricultural Preserves.

Temporary impacts to farmlands as a result of construction of any of the MCP Build Alternatives occur due to the proximity of construction activities to field crops or grazing lands. Fugitive dust emissions from grading and exhaust emissions from construction equipment could have an adverse impact on farmlands immediately adjacent to the construction areas. Noise from construction equipment could startle or otherwise disturb livestock. Agricultural operations could be adversely impacted where the MCP project would bisect existing agricultural parcels of land, impairing the ability of farm equipment to be easily transported from one parcel to another.

S.5.3.2 No Build Alternatives

Under the MCP Build Alternatives, the temporary and permanent impacts discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but impacts to farmlands could result from other transportation improvement projects included in the No Build Alternatives. Alternative 1B would implement the Riverside County General Plan Circulation Element improvements on Cajalco Road and Ramona Expressway and would therefore result in impacts to farmlands immediately adjacent to those roadways.

S.5.4 Community Impacts and Relocation

S.5.4.1 Community Character and Cohesion Build Alternatives

The MCP Build Alternatives would result in a physical change that would permanently alter the character of the existing community. The MCP Build Alternatives would cause rerouting and/or closing of several roadways that would intersect the MCP project, which would have a slightly adverse effect on access and travel time for residents living within the vicinity of these improvements. The MCP

Build Alternatives would result in property relocations throughout the MCP study area that would change the affected communities' character by displacing and relocating existing residents and local businesses. Although a disruption of community character and cohesion would occur as a result of construction of the MCP project, the ultimate mobility improvements provided by the project would also benefit the communities by providing an improved connection to other parts of the MCP study area, western Riverside County, and the region as a whole.

Construction of any of the MCP Build Alternatives would temporarily affect local communities. Temporary construction impacts would include disruption of local traffic patterns (traffic diversions due to local road, temporary ramp, and mainline lane closures) and access to residences, businesses, and community facilities; increased traffic congestion; and increased noise, vibration, and dust.

No Build Alternatives

Under the MCP No Build Alternatives, the permanent impacts to community cohesion discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but impacts to communities could result from other transportation improvement projects included in the No Build Alternatives.

S.5.4.2 Relocations

Build Alternatives

The MCP Build Alternatives would result in the acquisition of nonresidential (dairies, agricultural, sod farms, open storage, big box distribution, manufacturing, and retail), residential (mobile homes, single-family, multifamily), and municipal (fire station, police station, school district offices, and high school) properties. Alternative 6 results in the highest number of residential and nonresidential displacements with implementation of the MCP project, and Alternative 9 results in the fewest number of displacements.

The MCP Build Alternatives also result in a loss of total property tax revenue associated with full parcels acquired for the MCP Build Alternatives. Alternative 4 (base case) would result in the greatest property tax revenue loss to the cities and unincorporated Riverside County, and Alternative 9 TWS DV would result in the least.

The MCP Build Alternatives also result in a loss of sales tax revenue. Alternative 7 (base case) results in the greatest estimated annual sales tax revenue loss to the cities,

county, RCTC, and state; and Alternatives 9 PPE DV results in the least, followed by Alternative 9 TWS DV.

No Build Alternatives

Under the MCP No Build Alternatives, the adverse effects resulting from property acquisitions discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but similar effects could occur for the other transportation improvement projects included in the No Build Alternatives.

S.5.4.3 Environmental Justice

Build Alternatives

All MCP Build Alternatives would benefit most study area residents, including minority and low-income populations, by improving mobility and circulation throughout the MCP study area and the western Riverside County region. However, the MCP Build Alternatives will involve the establishment of a parkway through the communities of Mead Valley and Perris. Some Census Tracts within these communities have a higher percentage of non-White persons, a higher percentage of Hispanic population, a higher percentage of persons below the poverty line, and a lower median income compared to the county as a whole and the cities within the MCP study area. Implementation of the MCP project would result in property acquisitions, temporary construction detours, temporary and permanent air and noise impacts, permanent aesthetic impacts, and temporary and permanent changes in travel patterns throughout the study area, including the Mead Valley and Perris areas. Alternatives 4 through 7 have a greater impact on Environmental Justice populations within the MCP study area than Alternative 9 due to their direct impact to low-income and minority populations along Cajalco Road in Mead Valley (within the Old Elsinore Road and Gavilan Hills communities). Alternative 9 does displace residences in the southern portion of Mead Valley, but the total number is lower than that for Alternatives 4 through 7.

Alternatives that would avoid or reduce adverse effects on the low-income and minority populations are not practicable for the MCP project as it is not possible to route the MCP alignments around these populations. That is, for the MCP project to meet its purpose of providing effective and efficient movement between and through Corona, Perris, and San Jacinto, it is not possible to completely avoid those Census Tracts with higher percentages of minority and low-income populations.

No Build Alternatives

Under the MCP No Build Alternatives, the adverse effects to minority and low-income populations discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but similar effects could occur for the other transportation improvement projects included in the No Build Alternatives.

S.5.5 Utilities and Emergency Services

S.5.5.1 Build Alternatives

The MCP Build Alternatives do not include the construction of any residential or commercial uses and therefore would not result in increased population or demand for public services or utilities in the MCP study area. However, the MCP Build Alternatives could have both beneficial and adverse impacts on fire, law enforcement, and emergency services. Beneficial effects include emergency response times, as the ability to move fire, law enforcement, and emergency service resources from one area to another would be enhanced by the improved transportation network. The project would also temporarily result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response time goals within a particular alternative. The MCP Build Alternatives could also increase the risk of wildfires in open space areas as a result of cigarette butts or other flammable items being thrown from cars, as well as car fires, and the temporary increase in risk of wildfires due to the use of combustion engines in construction equipment, welding equipment, and other sources of combustion. Non-fire-related medical emergencies could temporarily increase with the presence of construction workers and heavy machinery.

The following are public facilities that would be directly impacted by the MCP Build Alternatives:

- Riverside County Fire Department (RCOFD) Station No. 59, 21510

 Pinewood: This station would be directly impacted by Alternatives 4 through 7.

 The station would need to be relocated to maintain fire protection to the Mead Valley area.
- Corona Fire Department Temescal Public Safety Facility, 3777 Bedford
 Canyon Road: This facility would be directly impacted by all MCP Build
 Alternatives, including the TWS Design Variation. All MCP Build Alternatives
 would result in a direct physical impact to the Temescal Public Safety Facility due
 to the partial acquisition of the property, primarily the parking area and driveway.

• Station No. 90 (City of Perris/RCOFD/Police Substation), 333 Placentia Avenue: This station will be directly impacted by Alternative 9 (including the PP-E Design Variation). It is proposed to be relocated to the northeast corner of the Redlands Boulevard/Placentia Avenue intersection, only 200 m (650 ft) away from the existing location and would therefore not impact emergency response times within the station's service area.

In addition, there are temporary impacts, relocation, removal and protection in place of various utilities in the MCP study area that are common to all the MCP Build Alternatives and are described in detail in Table 3.5.A.

S.5.5.2 No Build Alternatives

Under the MCP No Build Alternatives, the temporary and permanent impacts to public services and utilities discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but similar impacts could occur for the other transportation improvement projects included in the No Build Alternatives.

S.5.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

S.5.6.1 Build Alternatives

The MCP project would result in temporary and permanent impacts to traffic circulation due to traffic diversions resulting from local road closures and temporary ramp and mainline lane closures.

All MCP Build Alternatives would have a long-term beneficial effect on traffic circulation as most of the freeways, ramps, and intersections within the MCP study area are expected to operate at acceptable LOS in the horizon year of 2035 for all of the Build Alternatives and design variations with the following exception:

• I-15 and I-215 freeway mainlines are expected to experience traffic congestion throughout the entire study area (between SR-91 and Temescal Canyon Road) for all Build Alternatives and design variations.

In addition, all of the MCP Build Alternatives would have an adverse effect on local traffic circulation for residents living south of Lake Mathews in the immediate vicinity of where portions of Cajalco Road would be closed from Gavilan Road to La Sierra Avenue. This closure would result in increased travel times to and from I-15 for some residents in this area

In addition, the closure of ramps at the I-15/El Cerrito Road interchange will also affect local circulation and travel time. For vehicles traveling northbound from I-15/Cajalco Road to I-15/El Cerrito Road, additional travel time due to these ramp closures is estimated at 1 minute under the full interchange condition and 4.6 minutes with implementation of the half diamond interchange. For vehicles traveling southbound along local streets from the I-15/El Cerrito Road interchange area to I-15/Cajalco Road interchange area, travel time would also be 1 minute under the full interchange condition but would increase to 2.6 minutes with implementation of the half diamond.

The MCP project will also provide facilities for bicycles and pedestrians in locations where local streets will cross the MCP, and these facilities will be designed to be consistent with the local General Plan Circulation Element. A Class I (off-road) trail is planned in the Riverside County General Plan Circulation Element for the entire length of Cajalco Road and Ramona Expressway, where the MCP Build Alternatives would remove portions of these two roads. The planned trail will need to be relocated either immediately adjacent to the MCP right of way or to a parallel west-east arterial highway, and mitigation has been identified in Section 3.6 of this EIR/EIS to maintain continuity and connectivity of the regional trail system.

Regional Travel Demand

In the regional travel forecasting model that was used in analyzing the traffic impacts of the MCP project, the future land use forecasts were the same with and without the project. SCAG develops its land use forecasts through analysis of regional trends that do not change when transportation facilities are added or subtracted from the roadway network. Therefore, the overall land use and trip generation at a regional level will remain the same, and no new vehicle trip generation will occur.

Information regarding vehicle miles traveled (VMT) in the MCP study area is shown later in Table 3.6.K in Section 3.6 of this EIR/EIS.

S.5.6.2 No Build Alternatives

Under the MCP No Build Alternatives, the beneficial traffic effects discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but similar effects could occur for the other transportation improvement projects included in the No Build Alternatives

S.5.7 Visual and Aesthetics

S.5.7.1 Build Alternatives

For all MCP Build Alternatives, long-term impacts would result from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and soundwalls. Existing lighting on streets and freeways would be modified or relocated as part of the MCP project, and safety lighting would also be provided along the MCP roadway in existing developed areas and at interchanges. Light and glare would increase as a result of the MCP project in those areas that are currently open space or are rural in character. The MCP Build Alternatives would create new sources of shadow and shade associated with fill slopes, bridges, and other structures. These shade and shadow effects are considered minimal because very few, if any, sensitive viewers would be within shade or shadow footprints.

Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and structures, construction vehicles, and construction staging areas. Construction activities are temporary, and the adverse visual impacts related to construction activity would cease after completion of construction. The effects of vegetation clearing would gradually cease over time as landscaping for the MCP project matures

S.5.7.2 No Build Alternatives

Alternative 1A would not change the existing visual setting and would, therefore, not create visual impacts to the MCP study area. Therefore, permanent visual impacts in the vicinity of Cajalco Road and Ramona Expressway would be less for Alternative 1A than for the MCP Build Alternatives.

Under Alternative 1B, the widening of Ramona Expressway between I-215 easterly to SR-79 would include some removal of agricultural land but would not include the construction of any interchange structures in this area. The effects of widening and realigning Cajalco Road and El Sobrante Road in the area from I-15 west to the existing Cajalco Road/El Sobrante Road intersection would result in the same visual effects as MCP Build Alternatives 6 and 7. Through Mead Valley, the widening of Cajalco Road to its General Plan Circulation Element width would result in the removal of mature ornamental vegetation as well as some existing residences and

businesses, but would not include the construction of any interchange structures in this area.

S.5.8 Cultural Resources

S.5.8.1 Build Alternatives

Impacts to cultural resources would result from construction of any of the MCP Build Alternatives. Four resources that are eligible for listing in the National Register of Historic Places (National Register) and California Register of Historical Resources (California Register) are at least partially within the Area of Potential Effect in Alternative 9 TWS DV. These resources and a description of impacts are listed below:

- Alternative 9 TWS DV would result in the physical destruction of the southern third of P-33-1512, with the exception of the southernmost tip. Therefore, there would be an adverse effect to this site (historic property) under Section 106 of the National Historic Preservation Act.
- Alternative 9 TWS DV would result in the physical destruction of roughly the eastern 60 percent of Site 33-1650/33-16687. Therefore, there would be an adverse effect to this site (historic property) under Section 106 of the National Historic Preservation Act.
- Alternative 9 TWS DV would result in the physical destruction of the
 northeastern 7 percent of P-33-16598. The area that would be impacted is highly
 disturbed and does not contribute to the overall site eligibility for the National or
 California Registers. Therefore, the direct effect would not be adverse to the site
 (historic property) under Section 106 of the National Historic Preservation Act.
- Alternative 9 TWS DV would result in the physical destruction of 95 percent of P-33-16679. Therefore, there would be an adverse effect to this site (historic property) under Section 106 of the National Historic Preservation Act.
- Three additional resources in Alternative 9 TWS DV are recommended for protection and avoidance through designation as ESAs: P-33-1649, P-33-12230, and LSA-JCV531-207. The project would have no adverse effect on properties that are protected by ESAs.

S.5.8.2 No Build Alternatives

While the MCP project would not be built under No Build Alternatives 1A and 1B, impacts to cultural resources could result from construction of the other transportation improvement projects included in the No Build Alternatives.

S.5.9 Hydrology and Floodplains

S.5.9.1 Build Alternatives

Alternative 6 would result in the greatest number of floodplain encroachments (five transverse and five longitudinal). Alternatives 5 and 9 would result in the least number of floodplain encroachments (two transverse and five longitudinal for Alternative 5, and three transverse and four longitudinal for Alternative 9). Floodplain encroachments include:

- Transverse encroachment of the Temescal Wash floodplain associated with the northern bridge over Temescal Wash (Alternatives 6 and 7).
- Transverse encroachment of the Perris Valley Storm Drain (Alternatives 4 and 6 at the Perris Drain (PD) segment, and Alternative 9 at the PP-E and Placentia Avenue/Perris Boulevard Depressed Grade (PP-D) segments.
- Transverse encroachment of the San Jacinto River floodplain west of Lakeview Avenue (all MCP Build Alternatives).
- Longitudinal encroachment of the floodplain of the San Jacinto River at the MCP/ SR-79 interchange (all MCP Build Alternatives).
- Transverse encroachment of the Bedford Canyon Wash floodplain between I-15 and Temescal Wash (all MCP Build Alternatives).
- Longitudinal encroachment of the floodplain of Cajalco Creek (Alternatives 4 through 7).

In addition, the MCP project would improve the transportation network in the area and would alleviate existing service interruptions caused by flooding because the MCP facility would be elevated higher than the existing facilities. The MCP project would result in a minimal increase in flood heights and flood limits; however, this is a minimal increase and would not result in any substantial change in flood risks or damage to life or property.

S.5.9.2 No Build Alternatives

While the MCP project would not be built under No Build Alternatives 1A and 1B, impacts to floodplains could result from construction of the other transportation improvement projects included in the No Build Alternatives that could result in floodplain encroachment. New roadway projects such as the SR-79 Realignment project would likely result in similar impacts to existing floodplains as those identified for the MCP Build Alternatives, while projects that widen existing facilities

(e.g., I-15 Widening and I-215 Widening projects) are less likely to result in any floodplain encroachments.

The MCP No Build Alternatives would not have the beneficial effect of alleviating existing transportation service interruptions caused by flooding. Although some projects included in the MCP No Build Alternatives may enhance the ability to move fire protection and emergency service resources from one area to another, they would not provide the benefit of a regional transportation facility like the MCP project.

S.5.10 Water Quality and Storm Water Runoff

S.5.10.1 Build Alternatives

Within the project area, surface water either drains to the San Jacinto River, which discharges into Canyon Lake and ultimately into Lake Elsinore, or to Temescal Wash, which flows to the Santa Ana River (Reach 3) and ultimately the Pacific Ocean. The primary receiving waters for all MCP Build Alternatives (Temescal Wash and the San Jacinto River) are not listed as impaired on the 2002 or 2006 303(d) impaired waters list for California. However, storm water runoff from all MCP Build Alternatives would eventually reach waters listed on the 303(d) list or have a Total Maximum Daily Load (TMDL). Lake Elsinore, Reach 3 of the Santa Ana River, and Canyon Lake are all listed as impaired on the California 303(d) list. A TMDL has been adopted for Lake Elsinore and Canyon Lake for nitrogen and phosphorus. Development of a TMDL for bacteria in Reach 3 of the Santa Ana River is currently under way and is awaiting approval by the EPA. Alternatives 6 and 7 and their design variations would be constructed over the greatest number of streams and therefore would have the greatest opportunity for pollutants to enter the waters during bridge construction. Alternative 9 and its design variations cross the fewest number of streams and therefore would have the least opportunity for pollutants to enter the waters during bridge construction.

Total new pavement area varies from 152 to 180 ha (376 to 445 ac) in the San Jacinto Watershed and from 131 to 177 ha (324 to 437 ac) in the Santa Ana River Watershed, depending on the alternative. In the two watersheds combined, Alternatives 4 and 5 would add 311 ha (769 ac) of new pavement, Alternatives 6 and 7 would add 357 ha (882 ac) of new pavement, and Alternative 9 would add 299 ha (739 ac) of new pavement. The MCP project would not increase industrial discharges.

Implementation of the project would require new cut-and-fill slopes, which could increase erosion potential. When possible, new slopes would be 1:4 or flatter. In

mountainous areas, slopes would be 1:2 or flatter. Acreage of existing slopes that are 1:2 or greater, where erosion could be the greatest, is 18.6 ha (45.9 ac) for Alternative 4, 17.9 ha (44.2 ac) for Alternative 5, 22.5 ha (55.5 ac) for Alternative 6, 21.8 ha (53.9 ac) for Alternative 7, and 35.9 ha (88.7 ac) for Alternative 9.

Nitrate and total phosphorus loading are anticipated to increase post-project compared with existing conditions; however, nitrate and total phosphorus concentrations are anticipated to decrease. Copper, lead, and zinc loadings are anticipated to increase with implementation of the MCP project. With implementation of the mitigation measures presented in Section 3.10 of this EIR/EIS, no adverse impacts to water quality are anticipated to result from implementation of the MCP project.

S.5.10.2 No Build Alternatives

For Alternative 1A, Treatment and Design Pollution Prevention Best Management Practices (BMPs) would be constructed for other planned roadway improvement projects consistent with Caltrans and State Water Resources Control Board (SWRCB) policies and guidelines; however, because Cajalco Road and Ramona Expressway would remain as they are today, runoff from these roadways would remain untreated. Under Alternative 1B, water quality impacts would be expected to be similar for the MCP Build Alternatives because Treatment and Design Pollution Prevention BMPs would be implemented under both scenarios.

S.5.11 Geology, Soils, Seismic, and Topography

S.5.11.1 Build Alternatives

Each of the Build Alternatives would alter existing landforms due to grading and construction of various cut-and-fill slopes. The geologic and geotechnical impacts of Alternative 9 are greater than the impacts of the other MCP Build Alternatives due to the higher quantities of grading. More extensive landform alteration also occurs under Alternative 9 due to its alignment through the Gavilan Hills and the area south of Lake Mathews near Monument Peak.

The roadway, structures, slopes, and other features of the MCP Build Alternatives could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) to some degree. Design and construction of the proposed project to current highway and structure design standards would minimize the impact of these conditions to the MCP Build Alternatives

Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Furthermore, the construction activities associated with the proposed Build Alternatives could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) to some degree if an earthquake were to occur during construction.

S.5.11.2 No Build Alternatives

For Alternatives 1A and 1B, the impacts discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but earthquake and seismic safety concerns would be issues that would be analyzed as part of the environmental and engineering studies for the other transportation improvement projects included in the No Build Alternatives. The grading and use of cut-and-fill slopes required for the MCP project would not occur under the No Build Alternatives.

S.5.12 Paleontology

S.5.12.1 Build Alternatives

Direct impacts to paleontological resources would result from construction of any of the MCP Build Alternatives, not from operation of the facility itself. Paleontological resource sensitivity is high for all MCP Build Alternatives. In addition, the MCP project increases human presence afforded by access, which creates opportunities for increased disturbance to paleontological resources.

S.5.12.2 No Build Alternatives

Although the MCP project would not be built under the No Build Alternatives, impacts to paleontological resources could result from construction of the other transportation improvement projects included in the No Build Alternatives.

S.5.13 Hazardous Waste and Materials

S.5.13.1 Build Alternatives

All MCP Build Alternatives would result in a potential for hazardous materials spills as a result of traffic accidents on the MCP roadway. In addition, vehicles traveling on the MCP roadway may transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources. However, transport of hazardous materials is subject to strict regulations. In addition, Caltrans, the California Highway Patrol, and local police and fire departments are trained in emergency response procedures

for safely responding to accidental spills of hazardous substances on public roads, which further reduces impacts. Also, the MCP project would be designed to current safety standards, which would reduce the possibility of accidents compared to older roadways that are not designed to current standards. Therefore, implementation of the MCP project would not result in a substantial permanent adverse impact related to hazardous waste and materials.

Hazardous materials may also be encountered during temporary activities (i.e. excavation and construction activities) for all MCP Build Alternatives. Based on the findings of the records search and the site survey when compared to other alternatives, Alternatives 6 and 7 have more sites within and immediately adjacent to the project footprint, and Alternative 9 has the fewest hazardous materials sites within and immediately adjacent to the project footprint.

S.5.13.2 No Build Alternatives

For Alternatives 1A and 1B, hazardous materials similar to those for the MCP Build Alternatives could be encountered during construction and improvement of the other transportation projects in the MCP study area.

S.5.14 Air Quality

S.5.14.1 Build Alternatives

Long-term mobile emissions associated with the MCP Build Alternatives would be lower than the MCP No Build Alternatives due to improved traffic flow in the project area under the MCP Build Alternatives. Direct human exposure to MSATs generated by vehicles on the MCP roadway would be lower for Alternative 9 than for Alternatives 4 through 7 since Alternative 9 is routed through less populated areas.

Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site preparation, equipment exhaust, and use of emulsified asphalt paving materials.

S.5.14.2 No Build Alternatives

Although the MCP project would not be built under the No Build Alternatives, construction-related air quality impacts could result from one of the other transportation improvement projects included in the No Build Alternatives.

S.5.15 Noise

S.5.15.1 Build Alternatives

All MCP Build Alternatives will result in increased traffic noise adjacent to the MCP project alignment. A total of 237 sensitive receptor locations were selected to represent the existing land uses in the MCP project area. Of the 237 receptor locations modeled, 88 receptor locations for Alternative 4, 85 receptor locations for Alternative 5, 81 receptor locations for Alternative 6, 79 receptor locations for Alternative 7, and 65 receptor locations for Alternative 9 would approach or exceed the Noise Abatement Criteria (NAC) under the future worst-case conditions.

Soundwalls were analyzed for all receptor locations that would be exposed to or would continue to be exposed to traffic noise levels that approach or exceed the NAC. Eighteen (18) soundwalls were analyzed and determined to be feasible (i.e., they could achieve a noise reduction of 5 decibels [dB] or more) for Alternative 4, as well as 17 soundwalls analyzed for Alternative 5, 17 soundwalls analyzed for Alternative 6, 16 soundwalls analyzed for Alternative 7, and 12 soundwalls analyzed for Alternative 9. Two (2) soundwalls were determined to be reasonable (i.e., they met Caltrans criteria for cost effectiveness) for Alternatives 4 through 7, and 3 soundwalls were determined to be reasonable for Alternative 9. A final decision to construct noise abatement will be made upon completion of the project design.

There is also short-term noise that would occur during construction of the MCP project that would be from construction crew commutes, the transport of construction equipment and materials to the project site, excavation, grading, pile driving, and roadway construction.

S.5.15.2 No Build Alternatives

Under Alternative 1A, the planned street network would be constructed, except for improvements to Cajalco Road and Ramona Expressway. Under Alternative 1B, the planned street network would be developed according to the Circulation Element of the Riverside County General Plan. As with the MCP project, noise abatement measures for sensitive receptors impacted by increases in traffic noise would be considered for all future projects.

S.5.16 Energy

S.5.16.1 Build Alternatives

Under the MCP Build Alternatives, there would be an irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities. However, it is unlikely that the increased energy demands of construction of the proposed project would create a noticeable impact to regional energy consumption.

Implementation of the MCP Build Alternatives would result in an increase in fuel consumption (i.e., up to a 3.9 percent increase) within the MCP study area as a result of increased VMT. This VMT increase in the MCP study area would be almost entirely offset by VMT reductions in other parts of the SCAG region due to rerouting of vehicle trips from other highways. Within the SCAG region, the MCP project's increase in fuel consumption would be negligible (i.e., an increase of 0.04 percent or less depending upon the alternative). When balancing energy used during construction and operation against energy conserved by relieving congestion and other transportation efficiencies, the project would not have substantial energy impacts. Therefore, implementation of any of the MCP Build Alternatives would not result in a substantial increase in fuel consumption.

S.5.16.2 No Build Alternatives

For Alternatives 1A and 1B, the energy consumption discussed above for the MCP Build Alternatives would not occur for the MCP project itself, but energy consumption would occur for the other transportation improvement projects included in the No Build Alternatives. Additionally, there would be increased energy consumption compared to the MCP Build Alternatives due to lack of energy savings from relieving congestion.

S.5.17 Natural Communities

S.5.17.1 Build Alternatives

Permanent direct impacts to MSHCP riparian/riverine areas by alternative are the greatest for Alternative 7 SJN DV (27.6 ha [67.6 ac]) and the least for Alternative 9 RD DV (12.4 ha [29.7 ac]).

Permanent direct impacts to other natural communities range between 158.5 ha (391.7 ac) and 185.3 ha (457.9 ac) with Alternative 6 as the most impacting and Alternative 5 the least impacting.

The least impact to the MSHCP Criteria Area would occur with Alternatives 4 and 5, 154.3 ha (381.4 ac) and 164.6 ha (406.8 ac), respectively. Greater impacts would occur with Alternatives 6, 7, or 9.

Alternative 9 would have the least impact to the MSHCP Cores and Linkages, followed by Alternatives 4 and 5. Alternatives 6 and 7 would have the greatest impact.

Alternative 9 would have the least impact to Public/Quasi-Public lands followed by Alternatives 4 and 5. Alternatives 6 and 7 would have the greatest impact to Public/Quasi-Public lands.

Alternative 9, located south of Lake Mathews, does not pass through the Lake Mathews MSHCP area; therefore, there would be no direct impacts to lands or species within the Lake Mathews MSHCP Plan Area by this alternative. However, there would still be indirect and cumulative impacts to the Lake Mathews MSHCP Plan Area. The proposed alignments of Alternatives 4 through 7 and their design variations pass through conserved lands within the Lake Mathews MSHCP Plan Area.

Alternatives 6 and 7 do not impact the El Sobrante Landfill MSHCP. Alternative 9 would impact 8.9 ha (22.1 ac) of the El Sobrante Landfill MSHCP Plan Area, and Alternatives 4 and 5 would each impact 9.1 ha (22.4 ac) of the El Sobrante Landfill MSHCP Plan Area.

The Lake Mathews-Estelle Mountain Stephens' Kangaroo Rat Reserve would be impacted by the project. Alternatives 6 and 7 would result in the greatest impact (221.3 ha [546.8 ac]), and Alternative 9 would result in the least impact (69.4 ha [171.5 ac]).

Temporary impacts to natural communities may occur during construction where habitats are temporarily disturbed during grading or other activities. Temporary impacts to MSHCP riparian/riverine areas range between 2.4 ha (6.0 ac) for Alternative 9 RD DV and 5.7 ha (14.1 ac) for Alternative 6 base case and TWS DV.

S.5.17.2 No Build Alternatives

Alternative 1A would generally result in fewer impacts to natural communities than any of the proposed Build Alternatives since the MCP project would not be built and no improvements would be made to Cajalco Road or Ramona Expressway.

Alternative 1B would generally result in fewer impacts than the Build Alternatives

since it would widen Cajalco Road and Ramona Expressway. Between I-15 and El Sobrante Road, the impacts of Alternative 1B would be the same as Build Alternatives 6 and 7 since these alternatives implement the General Plan roadway alignments in this area.

S.5.18 Wetlands and Other Waters of the United States

S.5.18.1 Build Alternatives

Alternative 9 would result in fewer permanent impacts to both CDFG riparian habitat and streambeds, and wetlands and nonwetland waters of the United States under USACE jurisdiction, followed by Alternatives 4 and 5, and then Alternatives 6 and 7. Alternative 9 RD DV would result in the fewest temporary impacts to CDFG riparian habitat and streambeds, and Alternative 6 would result in the greatest impacts. Alternative 5 SJN DV would result in the fewest temporary impacts to wetlands and nonwetland waters of the United States under USACE jurisdiction, and Alternative 6 would result in the greatest impacts.

S.5.18.2 No Build Alternatives

Under Alternative 1A, the planned street network would be constructed, except for improvements to Cajalco Road and Ramona Expressway. Because Cajalco Road and Ramona Expressway would remain as they are today, there would be no permanent impacts to jurisdictional waters along these roadways under Alternative 1A.

Under Alternative 1B, permanent impacts to wetlands and other waters would be expected to be less than the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway.

S.5.19 Plant Species

S.5.19.1 Build Alternatives

Alternatives 4, 5, and 9 would result in 3.07 ha (7.58 ac) of direct impacts to areas inferred to have long-term conservation value for many-stemmed dudleya (*Dudleya multicaulis*). This "worst case" conclusion may change upon completion of surveys scheduled for completion in late 2008. A shared portion of Alternatives 4, 5, and 9 has been realigned in order to avoid all currently known locations of many-stemmed dudleya. Alternatives 6 and 7 would result in 0.01 ha (0.02 ac) of direct impacts to areas inferred to have long-term conservation value for this species.

All MCP Build Alternatives would result in 0.84 ha (2.08 ac) of direct impacts to areas of long-term conservation value for smooth tarplant (*Centromadia pungens* ssp. *laevis*) and 0.63 ha (1.55 ac) of direct impacts to areas of long-term conservation value for Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) since the recorded populations of these species are within the SJ Segment, which is common to all five Build Alternatives.

Temporary impacts to plant species may occur during construction where habitats are temporarily disturbed during grading or other activities.

S.5.19.2 No Build Alternatives

Alternative 1A would generally result in fewer impacts to plant species than any of the proposed Build Alternatives since the MCP project would not be built and no improvements would be made to Cajalco Road or Ramona Expressway.

Alternative 1B would generally result in fewer impacts to plant species than the Build Alternatives since it would widen Cajalco Road and Ramona Expressway.

S.5.20 Animal Species

S.5.20.1 Build Alternatives

Burrowing owls (*Athene cunicularia hypugaea*) were not observed within Alternatives 4 through 7; therefore, direct and indirect impacts to burrowing owls along these alternatives are not anticipated. Impacts to occupied burrowing owl burrows from Alternative 9 (Far South Segment) were avoided by minimization of the project footprint. The Alternative 9 Rider Street Design Variation, however, would result in 1.6 ha (4.0 ac) of direct impacts to burrowing owl foraging habitat and burrows occupied by two pairs and six juveniles.

All of the MCP Build Alternatives and design variations would directly impact approximately 16.2 ha (40.0 ac) of Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) occupied habitat suitable for long-term conservation in the vicinity of the San Jacinto River just east of Lake Perris and the San Jacinto River area near the MCP/SR-79 interchange.

Temporary impacts to animal species may occur during construction where habitats are temporarily disturbed during grading or other activities.

S.5.20.2 No Build Alternatives

Because Cajalco Road and Ramona Expressway would remain as they are today, there would be no permanent impacts to special-status animal species along these roadways under Alternative 1A. Under Alternative 1B, permanent impacts to special-status animal species would be expected to be less for the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway.

S.5.21 Threatened and Endangered Species

S.5.21.1 Build Alternatives

All MCP Build Alternatives would directly impact 0.31 ha (0.77 ac) of area suitable for long-term conservation value for spreading navarretia (*Navarretia fossalis*).

Alternatives 4, 5, and 9 would result in 3.07 ha (7.58 ac) of direct impacts to areas inferred to be occupied by Munz's onion pending completion of survey reports in late 2008. Alternatives 6 and 7 would result in 0.01 ha (0.02 ac) of direct impacts to areas inferred to be occupied by Munz's onion.

Alternatives 6 and 7 do not impact Final Critical Habitat for the coastal California gnatcatcher (*Polioptila californica californica*). Alternatives 4 and 5 would result in 13.6 ha (33.5 ac) impacts to Final Critical Habitat for the coastal California gnatcatcher and Alternative 9 results in 16.2 ha (40.1 ac) impacts.

All MCP Build Alternatives will impact 1.2 ha (2.9 ac) of critical habitat for San Bernardino kangaroo rat. The MCP project will not result in any impact to the 2007 proposed critical habitat for San Bernardino kangaroo rat. In addition, within the MSHCP survey area for this species, the MCP project will directly impact 0.4 ha (1.0 ac) of San Bernardino kangaroo rat occupied habitat suitable for long-term conservation under all of the alternatives and design variations, except the SJN DV that will impact 0.3 ha (0.8 ac).

According to the MSHCP, the Quino checkerspot butterfly (*Euphydryas editha quino*) is determined to be extirpated from the Lake Mathews area; thus, direct impacts are not anticipated to this species. However, impacts to final designated Quino checkerspot butterfly critical habitat would consist of between 56.6 ha (140.0 ac) for Alternatives 6 and 7 and 132.6 ha (327.6 ac) for Alternative 9.

Alternatives 4 through 7 would each impact five nesting pairs/individual least Bell's vireo (*Vireo bellii pusillus*) and Alternative 9 would impact two nesting least Bell's

vireo pairs. Alternative 9 impacts the least amount of least Bell's vireo habitat (0.9 ha [2.2 ac]) suitable for long-term conservation, compared to 3.4 ha (8.5 ac) for Alternatives 6 and 7.

Impacts to the Stephens' Kangaroo Rat Reserve would range between 68.3 ha (168.7 ac) and 218.7 ha (540.3 ac) by impacting portions of the Lake Mathews MSHCP Plan Area and Lake Mathews-Estelle Mountain Reserve.

S.5.21.2 No Build Alternatives

No impacts to threatened and endangered species in the vicinity of Cajalco Road and Ramona Expressway would occur under Alternative 1A. Under Alternative 1B, permanent impacts to threatened and endangered species would be less than for the MCP Build Alternatives since it would widen Cajalco Road and Ramona Expressway.

S.5.22 Invasive Species

S.5.22.1 Build Alternatives

The construction of the MCP Build Alternatives could spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway. During the operation of the MCP facility, vehicles using the facility also have the potential to spread invasive species; however, these impacts would be minimal since areas adjacent to the facility will be landscaped with native species that should outcompete the invasive species.

S.5.22.2 No Build Alternatives

The construction of other projects included in the No Build Alternatives would have similar potential to spread invasive species as described in the Build Alternatives above

S.5.23 Cumulative Impacts

Cumulative impacts (both direct and indirect) were identified by comparing the impacts of the proposed MCP project and other past, current, or proposed actions in the area to establish whether, in the aggregate, they could result in cumulative environmental impacts. The analysis included review of adopted plans and related projects that may, in concert with the proposed MCP project, have a cumulative

adverse effect on sensitive resources in the MCP study area and western Riverside County. Adopted plans that will direct future growth, development, and open space preservation include the Riverside County General Plan, the General Plans of the three affected cities—Corona, Perris and San Jacinto—and the western Riverside County MSHCP. Historical land use trends were examined along with recent development proposals and transportation projects in the MCP study area.

The Riverside County General Plan EIR provides a comprehensive assessment of environmental impacts that would result from the build out of General Plan land uses and infrastructure. The MSHCP is a regional plan that serves to provide mitigation for cumulative impacts to biological resources. Cumulative impact conclusions for the MCP were based on the project's compliance and consistency with the General Plans and the MSHCP. Section 3.25 of this EIR/EIS contains a detailed cumulative impact analysis for the MCP project.

The MCP project would not contribute to cumulative adverse impacts related to growth, community impacts/relocations, and hydrology and floodplains.

The MCP project, when combined with the other anticipated cumulative projects, would contribute to a cumulative loss of farmlands, visual/aesthetics, cultural resources, paleontological resources, natural communities, wetlands and other waters, plant species, animal species, and threatened and endangered species.

S.5.24 Section 4(f) Properties

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

• There is no prudent and feasible alternative to using that land; and

• The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) properties used by one or more of the MCP Build Alternatives include:

- El Cerrito Sports Park
- Lake Mathews-Estelle Mountain Reserve
- El Sobrante Landfill MSHCP Plan Area
- Paragon Park
- Cajalco Tin Mine District (P-33-4759/H)
- Cajalco Creek Site (P-33-13791)
- Multi-Use Prehistoric Site (P-33-16598)

Table S.2 (provided at the end of this Executive Summary, following Table S.1) summarizes the use impacts of the MCP Alternatives on each Section 4(f) property. It identifies which alternatives result in use impacts at each Section 4(f) property, including the total area used by each alternative. Table S.3 describes the proposed measures to minimize harm for each Section 4(f) property.

S.6 Summary of Significant Impacts under CEQA after Mitigation

As discussed in detail in Chapter 4, California Environmental Quality Act (CEQA) Evaluation, the following impacts of the proposed MCP Build Alternatives were determined to be significant, adverse, and unavoidable after implementation of the identified avoidance, minimization, and mitigation measures, as well as project design features:

- Aesthetics
- Agricultural resources
- Archaeological resources
- Hydrology
- Consistency with applicable Habitat Conservation Plans and MSHCPs
- Long-term noise
- Long-term traffic on one segment of I-15 and at the I-215/Van Buren Boulevard interchange

The remaining impacts of the MCP Build Alternatives were determined to be either not significant or to be avoided or reduced to below a level of significance based on implementation of the project avoidance, minimization, and mitigation measures and project design features, as described in detail in Chapter 4.

S.7 Areas of Controversy and Unresolved Issues

During the scoping process, a number of individuals and at least one community group have raised objections to the MCP Build Alternatives due to their concerns regarding impacts related to residential and business displacements, community character (e.g., loss of rural qualities in areas such as Lake Mathews and Gavilan Hills), noise, air quality, and biological resources.

The MCP, as a CETAP corridor under the RCIP, involves consideration of a complex set of interrelated issues. Local and federal decision-makers (RCTC and FHWA, respectively) must balance the need to provide transportation infrastructure to serve a growing populace with the need to preserve natural resources and improve environmental quality. While no specific unresolved issues are noted at this time for the MCP project, there will likely be a number of specific issues identified through the public review of this Draft EIR/EIS that will require resolution prior to approval of the Final EIR/EIS.

S.8 Coordination with Public and Other Agencies

Early and continuing coordination with the general public and the MCP partner agencies (RCTC, FHWA, Caltrans, USACE, EPA, County of Riverside, City of Corona, City of Perris, and the City of San Jacinto) 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 project has been accomplished through a variety of formal and informal methods, including: the MCP website (http://www.midcountyparkway.org/), public scoping meetings held in late 2004 and August 2005, continued coordination with MCP partner agencies, project development team meetings (involving RCTC, Caltrans, the County, and the affected cities), meetings with other agencies and interested parties, and ongoing consultation with Native American tribes. Chapter 5 summarizes the results of the FHWA, Caltrans, and RCTC's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

The permits, reviews, and approvals listed in Table S.4 are anticipated to be required for the proposed MCP project.

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Table S.1 Summary of Impacts

Potential Impact No Build No Build Alternative 1A Build Alternative 4 Build Alternative 5 Build Alternative 6 Build Alternative 7	Build Alternative 9 Avoidance, Minimization, and Mitigation Measures
Less impact than MCP Build Alternatives ### Build Alt	be required by the Riverside County Transportation Commission (RCTC) to maintain pedestrian access to again adjacent land uses the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided as needed throughout construction, and the construction of agricultural lands. Inconsistent with both the Mead Valley and Lake Mathews/Woodcrest Area Plans, as it traverses areas designated for very-low-density and rural residential uses. Conflicts with Policy 1.12.1 in City of Corona General Plan, which provides for the continuation of existing and development, and professional office uses. Inconsistent with the designated roadways and land uses (residential, commercial, and industrial) shown in the City of San Jacinto General

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								Avenue to ensure that park patrons can safely walk or ride bicycles between the two facilities. RCTC will coordinate closely with the City of Perris during final design of the replacement park areas to include, modify, relocate, and/or expand the existing uses at Paragon Park to best meet the park and recreation needs of the community.
Growth	No impact	No impact	Possibility of growth-related effects at service interchanges.	Possibility of growth-related effects at service interchanges.	Possibility of growth-related effects at some service interchanges.	Possibility of growth-related effects at service interchanges.	Possibility of growth-related effects at service interchanges, especially at Lake Mathews Drive and Old Elsinore Road where none were planned previously.	No mitigation measures for growth-related effects are required.
Farmlands and Timberlands	No impact	Less impact than MCP Build Alternatives	Prime Farmland, 88.7 ha (219.1 ac) Farmland of Statewide Importance, 65.0 ha (160.7 ac) Unique Farmland, 49.3 ha (121.8 ac) Farmland of Local Importance, 184.9 ha (456.9 ac) Grazing Land, 3.4 ha (8.3 ac) Total: 391.3 (966.8 ac)	Prime Farmland, 98.9 ha (244.4 ac) Farmland of Statewide Importance, 57.0 ha (140.8 ac) Unique Farmland, 52.0 ha (128.5 ac) Farmland of Local Importance, 159.2 ha (393.4 ac) Grazing Land, 3.4 ha (8.3 ac) Total: 370.4 ha (915.3 ac)	Prime Farmland, 89.7 ha (221.6 ac) Farmland of Statewide Importance, 65.8 ha (162.7 ac) Unique Farmland, 53.5 ha (132.2 ac) Farmland of Local Importance, 213.0 ha (526.4 ac) Grazing Land, 3.7 ha (9.2 ac) Total: 425.8 ha (1,052.2 ac)	Prime Farmland, 99.9 ha (246.9 ac) Farmland of Statewide Importance, 57.8 ha (142.8 ac) Unique Farmland, 56.2 ha (138.9 ac) Farmland of Local Importance, 187.3 ha (462.8 ac) Grazing Land, 3.7 ha (9.2 ac) Total: 404.9 ha (1,000.6 ac)	Prime Farmland, 77.8 ha (192.3 ha) Farmland of Statewide Importance, 61.4 ha (151.8 ac) Unique Farmland, 46.6 ha (115.2 ac) Farmland of Local Importance, 143.5 ha (354.6 ac) Grazing Land, 3.4 ha (8.3 ac) Total: 332.7 ha (822.2 ac)	AG-1 Prior to the start of any construction activity adjacent to farmlands, the Riverside County Transportation Commission (RCTC) shall provide written notification to agricultural property owners or leaseholders immediately adjacent to the disturbance limits for the Mid County Parkway (MCP) project. The notification is to indicate the intent to begin construction, including an estimated date for the start of construction. In order to provide agricultural property owners or leaseholders sufficient lead time to make any changes to their operations due to MCP project construction, this notification shall be provided at least 3 but no more than 12 months prior to the start of construction activity. AG-2 Prior to the start of any construction activity adjacent to any farmlands, the Riverside County Transportation Commission (RCTC) shall coordinate with agricultural property owners or leaseholders to provide temporary livestock and equipment crossings of the MCP right of way to minimize impacts to livestock movement, and routine operations and normal business activities during project construction. AG-3 Prior to completion of right of way acquisition, the Riverside County Transportation Commission (RCTC) shall prepare and send all required notices to the Director of Conservation and the local governing body responsible for the administration of agricultural preserves pursuant to Section 51291 of the Williamson Act for any roadways within established agricultural preserves. AG-4 During final design, and in coordination with property owners of lands in use for agricultural operations, the Riverside County Transportation Commission (RCTC) will finalize the realignments of any affected

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								access roads to provide equipment crossings to minimize impediments to routine agricultural operations and normal business activities that may result from long-term project operation.
Community Impacts and Relocation (including Environmental Justice)	No impact	Less impact than MCP Build Alternatives	Rerouting and/or closed portions of roadways that would intersect the MCP project. Impacts to rural residential communities: 292 non-residential property displacements 351 residential property displacements 1,799 occupants displaced Impacts 37% of non-White population, 36% Hispanic population, and 13% population below poverty line. Property tax revenue loss of \$1,094,340. Sales tax loss of \$10,454,339.	Rerouting and/or closed portions of roadways that would intersect the MCP project. Impacts to rural residential communities: 288 non-residential property displacements 305 residential displacements 1,580 occupants displaced Impacts 38% of non-White population, 37% Hispanic population, and 14% population below poverty line. Property tax revenue loss of \$1,037,102. Sales tax loss of \$11,054,450.	Rerouting and/or closed portions of roadways that would intersect the MCP project. Impacts to rural residential communities: 333 non-residential property displacements 336 residential displacements 1,753 occupants displaced Impacts 37% of non-White population, 36% Hispanic population, and 13% population below poverty line. Property tax revenue loss of \$1,090,846. Sales tax loss of \$14,104,961.	Rerouting and/or closed portions of roadways that would intersect the MCP project. Impacts to rural residential communities: 309 non-residential property displacements 290 residential property displacements 1,534 occupants displaced limpacts 38% of non-White population, 37% Hispanic population, and 14% population below poverty line. Property tax revenue loss of \$1,033,608. Sales tax loss of \$14,705,072.	Rerouting and/or closed portions of roadways that would intersect the MCP project. Impacts to rural residential communities: 268 non-residential property displacements 210 residential property displacements 1,329 occupants displaced Impacts 38% of non-White population, 37% Hispanic population, and 14% population, and 14% population below poverty line. Property tax revenue loss of \$1,006,698. Sales tax loss of \$6,788,970.	All property acquisition and relocation for the MCP Build Alternatives will be handled in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) of 1970 (Public Law 91-646, 84 Stat. 1894).
Utilities and Emergency Services	No impact	Less impact than MCP Build Alternatives	Utilities that could be impacted at locations where lines and facilities are within and adjacent to the disturbance limits would be relocated or protected in place. Riverside County Fire Department (RCOFD) Station No. 59, 21510 Pinewood: relocated to maintain fire protection to the Mead Valley area. Corona City Fire Department Cepartment	Utilities that could be impacted at locations where lines and facilities are within and adjacent to the disturbance limits would be relocated or protected in place. RCOFD Station No. 59, 21510 Pinewood: would need to be relocated to maintain fire protection to the Mead Valley area. Corona City Fire Department Temescal Public	Utilities that could be impacted at locations where lines and facilities are within and adjacent to the disturbance limits would be relocated or protected in place. RCOFD Station No. 59, 21510 Pinewood: would need to be relocated to maintain fire protection to the Mead Valley area. Corona City Fire Department Temescal Public	Utilities that could be impacted at locations where lines and facilities are within and adjacent to the disturbance limits would be relocated or protected in place. RCOFD Station No. 59, 21510 Pinewood: would need to be relocated to maintain fire protection to the Mead Valley area. Corona City Fire Department Temescal Public	Utilities that could be impacted at locations where lines and facilities are within and adjacent to the disturbance limits would be relocated or protected in place. Corona City Fire Department Temescal Public Safety Facility, 3777 Bedford Canyon Road: partial acquisition of the property, primarily to the parking area and driveway	U&ES-1 Public Facility Acquisition. During final design, the Riverside County Transportation Commission (RCTC) will refine the project design to avoid or minimize temporary use of and permanent acquisition of land currently occupied by public service facilities. The RCTC will coordinate with the affected public agencies to obtain their input in the design refinement process. Specifically for Station No. 90, RCTC will coordinate with the City of Perris to finalize the location, property acquisition, size, parking, design, and funding for the relocation of the City of Perris/ Riverside County Fire Department (RCOFD)/Police Substation to the northeast corner of the Redlands Avenue/Placentia Avenue intersection, an approximate 0.49-hectare (1.21-acre) property. Specifically for the Temescal Public Safety Facility, RCTC will coordinate with the City of Corona to

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
			Temescal Public Safety Facility, 3777 Bedford Canyon Road: partial acquisition of the property, primarily to the parking area and driveway.	Safety Facility, 3777 Bedford Canyon Road: partial acquisition of the property, primarily to the parking area and driveway.	Safety Facility, 3777 Bedford Canyon Road: partial acquisition of the property, primarily to the parking area and driveway.	Safety Facility, 3777 Bedford Canyon Road: partial acquisition of the property, primarily to the parking area and driveway.	Station No. 90 (City of Perris/RCOFD/ Police Substation), 333 Placentia Avenue: relocated to the northeast corner of the Redlands Avenue/Placentia Avenue intersection.	finalize the relocation of the loss of parking area if it cannot be accommodated on site. The driveway and facility will remain operational after the partial acquisition. U&ES-2 Fire Protection. During construction in areas subject to wildfires as determined by the Riverside County Fire Department (RCOFD), the Riverside County Transportation Commission (RCTC) shall require the contractor to install signs around construction sites warning of high fire risk and of area closings during the high fire season as declared by RCOFD.
								U&ES-3 Fire Protection. During construction, the construction contractor will be required to maintain access by emergency personnel to any existing fire roads as identified and used by the Riverside County Fire Department (RCOFD).
								U&ES-4 Fire Protection. During final design, the long-term preservation/provision of access to the existing fire road grid for the Riverside County Fire Department (RCOFD) will be incorporated by the Riverside County Transportation Commission (RCTC) in the facility design, in consultation with RCOFD, California Department of Transportation (Caltrans), and local jurisdictions.
								U&ES-5 Fire Protection. During construction, the contractor will implement fuel modification techniques as required by the Riverside County Fire Department (RCOFD) in areas of fire hazard as determined by the RCOFD.
								U&ES-6 Fire Protection. To minimize the risk of wildfire during construction, the construction contractor shall ensure that all construction vehicles are equipped with fire extinguishers and shovels, and that all construction equipment is inspected to ensure that they are in compliance with minimum fire safety standards. Inspections by the construction contractor will be documented in weekly reports to the Riverside County Transportation Commission (RCTC).
								U&ES-7 Fire Protection. Prior to completion of final design, the Riverside County Transportation Commission (RCTC) shall provide brush management zones in areas adjacent to existing reserves, the Multiple Species Habitat Conservation Plan (MSHCP) Conservation Area, and other undeveloped lands in accordance with Section 6.4 of the MSHCP.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								U&ES-8 Fire, Emergency Medical, and Law Enforcement. Prior to completion of final design, emergency call boxes will be identified on project plans and installed during construction along the Mid County Parkway (MCP) roadway in undeveloped areas of high and extreme fire hazard consistent with existing Riverside County Fire Department (RCOFD), California Department of Transportation (Caltrans), and/or local jurisdictions' policies on emergency call boxes.
								U&ES-9 Fire, Emergency Medical, and Law Enforcement. Prior to and during construction, the Riverside County Transportation Commission (RCTC) and the construction contractor will coordinate all temporary ramp closures and detour plans with fire, emergency medical, and law enforcement providers to minimize temporary delays in emergency response times as part of the Traffic Management Plan identified in Mitigation Measure TR-2, including the identification of alternative routes and routes across the construction areas for emergency vehicles developed in coordination with the affected agencies.
								U&ES-10 Utilities. During final design, the Riverside County Transportation Commission (RCTC) shall prepare utility relocations plans for utilities anticipated to be relocated, in consultation with the affected utility provider/owners. The Project Engineer will seek: (1) to avoid utility relocations; (2) if relocation is necessary, to relocate utilities across the MCP right of way or within other existing public right of ways and/or easements; (3) if relocation outside of existing or proposed public right of way and/or easements, to relocate in such a manner as to minimize environmental impacts as a result of construction and ongoing maintenance and repair activities.
Traffic and Transportation/ Pedestrian and Bicycle Facilities	No impact	While some intersections would improve in level of service (LOS), several intersections would still be below the acceptable LOS standard for the MCP project.	Most of the freeways, ramps, and intersections within the study area are expected to operate at acceptable LOS in the horizon year of 2035. Interstate 15 (I-15) and Interstate 215 (I-215) freeway mainlines are expected to	Most of the freeways, ramps, and intersections within the study area are expected to operate at acceptable LOS in the horizon year of 2035. I-15 and I-215 freeway mainlines are expected to experience traffic congestion	Most of the freeways, ramps, and intersections within the study area are expected to operate at acceptable LOS in the horizon year of 2035. I-15 and I-215 freeway mainlines are expected to experience traffic congestion	Most of the freeways, ramps, and intersections within the study area are expected to operate at acceptable LOS in the horizon year of 2035. I-15 and I-215 freeway mainlines are expected to experience traffic congestion	I-15 and I-215 freeway mainlines are expected to experience traffic congestion throughout the entire study area (between SR-91 and Temescal Canyon Road) for all Build Alternatives and design variations. I-15 will experience LOS D or better	TR-1 During final design, the Riverside County Transportation Commission (RCTC) shall conduct a study to determine the most beneficial and cost-effective transportation improvements that will mitigate the traffic impacts of the Mid County Parkway (MCP) project on Interstate 15 (I-15) and on the I-15/State Route 91 (SR-91) interchange. Prior to the opening of any segment of the project that substantially impacts traffic operations along I-15, RCTC shall implement the transportation improvements recommended by the study. It is not feasible to conduct this study now because RCTC has initiated two other transportation projects on I-15 and SR-91 that may impact this section of I-15. The performance standard

Table S.1 Summary of Impacts

Potential Impact No Build No Build No Build Alternative 1A Alternative 1B	uild Alternative 4 Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
ex con thriften (b) Ro an Ca Bu an va Cla Ro Ro Av I-1 La Es Ca ne to Maint (in tim ap mill an ap mill afficing inc. Ca Ca Ro Ro Ca Ca Ro Ro Ca Ca Ca Ro Ca Ca Ro Ro Ro Ca Ca Ro Ro Ro Ca Ca Ro Ro Ro Ro Ca Ca Ro Ro Ro Ca Ca Ro Ca	xperience traffic ongestion roughout the entire study area between State toute 91 [SR-91] and Temescal Canyon Road) for all Build Alternatives and design variations. Closure of Cajalco Road from Gavilan Road to La Sierra Avenue. To reach 1-15, residents in ake Mathews istates near cajalco Road would eed to travel east to the MCP/Lake Mathews Drive iterchange increase in travel me by pproximately 5 minutes). Closure of Ramps at al Cerrito Road therchange will affect local irculation and increase travel time ofth under the fill and half diamond interchanges. telocate Class I off-road) trail along Cajalco Road/Ramona expressway where diternative removes ortions.	throughout the entire study area (between SR-91 and Temescal Canyon Road) for all Build Alternatives and design variations. Closure of Cajalco Road from Gavilan Road to La Sierra Avenue. To reach I-15, residents in Lake Mathews Estates near Cajalco Road would need to travel east to the MCP/Lake Mathews Drive interchange (increase in travel time by approximately 5 minutes). Closure of Ramps at El Cerrito Road interchange will affect local circulation and increase travel time both under the fill and half diamond interchanges. Relocate Class I (off-road) trail along Cajalco Road/Ramona Expressway where Alternative removes portions.	throughout the entire study area (between SR-91 and Temescal Canyon Road) for all Build Alternatives and design variations. Closure of Cajalco Road from Gavilan Road to La Sierra Avenue. To reach I-15, residents in Lake Mathews Estates near Cajalco Road would need to travel east to the MCP/Lake Mathews Drive interchange (increase in travel time by approximately 5 minutes). Closure of Ramps at El Cerrito Road interchange will affect local circulation and increase travel time both under the fill and half diamond interchanges. Relocate Class I (off-road) trail along Cajalco Road/Ramona Expressway where Alternative removes portions.	during a.m. and p.m. peak-hour traffic for the Locally Preferred Alternative (Alternative 9 Temescal Wash Area Design Variation [TWS DV]). • Closure of Cajalco Road from Gavilan Road to La Sierra Avenue. To reach I-15, residents in Lake Mathews Estates near existing Cajalco Road would need to travel either south to access the MCP project or north on El Sobrante Road to access Cajalco Road to the west (increase in travel time by approximately 10 minutes). • Closure of Ramps at El Cerrito Road interchange will affect local circulation and increase travel time both under the fill and half diamond interchanges. • The Van Buren Boulevard and I-215 northbound ramp intersection is projected to operate at LOS E during p.m. peak-hour 2035 conditions under Alternative 9.	for this mitigation measure is to achieve level of service (LOS) D or better on this section of I-15. Potential improvements are listed below for the three separate facilities that would be substantially impacted by the project, the I-15 mainline, the I-15 northbound to SR-91 westbound ramp, and the SR-91 eastbound to I-15 southbound ramp; and the SR-91 eastbound to I-15 southbound ramp; • Potential I-15 Mainline Improvements • Provide an additional general purpose lane in each direction of travel from the Ontario Avenue interchange to the SR-91 interchange. This improvement would provide level of service (LOS) F conditions in 2035 with a density of 57.6 vehicles per mile per lane (vpmpl) with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 73.0 vpmpl. • Provide an additional high occupancy toll (HOT) lane in each direction of travel from the Ontario Avenue interchange to the SR-91 interchange. This improvement would provide LOS F conditions in 2035 with a density of 68.3 vpmpl with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 73.0 vpmpl. • Convert the planned high occupancy vehicle (HOV) lanes proposed for the I-15 freeway to HOT lanes, and add an additional HOT lane in each direction of travel from the Ontario Avenue interchange to the SR-91 interchange. The overall result would be to provide two HOT lanes in each direction of travel. This improvement would provide LOS F conditions in 2035 with a density of 65.4 vpmpl with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 73.0 vpmpl.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								 Provide a direct HOT-to-HOT connector from I-15 northbound to SR-91 westbound. This improvement would provide LOS F conditions in 2035 with a density of 70.4 vpmpl with the project and mittgation, as compared to the 2035 No Build condition of LOS F and a density of 86.5 vpmpl.
								Potential SR-91 Eastbound to I-15 Southbound Ramp Improvements Widen the ramp to provide an additional general purpose lane. This improvement would provide LOS D conditions in 2035 with a density of 32.6 ympl with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 48.1 ympl. Provide a direct HOV-to-HOV connector from SR-91 eastbound to I-15 southbound. This improvement would provide LOS E conditions in 2035 with a density of 41.6 ympl with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 48.1 ympl. Provide a direct HOT-to-HOT connector from SR-91 eastbound to I-15 southbound. This improvement would provide LOS E conditions in 2035 with a density of 39.1 vpmpl with the project and mitigation, as compared to the 2035 No Build condition of LOS F and a density of 48.1 ympl.
								TR-2 Prior to construction, the Riverside County Transportation Commission (RCTC) will prepare a Traffic Management Plan (TMP) in consultation with th California Department of Transportation (Caltrans) and affected local jurisdictions that will consist of, but not b limited to, the following standard measures to alleviate traffic inconvenience caused by construction activities.
								Traffic Control: This project will require traffic control elements such as lane/shoulder closures and temporary signing/striping on Interstate 15 (I-15) and Interstate 215 (I-215). Construction Zone Enhanced Enforcement Program (COZEEP): Through coordination with Caltrans and the California Highway Patrol (CHP), this program was developed to provide a safer work zone for both construction workers and the motoring public. The program uses two CHP officers who enforce lane closures and also provide a visual deterrent to errant/speeding vehicles.
								 Public Awareness Campaign (PAC): Although the majority of the major closures will occur at night, vehicles traveling through the construction zone will likely experience longer than normal delays. To reduce these delays and confusion to the monitoring

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
Visual and Aesthetics	No impact	No impact	- Chort torm vious!	- Short form visual	. Chart term visual	. Chart torm vious!	- Chart torm vious!	public during construction activities, the RCTC will implement a PAC. The purpose of the PAC is to keep the surrounding community abreast of the project's progress and construction activities that could affect their travel plans. Mailers/flyers, local newspaper advertising, local radio information, public meetings, a project Web site, and e-mail, as appropriate, will be used to disseminate this information. • Signing: Post information signing on I-15, I-215, and the local arterials prior to and during construction to inform motorists of delays, ramp or lane closures, and alternate travel routes. • Pedestrian Access: Provide a pedestrian detour plan to accommodate sidewalk closures. • Business Access: Provide a plan to maintain access to businesses. • Haul Routes: Identification of designated haul routes in consultation with the affected local jurisdictions. • Haul Routes: Limiting construction truck and haul traffic to designated routes only. • Construction scheduling (start/stop times, major materials deliveries, export hauling, etc.): Shall be scheduled to avoid a.m. and p.m. peak traffic periods on adjacent streets so that the majority of construction-related traffic occurs outside of peak commuting times. • Signage: Coordinate with Caltrans and local agencies to ensure that signage for haul routes, detour routes, and public information is consistent. TR-3 Prior to completion of final design, the Riverside County Transportation Commission (RCTC) will coordinate with each affected local jurisdiction to determine an appropriate rerouting of any planned trail that would be impacted by the Mid County Parkway (MCP) project. Rerouting of trails shall be done to maintain continuity and connectivity of the regional trail system.
visual and Aesthetics	No impact	No impact	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and	Transportation construction, the Riverside County Transportation Commission (RCTC) will locate construction and staging areas within public rights of way and within the maximum project disturbance footprint defined for the Mid County Parkway (MCP). VIS-2 Prior to construction, the Riverside County Transportation Commission (RCTC) will prepare a landscape plan that will be incorporated into the final design of the Mid County Parkway (MCP) project. RCTC or local entities will be responsible for long-term maintenance of the roadside landscaping until such time as California Department of Transportation

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
			structures, construction vehicles, and construction staging areas. • Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	structures, construction vehicles, and construction staging areas. • Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	structures, construction vehicles, and construction staging areas. • Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	structures, construction vehicles, and construction staging areas. • Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	structures, construction vehicles, and construction staging areas. • Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls. • Greater adverse impact due to the higher grading quantities and amount of cut-and-fill slopes required to construct • Fewer impacts to sensitive viewers than Alternatives 4 through 7.	(Caltrans) assumes responsibility for the MCP if it is designated as a State Highway. Highway planting is warranted on new highways where adjacent properties are developed at the time the highway is accepted. The Landscape Plan shall be submitted for review by the Caltrans District 8 Landscape Architect. The Caltrans District 8 Landscape Architect. The Caltrans District 8 Landscape Plan applicable to State Highway right of way. The landscape Plan applicable to State Highway right of way. The landscape plan will include the following components: • Incorporation of applicable procedures and requirements as detailed in the publication Caltrans Highway Design Manual, Section 902.1, Planting Guidelines (November 2001), and any applicable local agency requirements. • Identification of areas within the project limits for revegetation, including landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new project structures (ramps, sound walls, and retaining walls). • Planting of trees, shrubs, and groundcover along the MCP and at interchange locations to enhance the existing visual planting character of the area. • Planting of drought-resistant plants along the MCP so as to be consistent with Metropolitan Water District guidelines, which promote the use of xeric (adapted to arid conditions) landscaping techniques. The irrigation design and implementation practices will also conform to the water conservation measures established in Assembly Bill 325, the Water Conservation in Landscaping Act of 1990 (in effect January 1, 1993). Plants shall also be durable in relation to urban pollutants such as smog. • Incorporate soil erosion control planting (groundcover, native grasses, wildflowers) into the embankments and within the areas of steeper slopes. Vegetation planted adjacent to walls will not be highly sensitive to shadow and shade. All plantings will be drought-resistant and, in areas where shade occurs for most of the day, shadow-resistant to ensure plant longevity and

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								avoided, additional landscape improvements will be incorporated into the final design. The replacement ratio of any trees removed shall be determined in consultation with the California Department of Transportation (Caltrans) District 8 Landscape Architect.
								VIS-4 Prior to completion of the final design, the Riverside County Transportation Commission (RCTC) will require that the Project Engineer incorporate attractive walls, medians, and other visually pleasing hardscape in the project design.
								VIS-5 Prior to completion of the final design, the Riverside County Transportation Commission (RCTC) will include aesthetic enhancements for soundwalls in the final design. The design of soundwalls requires compliance with California Department of Transportation (Caltrans) standards for sound attenuation, safety requirements, and other pertinent standards. The design of soundwalls requires compliance with the Caltrans Highway Design Manual standards and aesthetic treatments shall be reviewed by the Caltrans District 8 Landscape Architect. The Caltrans District 8 Landscape Architect shall approve the design of any soundwalls within State Highway right of way. The soundwalls shall include the following features:
								 Attractive, decorative elements such as local art shall be incorporated into soundwall design in order to increase the visual quality of the area and to provide an expression of the regional "sense of place." Where landscaping can be accommodated within the public right of way, areas in front of soundwalls shall be landscaped, including trees, shrubs, and vines (depending upon the space available), to break the visual monotony, soften the appearance of soundwalls, and deter graffiti.
								VIS-6 Prior to completion of the final design, the Riverside County Transportation Commission (RCTC) will include aesthetic enhancements for retaining walls in the project design. Attractive, decorative elements such as local art shall be incorporated into architectural treatment wall design to increase the visual quality of the area and to provide an expression of the regional "sense of place." The retaining walls along the Mid County Parkway (MCP) or interchange off- and on-ramps will require compliance with California Department of Transportation (Caltrans) standards for safety.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								VIS-7 Prior to completion of final design, a lighting plan will be prepared by the Riverside County Transportation Commission (RCTC) for approval by California Department of Transportation (Caltrans) District 8 in areas under state jurisdiction and for approval by the County or the affected Cities within their jurisdictions. The lighting fixtures will be designed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with nonglare hoods and focused within the Mid County Parkway (MCP) project right of way. VIS-8 Prior to completion of final design, a Mid County Parkway (MCP) Corridor Master Plan will be prepared by the Riverside County Transportation Commission (RCTC). In preparing the MCP Corridor Master Plan, RCTC shall coordinate with the County and affected Cities for the portions of the project within their respective jurisdictions. RCTC shall also involve the California Department of Transportation (Caltrans) in the Context Sensitive design process for the MCP Corridor Master Plan will include a design template for aesthetic features applied to any structures throughout the MCP corridor. The purpose of the MCP Corridor Master Plan is to create consistency in aesthetic design throughout the length of the MCP corridor. The Master Plan will be designed in conjunction with the landscape plan for the MCP.
Cultural Resources	No impact	Less impact than MCP Building Alternatives	Number of Historic Properties/Historical Resources: 2 Built Environment Resources significant under CEQA 2 National Register eligible archeological resources that are also sacred sites	Number of Historic Properties/Historical Resources: 1 Built Environment Resource significant under CEQA 2 National Register eligible archeological resources that are also sacred sites.	Number of Historic Properties/Historical Resources: 2 Built Environment Resources significant under CEQA 3 National Register eligible archeological resources 2 sacred sites	Number of Historic Properties/Historical Resources: 1 Built Environment Resource significant under CEQA 3 National Register eligible archeological resources 2 sacred sites	Number of Historic Properties/Historical Resources: 3 resources in Alternative 9 TWS DV are assumed eligible for National Register and are recommended for protection and avoidance through designation of Environmentally Sensitive Areas (ESAs). 4 resources are eligible for the National Register. 1 Built Environment Resource significant under CECAA	AR-1 During final design, the Riverside County Transportation Commission (RCTC), in consultation with California Department of Transportation (Caltrans), State Historic Preservation Officer (SHPO), and interested Native American tribes shall prepare an Archaeological Monitoring Plan (AMP). The AMP shall establish procedures for archaeological resource surveillance, and procedures for temporarily halting or redirecting work to permit identification, sampling, and evaluation of archaeological resources. At a minimum, the AMP shall: Require an archaeologist to be present during construction activities in native soils; Require a Native American representative to be present during construction activities in native soils; Require the archaeologist and tribal representative to be present at the pre-grading conference to explain the established procedures in the AMP; Establish a protocol for the discovery of new archaeological resources; Requires that the protocol for the unanticipated discovery of human remains is followed. If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
Potential Impact			Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	1 sacred site	and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to PRC Section 5097.98 and California Code of Regulations Section 15064.5, 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 Descendant (MLD). At this time, the person who discovered the remains will contact the District Environmental Branch Chief or the District Native American Coordinator (Gwyn Alcock, 909/383-4045) so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable; Require monthly archaeological monitoring status reports; Require a final archaeological monitoring report; Establish a curation facility for collected archaeological material; and Maintain Environmentally Sensitive Areas (ESAs) during construction near three sites (P-33-1649, P-33-12230, and LSA-JCV531-S-207) as detailed in the ESA Action Plan. P-33-1512. The ability and nature of avoidance and minimization of adverse effects to Site P-33-1512 are not known at this time; therefore, mitigation measures are proposed based on current Alternative 9 Temescal Wash Area Design Variation (TWS DV) plans. • Prior to the start of construction at this location, data recovery shall be conducted at this site for all portions of the site within the area of potential effects (APE). Although the southern tip of the site is south of, and not within, the right of way, data recovery shall be conducted here because of the loss of physical and legal continuity between the northern (66 percent of the total site area) portions of the site. The data recovery shall attempt to exhaust all research potential that Site P-33-1512 has to offer. Methods shall include, but not be limited to, 1-square-meter units, surface collection grids, extensive research
								into site function, settlement patterns, etc. Nondestructive, noncollection, and nonexcavation mapping and analysis shall be conducted in the northern 66 percent of the site in order to adequately characterize the entire site in data recovery. Native American tribes shall be consulted throughout the
								data recovery process. Disposition arrangements shall be agreed to prior to initiating any data recovery efforts.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								The portion of the site that is adjacent and north of the proposed Alternative 9 right of way shall be further protected with the designation of an ESA in accordance with the Caltrans Section 106 Programmatic Agreement. The northern 66 percent of the site shall be protected from any possible project impacts via the use of fencing during project construction and the presence of an archaeological monitor and a Native American monitor. No collection or excavation shall be conducted here unless plans change to include disturbance of this area.
								P-33-1650/P-33-16687. The ability and nature of avoidance and minimization of adverse effects to Site P-33-1650/P-33-16687 are not known at this time. Therefore, mitigation measures are proposed based on current Alternative 9 TWS DV plans.
								Prior to the start of construction at this location, data recovery shall be conducted at this site for all portions of the site within the right of way (the eastern 60 percent of the total site area). The data recovery shall attempt to exhaust all research potential that Site P-33-1650/P-33-16687 has to offer. Methods shall include, but not be limited to, 1-square-meter units, surface collection grids, extensive research into site function, settlement patterns, etc. Nondestructive, noncollection, and nonexcavation mapping and analysis shall be conducted in the western 40 percent of the site in order to adequately characterize the entire site in data recovery. Native American tribes shall be consulted throughout the data recovery process. Disposition arrangements shall be agreed to prior to initiating any data recovery efforts. The portion of the site that is adjacent to the proposed Alternative 9 right of way shall be further protected with the designation of an ESA in accordance with the Caltrans Section 106 Programmatic Agreement. The western half of the site shall be protected from any possible project impacts via the use of fencing during project
								construction and the presence of an archaeological monitor and a Native American monitor. No collection or excavation shall be conducted here unless plans change to include disturbance of this area.
								P-33-16598. The following mitigation is proposed for Site P-33-16598 based on direct effects to the portion of the site that is in Alternative 9 TWS DV.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								The portion of the site that is adjacent to the proposed Alternative 9 right of way shall be further protected with the designation of an ESA in accordance with the Caltrans Section 106 Programmatic Agreement. The site shall be protected from any possible project impacts via the use of fencing during project construction and the presence of an archaeological monitor and a Native American monitor during all ground disturbing activities in the area of Site P-33-16598.
								P-33-16679. The ability and nature of avoidance and minimization of adverse effects to Site P-33-16679 are not known at this time. Therefore, mitigation measures are proposed based on current Alternative 9 plans.
								• Prior to the start of construction at this location, data recovery shall be conducted for all portions of this site, including the small portion of the southern tip of Locus A, which is outside of the right of way. Although the southern tip of the site is south of and not within the right of way, data recovery shall be conducted here because of the loss of association with the larger portion of the site. The data recovery shall attempt to exhaust all research potential that Site P-33-16679 has to offer. Methods shall include, but not be limited to, 1-square-meter units, trench-and-block excavation, and extensive research into site function, settlement patterns, etc. Native American tribes shall be consulted throughout the data recovery process. Disposition arrangements shall be agreed to prior to initiating any data recovery efforts.
Hydrology and Floodplain	No impact	Temescal Wash: Transverse Encroachment (TE) Cajalco Creek: TE, Longitudinal Encroachment (LE) Perris Valley Storm Drain: TE San Jacinto River: TE, LE	Temescal Wash: TE Cajalco Creek: TE, LE Perris Valley Storm Drain: TE San Jacinto River: TE, LE	Temescal Wash: TE Cajalco Creek: TE, LE San Jacinto River: TE, LE	Temescal Wash: TE Cajalco Creek: TE, LE Perris Valley Storm Drain: TE San Jacinto River: TE, LE	Temescal Wash: TE Cajalco Creek: TE, LE San Jacinto River: TE, LE	Temescal Wash: TE Perris Valley Storm Drain: TE San Jacinto River: TE, LE	Measures to minimize floodplain impacts were included in the design of the project and are described in detail in Chapter 2.0, Project Description.
Water Quality and Stormwater Runoff	No impact	No impact	910 ha (2,249 ac) of disturbed soil 68 stream crossings 311 ha (769 ac) of new pavement 18.6 ha (45.9 ac) of steep slopes	944 ha (2,333 ac) of disturbed soil 68 stream crossings 311 ha (769 ac) of new pavement 17.9 ha (44.2 ac) of steep slopes	958 ha (2,368 ac) of disturbed soil 74 stream crossings 357 ha (882 ac) of new pavement 22.5 ha (55.5 ac) of steep slopes	992 ha (2,452 ac) of disturbed soil 74 stream crossings 357 ha (882 ac) of new pavement 21.8 ha (53.9 ac) of steep slopes	923 ha (2,281 ac) of disturbed soil 51 stream crossings 299 ha (739 ac) of new pavement 35.9 ha (88.7 ac) of steep slopes	WQ-1 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) Order No. 99-08-DWQ, NPDES No. CAS000002, and any subsequent permit or individual

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
			-17,857 pounds per year (lbs/yr) change in total suspended solids loading 113.1 lbs/yr change in total phosphate loading 566.0 lbs/yr change in total nitrate loading 8.4 lbs/yr change in total copper loading 14.0 lbs/yr change in total lead loading 14.0 lbs/yr change in total lead loading 11.0 lbs/yr change in total zinc loading	-15,300 lbs/yr change in total suspended solids loading 110.2 lbs/yr change in total phosphate loading -565.0 lbs/yr change in total nitrate loading -8.8 lbs/yr change in total copper loading 14.0 lbs/yr change in total lead loading 33.0 lbs/yr change in total intotal lead loading 33.0 lbs/yr change in total zinc loading	-21,199 lbs/yr change in total suspended solids loading 155.4 lbs/yr change in total phosphate loading 717.1 lbs/yr change in total nitrate loading 9.9 lbs/yr change in total copper loading 13.8 lbs/yr change in total lead loading 34.4 lbs/yr change in total read loading 13.4 lbs/yr change in total lead loading	-18,642 lbs/yr change in total suspended solids loading -152.51 lbs/yr change in total phosphate loading -715.8 lbs/yr change in total nitrate loading -10.3 lbs/yr change in total copper loading -13.8 lbs/yr change in total lead loading -13.8 lbs/yr change in total lead loading -13.6 lbs/yr change in total lead loading -14.6 lbs/yr change in total lead loading -15.6 lbs/yr change in total lead loading -15.6 lbs/yr change in total lead loading -15.6 lbs/yr change in total lead loading	-16,870 lbs/yr change in total suspended solids loading 112.3 lbs/yr change in total phosphate loading 624.0 lbs/yr change in total nitrate loading 8.0 lbs/yr change in total copper loading 13.0 lbs/yr change in total lead loading 13.0 lbs/yr change in total lead loading 13.0 lbs/yr change in total lead loading 14.0 lbs/yr change in total lead loading	permit if required by the Regional Water Quality Control Board (RWQCB) as they relate to construction activities for the project, including dewatering. This will include submitting a Notice of Intent (NOI) to the State Water Resources Control Board (SWRCB) at least 30 days prior to the start of construction; preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP); and submitting a Notice of Termination to the Santa Ana Regional Water Quality Control Board (RWQCB) upon completion of construction and stabilization of the site. WQ-2 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will comply with the provisions of the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality, Order No. R8-2003-0061 National Pollutant Discharge Elimination System (NPDES) No. CAG998001, as they relate to discharge of non-storm water dewatering wastes for the project. This will include submitting to the Santa Ana Regional Water Quality Control Board (RWQCB) a Notice of Intent (NOI) at least 60 days prior to the start of construction, notification of discharge at least 5 days prior to any planned discharges, and monitoring reports by the 30th day of each month following the monitoring period. WQ-3 Prior to completion of final design, the Riverside County Transportation's (Caltrans) Storm Water Quality Handbooks, Project Planning and Design Guide for implementing Design Pollution Prevention and Treatment Best Management Practices (BMPs) for the project. This will include coordination with the Santa Ana Regional Water Quality Control Board (RWQCB) with respect to feasibility, maintenance, and monitoring of Treatment Best Management Plan.
								infiltration basins, detention basins, or sand filters will be identified and included in project plans.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
Geology, Soils, Seismic, and Topography	The impacts discussed for the MCP Build Alternatives would not occur for Alternative 1A, but would occur for the other transportation improvement projects included in this No Build Alternative.	The impacts discussed for the MCP Build Alternatives would not occur for Alternative 1B, but would occur for the other transportation improvement projects included in this No Build Alternative.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction. Greater impacts than Alternatives 4 through 7 because of higher quantities of grading. More extensive landform alteration occurs than with Alternatives 4 through 7 due to alignment through the Gavilan Hills and the area south of Lake Mathews near Monument Peak.	GEO-1 Prior to completion of final design, the Riverside County Transportation Commission (RCTC) will prepare a design-level geotechnical report. It is not feasible to prepare such a study at this time because the design is at a preliminary/conceptual stage. This report will document soil-related constraints and hazards such as slope instability, settlement, liquefaction, or related secondary seismic impacts that may be present. Acceptance of this report will be subject to the local agencies with jurisdiction over the MCP project right of way and the California Department of Transportation (Caltrans) for portions of the MCP project within State highway right of way. The performance standard for this report will be the geotechnical design standards of the State of California, Caltrans, and the affected local jurisdictions. The report shall also include: • Evaluation of expansive soils and recommendations regarding construction procedures and/or design criteria to minimize the effect of these soils on the development of the project. • Design-level geotechnical studies will identify potential liquefiable areas within the project limits and provide recommendations for mitigation. Any areas that require mitigation would be within the disturbed areas, and no additional impacts would result. • Identification of potential liquefiable areas within the project limits and recommendations for mitigation. Any areas that require mitigation would be within the disturbed areas, and no additional impacts would result. • Demonstration that side slopes can be designed and graded so that surface erosion of the engineered fill is not increased compared to existing, natural conditions GEO-2 During construction, and as included on project plans during final design, the Riverside County Transportation Commission (RCTC) will require planting of native vegetation with good soil-binding characteristics and low water requirements on engineered slopes to reduce erosion and slope instability. These types of plants include species that

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								GEO-3 The Riverside County Transportation Commission (RCTC) will maintain a quality assurance/quality control plan during construction. The plan will include observing, monitoring, and testing by a geotechnical engineer and/or geologist during construction to confirm that geotechnical/geologic recommendations are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The geotechnical engineer will submit weekly reports to RCTC while grading, excavation, and construction activities are underway.
								GEO-4 Prior to completion of final design, the Riverside County Transportation Commission (RCTC) will undertake a detailed review of available well information to locate all groundwater wells within the MCP project right of way. Any groundwater wells that occur within the MCP project right of way will be identified on a well management plan and abandoned properly during project construction in accordance with California Department of Water Resources Standards (Bulletin 74-90). Any water supply provided by active wells will be replaced. Replacement water may be provided by a variety of means, such as installing a new well or by creating a connection to a municipal supply. The project engineer will document the location of existing wells, the abandonment approval by the agencies with jurisdiction for those wells within the MCP project right of way, and the replacement water supply as needed for active wells in a report submitted to RCTC for review and approval prior to initiation of construction activities.
Paleontology	No impact	No impact	MCP Build Alternates have functionally the same impacts. Alternative 4 impacts 256 ha (632 ac) of Low Sensitivity and 872 ha (2,155 ac) total of High Sensitivity that may contain paleontological resources.	MCP Build Alternates have functionally the same impacts. Alternative 5 impacts 269 ha (664 ac) of Low Sensitivity and 825 ha (2,041 ac) total of High Sensitivity that may contain paleontological resources.	MCP Build Alternates have functionally the same impacts. Alternative 6 impacts 427 ha (1,056 ac) of Low Sensitivity and 904 ha (2,234 ac) total of High Sensitivity that may contain paleontological resources.	MCP Build Alternates have functionally the same impacts. Alternative 7 impacts 440 ha (1,087 ac) of Low Sensitivity and 857 ha (2,120 ac) total of High Sensitivity that may contain paleontological resources.	MCP Build Alternates have functionally the same impacts. Alternative 9 impacts 353 ha (873 ac) of Low Sensitivity and 714 ha (1,764 ac) total of High Sensitivity that may contain paleontological resources.	PAL-1 Prior to the beginning of construction, the Riverside County Transportation Commission (RCTC), in accordance with the guidelines on the California Department of Transportation (Caltrans) Standard Environmental Reference Web site, the County of Riverside guidelines, guidelines of the Bureau of Land Management (BLM), and the guidelines of the Society of Vertebrate Paleontology, shall develop a Paleontological Mitigation Plan (PMP) for implementation during the excavation phase of the MCP project. The PMP shall include the following steps: • Prior to the start of construction activity, RCTC shall retain a qualified vertebrate paleontologist. The paleontologist shall establish procedures (monitoring plan) for paleontological resource monitoring and procedures for temporarily

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								halting or redirecting work to permit the sampling, identification, and evaluation of the paleontological resources as appropriate. The paleontologist shall also be present at the pregrading conferences to explain the established procedures based on a preapproved monitoring plan. If paleontological resources are discovered, a qualified project paleontologist shall determine appropriate actions, in cooperation with RCTC, for testing and/or data recovery, plans for which may be developed in advance to avoid construction delays. The paleontologist shall submit a follow-up report to RCTC that shall include the period of inspection, an analysis of any fossils found, the results of any testing or data recovery, and the present repository of the fossil specimens. Paleontological monitoring reports shall be submitted to RCTC on a monthly or more frequent basis during grading and excavation activities of the construction phase of the MCP project.
								 A qualified paleontological monitor will be present during ground-disturbing activities within the project disturbance limits in potentially fossiliferous formations crossed by the MCP project. These sediments are likely to contain paleontological resources. The monitoring for paleontological resources. The monitoring for paleontological resources will be conducted on a full-time basis where fossiliferous sediments are exposed at the surface (High A) and at elevations where excavation is 0.9 meter (3 feet) below the surface where paleontological resources are anticipated at depth (High B). The monitor will be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor will be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, samples will be collected and processed to recover microvertebrate fossils. Processing will include wet screen washing and microscopic examination of the residual materials to identify small vertebrate remains. On encountering a large deposit of fossils, the monitor will salvage all fossils in the area using additional field staff and in accordance with modern paleontological techniques. All fossils collected will be prepared to a reasonable point of identification. Excess sediment or matrix will be removed from the specimens to reduce the bulk of the material and the storage cost. Itemized catalogs of all material collected and

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								identified will be provided to the repository along with the specimens. • A compliance report addressing Caltrans and Riverside County guidelines that document the results of the monitoring and salvage activities and the significance of the fossils will be prepared and submitted for filing at RCTC within 4 months of the end of project construction. Consideration shall be given to budgeting for tasks of wet screen matrix processing, fossil preparation, and identification to start while excavation monitoring is ongoing. • All fossils collected during this work, along with the itemized inventory of these specimens and the compliance report, will be deposited for permanent curation and storage into an established repository (Society of Vertebrate Paleontology [SVP], 1995 and 1996) such as the Riverside Metropolitan Museum. • There are two federal land (Bureau of Land Management [BLM]) parcels traversed by the Locally Preferred Alternative. If the qualified paleontologist determines that the formations in these areas have paleontological sensitivity and construction activities will occur that may disturb these formations, an appropriate BLM paleontological resource use permit will be obtained.
Hazardous Waste and Materials	No impact	No impact	359 hazardous material/waste sites within 0.4 kilometer (km) (0.25 mile [mil) of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	362 hazardous materiall/waste sites within 0.4 km (0.25 mi) of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	394 hazardous materiall/waste sites within 0.4 km (0.25 mi) of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	397 hazardous material/waste sites within 0.4 km (0.25 mi) of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	298 hazardous materiall/waste sites within 0.4 km (0.25 mi) of the alternative alignment Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	HW-1 Prior to completion of right of way acquisition, the Riverside County Transportation Commission (RCTC) will conduct a Site Investigation for hazardous materials sites identified in the Initial Site Assessment that are within the right of way of the approved alternative. It is not feasible to conduct these site investigations prior to completion of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) because new contamination may occur if the investigations are completed too far in advance of right of way acquisition. The performance standard for this measure is compliance with applicable federal, state, and local regulations. The Site Investigation will meet or exceed the requirements of the United States Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (FR 66070, Vol. 70, No. 210, November 1, 2005). If contaminants are determined to be present during the Site Investigation, one or more of the following specialized reports may be necessary: Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report. Site Investigations for any active leaking underground storage tank (LUST) cases will be coordinated with the Riverside

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Av	oidance, Minimization, and Mitigation Measures
									County Department of Environmental Health (RCDEH), and if groundwater has been impacted, the Regional Water Quality Control Board (RWQCB), Santa Ana Region. Site Investigations for any automotive or industrial uses will be coordinated with the RCDEH. Site Investigations for any clandestine drug lab locations will be coordinated with RCDEH, Department of Toxic Substances Control (DTSC), and law enforcement agencies. Prior to completion of final design, RCTC shall provide a Hazardous Substances Disclosure Document (HSDD) that clears affected right of way for acquisition to the California Department of Transportation (Caltrans) District Hazardous Waste Coordinator for review and approval.
								HW-2	During final design, the Riverside County Transportation Commission (RCTC) will conduct soil sampling for aerially deposited lead in unpaved locations adjacent to existing state highway right of way within the project limits, if not previously tested. It is not feasible to conduct these site investigations prior to completion of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) because new contamination may occur if the investigations are completed too far in advance of right of way acquisition. The performance standard for this measure is compliance with applicable federal, state, and local regulations. The analytical results of the soil sampling will determine the appropriate handling of the soil in those areas and disposal of surplus materials. Soil will be reused within the California Department of Transportation (Caltrans) right of way in accordance with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Variance No. 00-H-VAR-04, September 22, 2000, or a subsequent applicable variance. If it is not feasible to reuse soils, then the excavated hazardous soils will require off-site disposal as hazardous waste at a permitted facility (Class I or II). Refer to Standard Special Provision XE 19-900 for additional information on the disposal of soils impacted with aerially deposited lead.
								HW-3	Prior to construction, the Riverside County Transportation Commission (RCTC) will retain a certified consultant to conduct predemolition asbestos, lead-based paint, and polychlorinated biphenyl (PCB) surveys of any structures that will be renovated or demolished. Building materials that exceed California Health and Safety Code criteria for hazardous waste will be disposed of at the appropriate Class I or II facility.

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Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Av	voidance, Minimization, and Mitigation Measures
								HW-4	Prior to construction, the Riverside County Transportation Commission (RCTC) will conduct inspections of utility pole-mounted transformers that will be relocated or removed as part of the project. Leaking transformers will be considered a polychlorinated biphenyl (PCB) hazard unless tested and confirmed otherwise, and will be handled accordingly.
								HW-5	Prior to construction, the Riverside County Transportation Commission (RCTC) will test and remove any yellow traffic striping and pavement- marking material in accordance with Standard Special Provision XE 15-300.
								HW-6	Prior to construction, the Riverside County Transportation Commission (RCTC) will determine whether groundwater removal will be required during construction of the project. The need for dewatering cannot be determined until the final design phase. Any dewatering will require compliance with the State General Permit or an individual permit from the Regional Water Quality Control Board (RWQCB), Santa Ana Region, consistent with National Pollutant Discharge Elimination System (NPDES) requirements. The RWQCB will decide which permit is applicable and whether sampling is required once it receives and reviews the Notice of Intent (NOI). Additional coordination with the Riverside County Department of Environmental Health (RCDEH), Department of Toxic Substances Control (DTSC), and the Department of Defense may be necessary, and will be conducted by RCTC, if groundwater dewatering occurs in the vicinity of the March Air Reserve Base. RCTC will provide the Resident Engineer with the Waste Discharge Identification Number or a copy of an individual permit (as applicable) issued by the RWQCB prior to construction.
								HW-7	During final design, the Riverside County Transportation Commission (RCTC) will sample soils adjacent to the Burlington Northern Santa Fe railroad tracks that will be disturbed during construction of the project for petroleum hydrocarbons, metals, solvents, and other potential contaminants to determine whether they require special handling and disposal. Soils exceeding California Health and Safety Code criteria for hazardous waste will be disposed of at the appropriate Class I or II facility.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								HW-8 Prior to completion of right of way acquisition, the Riverside County Transportation Commission (RCTC) will conduct soil sampling for pesticides in former or current agricultural properties that will be disturbed by the project where soil has not been disturbed (through grading, etc.). It is not feasible to conduct these site investigations prior to completion of the Final Environmental Impact Report/ Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) because new contamination may occur if the investigations are completed too far in advance of right of way acquisition. The performance standard for this measure is compliance with applicable federal, state, and local regulations. The analytical results of the soil sampling will determine the appropriate handling and disposal of the soil. Sampling will be conducted in general accordance with Department of Toxic Substances Control (DTSC) Interim Guidance for Sampling Agricultural Fields for School Sites (August 26, 2002).
								HW-9 The Riverside County Transportation Commission (RCTC) will notify and submit fees to the South Coast Air Quality Management District (SCAQMD) at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403). Contractors will adhere to the requirements of SCAQMD Rule 1403 during renovation/demolition activities.
								HW-10 If suspect hazardous waste or underground tanks are encountered during construction, the contractor will stop work and follow the procedures outlined in Appendix E, Caltrans Unknown Hazards Procedures for Construction.
Air Quality	No impact	No impact	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site	SC-1 During construction, the Riverside County Transportation Commission (RCTC) shall ensure that the construction contractor shall adhere to the requirements of South Coast Air Quality Management District (SCAOMD) rules and regulations on cutback and emulsified asphalt paving materials.
			preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would	preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would	preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would	preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would	preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would	SC-2 To reduce fugitive dust emissions during construction, the Riverside County Transportation Commission (RCTC) shall ensure that the construction contractor shall adhere to the requirements of South Coast Air Quality Management District (SCAQMD) Rule 403. The Best Available Control Measures (BACMs) specified in SCAQMD's Rule 403 will be incorporated into the project construction.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
			be less than the No Build Alternatives due to improved traffic flow in the project area.	be less than the No Build Alternatives due to improved traffic flow in the project area.	be less than the No Build Alternatives due to improved traffic flow in the project area.	be less than the No Build Alternatives due to improved traffic flow in the project area.	be less than the No Build Alternatives due to improved traffic flow in the project area.	SC-3 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that all disturbed areas, including storage piles, not being actively utilized for construction purposes shall be effectively stabilized for dust emissions using wate chemical stabilizers/suppressants, or vegetative ground cover, as appropriate.
								SC-4 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that all on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized for dust emissions us water or chemical stabilizers/suppressants.
								SC-5 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled for fugitive dust emissions by utilizing applications of water or by presoaking.
								SC-6 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that when materials are transported off site, all material shall covered or effectively wetted to limit visible dust emissions, or at least 15.2 centimeters (6 inches) of freeboard space from the top of the container will b maintained.
								SC-7 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that all operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operatio are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visibl dust emissions. The use of blower devices is expressly prohibited.
								SC-8 During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall ensure that, following the addition of materials to or the removal of materials from the surface of outdoor storage piles those piles shall be effectively stabilized for fugitive dust emissions utilizing sufficient water or chemica stabilizers/suppressants.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance	, Minimization, and Mitigation Measures
								Transp constru speeds	construction, the Riverside County ortation Commission (RCTC), through the totion contractor, shall ensure that traffic on unpaved roads shall be limited to 24 ters per hour (kph) (15 miles per hour [mph]).
								Transp constru or othe to prev	construction, the Riverside County ortation Commission (RCTC), through the action contractor, shall ensure that sandbags rerosion control measures shall be installed ent silt runoff to public roadways from sites slope greater than 1 percent.
								Transp constru washer trucks	construction, the Riverside County ortation Commission (RCTC), through the tction contractor, shall ensure that wheel s for all exiting trucks shall be installed, or all and equipment shall be washed off before the site.
								Transp constru	construction, the Riverside County ortation Commission (RCTC), through the loction contractor, shall ensure that wind breaks e installed at windward side(s) of construction
								Transp constru and gra winds e	construction, the Riverside County ortation Commission (RCTC), through the iction contractor, shall ensure that excavation ading activities shall be suspended when exceed 32 kilometers per hour (kph) (20 miles in [mph]).
								Transp constru subject constru	construction, the Riverside County ortation Commission (RCTC), through the action contractor, shall ensure that areas to excavation, grading, and other action activity shall be limited consistent with onstruction activities underway.
								Transp constru piles ai applyin This ap	construction activity, the Riverside County ortation Commission (RCTC), through the iction contractor, shall stabilize open storage ind disturbed areas by covering and/or g water or chemical/organic dust palliative. pplies to both inactive and active sites during itys, weekends, holidays, and windy conditions.
								Transp constru phase	construction, the Riverside County ortation Commission (RCTC), through the iction contractor, shall install wind fencing and grading operations and operate water trucks oilization of surfaces under windy conditions.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	A	voidance, Minimization, and Mitigation Measures
								AQ-3	During construction, the Riverside County Transportation Commission (RCTC), through the construction contractor, shall, when hauling material and operating nonearthmoving equipment, prevent spillage and limit speeds to 24 kilometers per hour (kph) (15 miles per hour [mph]). Limit speed of earthmoving equipment to 16 kph (10 mph).
								AQ-4	During construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor reduce use, trips, and unnecessary idling from heavy equipment.
								AQ-5	During construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor maintain and tune engines per manufacturers' specifications to perform at United States Environmental Protection Agency (EPA) certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
								AQ-6	During construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
								AQ-7	During construction, the Riverside County Transportation Commission (RCTC) shall require that leased equipment be 1996 model or newer unless cost exceeds 110 percent or average lease cost, and require that 75 percent or more of total horsepower of owned equipment to be used be 1996 or newer models.
								AQ-8	During construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor utilize United States Environmental Protection Agency (EPA) registered particulate traps and other appropriate controls to reduce emissions of diesel particulate matter (DPM) and other pollutants at the construction site.
								AQ-9	During construction, the Riverside County Transportation Commission (RCTC) and its contractors shall identify where implementation of mitigation measures for short-term air quality is rejected based on economic infeasibility.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								AQ-10 Prior to construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be damage caused to the construction equipment engine, or whether there may be a risk to nearby workers or the public.)
								AQ-11 During construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor utilize the cleanest available fuel engines in construction equipment and identify opportunities for electrification, and use low sulfur fuel (diesel with 15 parts per million [ppm] or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
								AQ-12 Prior to construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
								AQ-13 Prior to construction, the Riverside County Transportation Commission (RCTC) shall require that the construction contractor identify sensitive receptors in the project area, such as children, the elderly, and the infirm, and specify the means by which impacts to these populations will be minimized. For example, construction equipment and staging zones shall be located away from sensitive receptors and away from fresh air intakes to building and air conditioners.
Noise	No impact	Less impact than for MCP Build Alternatives	88 receptor locations would approach or exceed the Noise Abatement Criteria (NAC). 18 soundwalls analyzed; 2 soundwalls meet both reasonable and feasible criteria.	85 receptor locations would approach or exceed the NAC. 17 soundwalls analyzed; 2 soundwalls meet both reasonable and feasible criteria.	81 receptor locations would approach or exceed the NAC. 17 soundwalls analyzed; 2 soundwalls meet both reasonable and feasible criteria.	79 receptor locations would approach or exceed the NAC. 16 soundwalls analyzed; 2 soundwalls meet both reasonable and feasible criteria.	65 receptor locations would approach or exceed the NAC. 13 soundwalls analyzed; 3 soundwalls meet both reasonable and feasible criteria.	Feasible and reasonable soundwalls have been identified for all MCP Build Alternatives. During final design of the selected alternative, the precise locations and heights for soundwalls at locations where walls are determined to be feasible and reasonable will be identified and included in the project plan. To minimize the construction noise impact for sensitive land uses adjacent to the project site, construction noise is regulated by Caltrans' Standard Specifications, Section 5-1, "Sound Control Requirements," in the Standard Special Provisions. These provisions are:
								"Sound control shall conform to the provisions in Section 7-1.011 (Sound Control Requirements) of the Standard Specifications and these special

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								provisions. The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dBA at a distance of 15 m (50 ft). This requirement in no way relieves the contractor from responsibility for complying with local ordinances regulating nose level. The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixer or transient equipment that may or may not be owned by the contractor. The use of loud signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel. Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional cost will be allowed therefore."
Energy	No impact	No impact	Irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities Implementation of the Build Alternatives would result in a slight increase in fuel consumption; however, within the SCAG region, the proposed MCP project's increase in fuel consumption would be negligible.	Irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities Implementation of the Build Alternatives would result in a slight increase in fuel consumption; however, within the SCAG region, the proposed MCP project's increase in fuel consumption would be negligible.	Irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities Implementation of the Build Alternatives would result in a slight increase in fuel consumption; however, within the SCAG region, the proposed MCP project's increase in fuel consumption would be negligible.	Irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities Implementation of the Build Alternatives would result in a slight increase in fuel consumption; however, within the SCAG region, the proposed MCP project's increase in fuel consumption would be negligible.	Irreversible impact from the consumption of diesel fuel (and other fuels) related to these construction activities Implementation of the Build Alternatives would result in a slight increase in fuel consumption; however, within the SCAG region, the proposed MCP project's increase in fuel consumption would be negligible.	The Mid County Parkway (MCP) project will result in a nominal (maximum of 0.03 percent) increase in regional energy consumption compared to the No Build Alternatives due to project operation as a result of increased vehicle miles traveled. Mitigation Measures AQ-1 through AQ-8, AQ-11, and AQ-12 discussed in Section 3.14 will reduce impacts related to increased energy consumption and global climate change.
Natural Communities	No impact	Less impact than MCP Build Alternatives	Temporarily impacts 4.5 ha (11.2 ac) MSHCP Riparian/Riverine Areas. Permanently impacts 22.5 ha (55.3 ac) MSHCP Riparian/Riverine Areas. Permanent impacts 159.5 ha (394.2 ac) of Other Natural Communities of Special Concern.	Temporarily impacts 4.0 ha (9.8 ac) MSHCP Riparian/Riverine Areas. Permanently impacts 22.7 ha (55.2 ac) MSHCP Riparian/Riverine Areas. Permanent impacts 158.5 ha (391.7 ac) of Other Natural Communities of Special Concern.	Temporarily impacts 5.7 ha (14.2 ac) MSHCP Riparian/Riverine Areas. Permanently impacts 26.8 ha (65.5 ac) MSHCP Riparian/Riverine Areas. Permanent impacts 185.3 ha (457.9 ac) of Other Natural Communities of Special Concern.	Temporarily impacts 5.2 ha (12.7 ac) MSHCP Riparian/Riverine Areas. Permanently impacts 27.0 ha (66.1 ac) MSHCP Riparian/Riverine Areas. Permanent impacts 184.2 ha (455.3 ac) of Other Natural Communities of Special Concern.	Temporarily impacts 3.6 ha (8.8 ac) MSHCP Riparian/Riverine Areas. Permanently impacts 13.8 ha (34.1 ac) MSHCP Riparian/Riverine Areas. Permanent impacts 175.6 ha (434.0 ac) of Other Natural Communities of Special Concern.	HCP-1 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will adhere to the guidelines in the Multiple Species Habitat Conservation Plan (MSHCP) Section 6.1.4, Section 6.4, Section 7.5.3, and Appendix C to reduce edge effects on the MSHCP Conservation Area. HCP-2 During final design, the Riverside County Transportation Commission (RCTC) will coordinate with USA Waste of California, Inc. to amend the El Sobrante Landfill Multiple Species Habitat Conservation Plan (El Sobrante Landfill MSHCP) to address the Mid County Parkway (MCP) project and its effects on the Plan's easterly conservation area. The amendment will address the addition of mitigation lands to the Plan that would offset the loss

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
			Permanent impacts 154.3 ha (381.4 ac) of MSHCP Criteria Area. Permanent impacts 9.1 ha (22.4 ac) of El Sobrante Landfill Multiple Species Habitat Conservation Plan Permanent impacts 172.6 ha (426.6 ac) of Lake Mathews-Estelle Mountain Reserve.	Permanent impacts 164.6 ha (406.8 ac) of MSHCP Criteria Area. Permanent impacts 9.1 ha (22.4 ac) of EI Sobrante Landfill Multiple Species Habitat Conservation Plan Permanent impacts 172.6ha (426.6 ac) of Lake Mathews-Estelle Mountain Reserve.	Permanent impacts 258.2 ha (638.0 ac) of MSHCP Criteria Area. Permanent impacts 221.3 ha (546.8 ac) of Lake Mathews-Estelle Mountain Reserve.	Permanent impacts 268.5 ha (663.4 ac) of MSHCP Criteria Area. Permanent impacts 221.3 ha (546.8 ac) of Lake Mathews-Estelle Mountain Reserve.	Permanent impacts 256.8 ha (634.5 ac) of MSHCP Criteria Area. Permanent impacts 8.9 ha (22.0 ac) of El Sobrante Landfill Multiple Species Habitat Conservation Plan Permanent impacts 69.4 ha (171.5 ac) of Lake Mathews-Estelle Mountain Reserve.	of functions, values, and species covered under the Plan. HCP-3 During final design, the Riverside County Transportation Commission (RCTC) will coordinate with the Riverside County Habitat Conservation Authority (RCHCA) to amend the Habitat Conservation Plan for the Stephens' Kangaroo Rat to address the Mid County Parkway (MCP) project and its effects on the Habitat Conservation Plan Conservation Plan Conservation Plan aconservation Plan Conservation Plan to the Habitat Conservation Plan to offset the loss of functions, values, and species covered under this Habitat Conservation Plan. The replacement habitat for the Habitat Conservation Plan. The replacement habitat for the Habitat Conservation Plan for the Stephens' Kangaroo Rat must be approved by the wildlife agencies and must be contiguous to the current Stephens' Kangaroo Rat Reserve lands. In addition, replacement lands for lands impacted in the Stephens' Kangaroo Rat Reserve lands that are managed by the federal Bureau of Land Management (BLM) shall also require BLM approval through a right of way encroachment application. These lands would be managed by the RCHCA through an agreement with RCTC.
								BIO-1 During construction, the Riverside County Transportation Commission (RCTC) will ensure that impacts to areas that provide long-term conservation value for species identified in the Multiple Species Habitat Conservation Plan (MSHCP) as Narrow Endemic Plant Species, Criteria Area Plant Species, and Additional Survey Species are avoided and minimization will be achieved by confining disturbance to areas not identified as having long-term conservation value, and not exceeding the limits identified in this Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Disturbance will be controlled by erecting barrier fencing or other appropriate means of demarcating construction limits.
								BIO-2 During final design, the Riverside County Transportation Commission (RCTC) will ensure that notes are placed on project construction plans, informing contractors that areas designated with long-term conservation value outside the project footprint are environmentally sensitive and that construction activity is excluded from those areas.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								BIO-3 During construction, the Riverside County Transportation Commission (RCTC) will contract a qualified/authorized biological monitor to ensure that disturbance outside the footprint is avoided and seasonal restrictions are observed.
Wetlands and Other Waters of the United States	No impact	Less impact than MCP Build Alternatives	6.0 ha (14.9 ac) of permanent impacts to United States Army Corps of Engineers (USACE) jurisdiction al areas. 3.9 ha (9.8) of temporary impacts to USACE jurisdictional areas. 11.3 ha (27.8 ac) of permanent impacts to California Department of Fish and Game (CDFG) jurisdictional areas. 4.0 ha (10.0 ac) of temporary impacts to CDFG jurisdictional areas.	6.0 ha (14.8 ac) of permanent impacts to USACE jurisdictional areas. 3.3 ha (8.2 ac) of temporary impacts to USACE jurisdictional areas. 11.2 ha (27.6 ac) of permanent impacts to CDFG jurisdictional areas. 3.5 ha (8.6 ac) of temporary impacts to CDFG jurisdictional areas. inspection of temporary impacts to CDFG jurisdictional areas.	6.9 ha (17.2 ac) of permanent impacts to USACE jurisdictional areas. 4.2 ha (10.4 ac) of temporary impacts to USACE jurisdictional areas. 14.6 ha (36.1 ac) of permanent impacts to CDFG jurisdictional areas. 4.8 ha (11.9 ac) of temporary impacts to CDFG jurisdictional areas. inspectional areas.	6.9 ha (17.0 ac) of permanent impacts to USACE jurisdictional areas. 3.6 ha (8.9 ac) of temporary impacts to USACE jurisdictional areas. 14.5 ha (35.9 ac) of permanent impacts to CDFG jurisdictional areas. 4.2 ha (10.5 ac) of temporary impacts to CDFG jurisdictional areas.	4.2 ha (10.5 ac) of permanent impacts to USACE jurisdictional areas. 3.5 ha (8.6 ac) of temporary impacts to USACE jurisdictional areas. 6.4 ha (15.9 ac) of permanent impacts to CDFG jurisdictional areas. 3.5 ha (8.6 ac) of temporary impacts to CDFG jurisdictional areas.	WET-1 Prior to construction, the Riverside County Transportation Commission (RCTC) shall obtain a Section 404 permit from the United States Army Corps of Engineers (USACE), a Section 1602 Agreement for Streambed Alteration from the California Department of Fish and Game (CDFG), and a Section 401 water quality certification or waiver from the Santa Ana Regional Water Quality Control Board (RWQCB). Specific mitigation requirements shall be negotiated with each agency during the permit process and shall incorporate approaches and measures identified in the Conceptual Mitigation Plan (Appendix Q) and those described below. WET-2 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will mitigate permanent impacts to wetlands at a minimum ratio of 1.5:1 in order to achieve no net loss of wetlands. Mitigation will occur through habitat restoration and/or enhancement of on-site areas along the length of the Mid County Parkway (MCP) to the extent practical. If it is infeasible to mitigate entirely on site, in accordance with the Conceptual Mitigation Plan, alternative off-site mitigation would occur. Off-site mitigation such as enhancement, creation, and restoration would occur. Mitigation for temporal loss of habitat value and other compensatory mitigation beyond the basic 1.5:1 replacement ratio could then occur through purchase of mitigation bank credits for removal of giant reed (Arundo donax) from a location approved by the United States Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) under guidelines described by the resource and regulatory agencies through the permitting process, or through participation in another approved habitat mitigation bank. The actual amount of mitigation will be determined in coordination with the resource and regulatory agencies through the permitting process, or through participation in another approved habitat mitigation bank. The actual amount of mitigation will be determined in coordination with the resource and r

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								Temporary impacts to USACE jurisdictional areas will be mitigated at a 1:1 replacement ratio on site through revegetation efforts or through an approved mitigation bank.
								WET-3 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will mitigate impacts to aquatic resources (i.e., nonwetland aquatic habitat such as deep streams and ponds without hydrophytic vegetation) at a minimum ratio of 3:1. Mitigation will occur through habitat restoration and/or enhancement of on-site areas along the length of the Mid County Parkway (MCP) to the extent practical. If it is infeasible to mitigate entirely on site, in accordance with the Conceptual Mitigation Plan, alternative off-site mitigation would occur. Off-site mitigation such as enhancement, creation, and restoration would occur. Mitigation for temporal loss of habitat value and other compensatory mitigation beyond the basic 1:1 replacement ratio could then occur through purchase of mitigation bank credits for removal of giant reed (Arundo donax) from a location approved by the United States Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) under guidelines described by the resource and regulatory agencies through the permitting process, or through participation in another approved habitat mitigation bank. The actual amount of mitigation will be determined in coordination with the resource and regulatory agencies based on the quality and quantity of jurisdictional resources to be affected with consideration of the results from the study entitled Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California (ERDC 2008). Temporary impacts to aquatic areas will be mitigated at a 1:1 replacement ratio on site through revegetation efforts or through an approved mitigation bank.
								WET-4 During final design, the Riverside County Transportation Commission (RCTC) will develop a Habitat Mitigation Monitoring Plan (HMMP) to restore impacted riparian habitats and shall incorporate the
								applicable approaches and measures identified in the Conceptual Mitigation Plan (Appendix Q). The HMMP will be subject to United States Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) approval. The HMMP will, at a minimum, meet the following requirements:

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								 A habitat replacement and/or enhancement ratio of at least 1:1 for temporary impacts, 1.5:1 for permanent impacts to wetlands, and 3:1 for permanent impacts to nonwetland aquatic resources;
								 A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; and
								 Additional requirements, including a 3-year establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan.
Plant Species	No impact	Less impact than MCP Build Alternatives.	3.07 ha (7.58 ac) of many-stemmed dudleya 0.84 ha (2.08 ac) smooth tarplant 0.63 ha (1.55 ac) Coulter's goldfields	3.07 ha (7.58 ac) of many-stemmed dudleya 0.84 ha (2.08 ac) smooth tarplant 0.63 ha (1.55 ac) Coulter's goldfields	0.01 ha (0.02 ac) of many-stemmed dudleya 0.84 ha (2.08 ac) smooth tarplant 0.63 ha (1.55 ac) Coulter's goldfields	0.01 ha (0.02 ac) of many-stemmed dudleya 0.84 ha (2.08 ac) smooth tarplant 0.63 ha (1.55 ac) Coulter's goldfields	3.07 ha (7.58 ac) of many-stemmed dudleya 0.84 ha (2.08 ac) smooth tarplant 0.63 ha (1.55 ac) Coulter's goldfields	PS-1 Prior to construction, the Riverside County Transportation Commission (RCTC) will obtain a Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to smooth tarplant and Coulter's goldfields pursuant to Section 6.1.3 of the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), where 10 percent or more of those portions of the site that provide for the long-term conservation value of smooth tarplant or Coulter's goldfields are impacted. A DBESP may also be required for any impacts to areas that are occupied by many-stemmed dudleya (based on the results of the 2008 focused surveys in the area north of the El Sobrante Landfill MSHCP Plan Area). Mitigation provided in the DBESP will demonstrate that equivalent or superior conservation for the species will be achieved through either location and preservation of populations that are not already proposed for conservation in the MSHCP, and/or restoration or enhancement of existing populations within the proposed conservation area.
Animal Species	No impact	Less impact than MCP Build Alternatives.	Impacts 16.2 ha (40.0 ac) of Los Angeles pocket mouse occupied habitat suitable for long-term conservation	Impacts 16.2 ha (40.0 ac) of Los Angeles pocket mouse occupied habitat suitable for long-term conservation	Impacts 16.2 ha (40.0 ac) of Los Angeles pocket mouse occupied habitat suitable for long-term conservation	Impacts 16.2 ha (40.0 ac) of Los Angeles pocket mouse occupied habitat suitable for long-term conservation	Alternative 9 Rider Street Design Variation (RD DV) would result in 1.6 ha (3.9 ac) of direct impacts to burrowing owl foraging habitat and burrows occupied by two pairs and six juveniles. Impacts 16.2 ha (40.0 ac) of Los Angeles pocket mouse occupied habitat suitable for long-term	Within 30 days prior to ground disturbance, the Riverside County Transportation Commission (RCTC) will conduct focused burrowing owl surveys in accordance with the Riverside County Environmental Programs Department Burrowing OW Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan (dated Oct 24, 2005), where suitable habitat occurs within the Multiple Species Habitat Conservation Plan (MSHCP) Conservation Area. Prior to and during construction, the Riverside County Transportation Commission (RCTC) will ensure that take of active burrowing owl nests is avoided. If focused burrowing owl surveys determine that the project site supports burrowing owls, the burrowing owls will be passively relocated. Passive relocation (use of one-way doors and collapse of

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
							conservation	burrows) will take place when owls are present outside of the nesting season. AS-3 Prior to construction, the Riverside County Transportation Commission (RCTC) will obtain a Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to Los Angeles pocket mouse near Lake Perris, where 90 percent or more of those portions of the site that provide for the long-term conservation value of Los Angeles pocket mouse cannot be avoided. As part of the DBESP, the RCTC will determine appropriate mitigation that will consist of acquisition of occupied or other suitable habitat off site or participation in an approved habitat mitigation bank. Land to be acquired could be either habitat that is occupied by the Los Angeles pocket mouse and/or could be habitat that is restored or enhanced in order to provide suitable habitat for the Los Angeles pocket mouse. AS-4 During construction, the Riverside County Transportation Commission (RCTC) will ensure that vegetation clearing is conducted outside nesting season (March 1–September 15). If suitable habitat is present for species protected by the Migratory Bird Treaty Act (MBTA), clearing within nesting season shall be preceded by surveys to ensure that nonlisted nesting birds are not taken.
Threatened and Endangered Species	No impact.	Less impact than MCP Build Alternatives	2.5 ha (6.1 ac) of least Bell's vireo habitat 13.6 ha (33.5 ac) of final California gnatcatcher critical habitat 63.8 ha (157.6 ac) of Quino checkerspot butterfly critical habitat 1.2 ha (2.9 ac) of San Bernardino kangaroor at critical habitat 0.31 ha (0.77 ac) of spreading Navarretia 3.07 ha (7.58 ac) of Munz's Onion 168.0 ha (415.1 ac) of Stephen's Kangaroo Rat	2.5 ha (6.1 ac) of least Bell's vireo habitat 13.6 ha (33.5 ac) of final California gnatcatcher critical habitat 63.8 ha (157.6 ac) of Quino checkerspot butterfly critical habitat 1.2 ha (2.9 ac) of San Bernardino kangaroor at critical habitat 0.31 ha (0.77 ac) of spreading Navarretia 3.07 ha (7.58 ac) of Munz's Onion 168.0 ha (415.1 ac) of Stephen's Kangaroo Rat	3.4 ha (8.5 ac) of least Bell's vireo habitat 56.6 ha (140.0 ac) of Quino checkerspot butterfly critical habitat 1.2 ha (2.9 ac) of San Bernardino kangaroo rat critical habitat 0.31 ha (0.77 ac) of spreading Navarretia 0.01 ha (0.02 ac) of Munz's Onion 218.7 ha (540.3 ac) of Stephen's Kangaroo Rat	3.4 ha (8.5 ac) of least Bell's vireo habitat 56.6 ha (140.0 ac) of Quino checkerspot butterfly critical habitat 1.2 ha (2.9 ac) of San Bernardino kangaroo rat critical habitat 0.31 ha (0.77 ac) of spreading Navarretia 0.01 ha (0.02 ac) of Munz's Onion 218.7 ha (540.3 ac) of Stephen's Kangaroo Rat	0.9 ha (2.2 ac) of least Bell's vireo habitat 16.2 ha (40.1 ac) of final California gnatcatcher critical habitat; 132.6 ha (327.6 ac) of Quino checkerspot butterfly critical habitat 1.2 ha (2.9 ac) San Bernardino kangaroor at critical habitat 0.31 ha (0.77 ac) of spreading Navarretia 3.07 ha (7.58 ac) of Munz's Onion 68.3 ha (168.7 ac) of Stephen's Kangaroo Rat	TE-1 Prior to construction, the Riverside County Transportation Commission (RCTC) will obtain a Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to habitat suitable for long-term conservation for spreading navarretia, least Bell's vireo, and San Bernardino kangaroor at where 10 percent or more of those portions of the site that provide for the long-term conservation value are impacted, pursuant to Section 6.1.2 and Section 6.1.3 of the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). A DBESP may also be required for any impacts to habitat suitable for long-term conservation for Munz's onion (pending the results of the focused surveys in the area north of the El Sobrante Landfill MSHCP Area in late 2008). Mitigation provided in the DBESP will demonstrate that equivalent or superior conservation for the species will be achieved through either location and preservation of populations that are not already proposed for conservation in the MSHCP, and/or restoration or enhancement of existing populations within the proposed conservation area.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								TE-2 During construction, the Riverside County Transportation Commission (RCTC) will adhere to the Guidelines for the Siting and Design of Planned Roads Within the Criteria Area and Public/Quasi-Public Lands (Multiple Species Habitat Conservation Plan, Sections 7.5.1, 7.5.3, and Appendix C) for avoiding take of active nests.
								TE-3 Prior to construction, the Riverside County Transportation Commission (RCTC) will mitigate for impacts to the Habitat Conservation Plan for the Stephens' Kangaroo Rat Reserve lands through replacement mitigation lands pursuant to the requirements of the Habitat Conservation Plan for the Stephens' kangaroo rat (replacement of occupied habitat at a ratio of 1:1). This mitigation will occur through RCTC's purchase of mitigation lands that are known to be occupied by Stephens' kangaroo rat (surveys to confirm presence of Stephens' kangaroo rat will be conducted prior to acquisition of these mitigation lands). These lands would then be managed by the Riverside County Habitat Conservation Agency through an agreement with RCTC. The 1:1 replacement of occupied habitat will also provide replacement of Public/Quasi-Public Lands at a 1:1 ratio, consistent with the Multiple Species Habitat Conservation Plan (MSHCP) requirements. The 1:1 replacement of occupied habitat will also meet the requirements for the 14 parcels managed by the federal Bureau of Land Management.
Invasive Species	No impact.	Less impact than MCP Build Alternatives	Potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway.	Potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway.	Potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway.	Potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway.	Potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway.	IS-1 Prior to and during construction, the Riverside County Transportation Commission (RCTC) will ensure that bare soil will be landscaped with California Department of Transportation (Caltrans) recommended seed mix and container plants from locally adapted species to preclude the invasion of noxious weeds. Seed mixtures for portions of the project under Caltrans jurisdiction shall be approved by a Caltrans District Landscape Architect. The use of site-specific materials adapted to local conditions increases the likelihood that revegetation will be successful and maintains the genetic integrity of the local ecosystem. Prior to construction, RCTC will require the Project Biologist to make arrangements well in advance of planting (at least 9 months prior) to ensure that plant materials are located and available for the scheduled planting time. Sufficient time shall be allocated for a professional seed company to visit the project site during the appropriate season and collect the native plant seed. If local propagules are not available or cannot be collected in sufficient quantities, materials collected

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
								or grown from other sources within southern California shall be substituted. For widespread native herbaceous species that are more likely to be genetically homogeneous, site specificity is a less important consideration, and seed and container plants from commercial sources may be used.
								IS-2 Prior to construction, the Riverside County Transportation Commission (RCTC) will require that the Project Biologist certify seed purity by planting seed labeled under the California Food and Agricultural Code or that has been tested within a year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists.
								IS-3 During construction, the Riverside County Transportation Commission (RCTC) will require that the Construction Contractor ensure that construction equipment is will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds both before mobilizing to arrive at the site and before leaving the site. Construction equipment will be cleaned at established truck wash facilities within the project vicinity.
								IS-4 During construction, the Riverside County Transportation Commission (RCTC) will require that the Construction Contractor ensure that trucks carrying vegetation shall be covered and that vegetative materials removed from the site shall be disposed of in accordance with all applicable laws and regulations.
								IS-5 During construction, prior to the initiation of grading, the Riverside County Transportation Commission (RCTC) will require that the Construction Contractor ensure that if material is obtained from a borrow site, the material will be inspected for the presence of noxious weeds and invasive plants to ensure that the material does not contain noxious weeds or invasive plants.
								IS-6 The Riverside County Transportation Commission (RCTC) will require that, during construction, the Construction Contractor control, kill, and remove noxious weeds and invasive plants from the project site, subject to verification by the Project Biologist.

Table S.1 Summary of Impacts

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Build Alternative 4	Build Alternative 5	Build Alternative 6	Build Alternative 7	Build Alternative 9	Avoidance, Minimization, and Mitigation Measures
Cumulative Impacts	No impact	Less impact than MCP	The MCP project,	Cumulative impacts to natural communities, plant species,				
		Build Alternatives	when combined with	animal species, and threatened and endangered species will				
			the other anticipated	be mitigated through compliance by RCTC and other				
			cumulative projects,	permittees with the MSHCP. Cumulative impacts to wetlands				
			would contribute to a	and other waters will be mitigated through compliance by				
			cumulative loss of	RCTC and other agencies with the provisions of the SAMP for				
			farmlands,	farmlands,	farmlands,	farmlands,	farmlands,	the San Jacinto River watershed, once it is approved. For
			visual/aesthetics,	visual/aesthetics,	visual/aesthetics,	visual/aesthetics,	visual/aesthetics,	cultural and paleontological resources, RCTC will work with
			cultural resources,	those agencies responsible for approval of the cumulative				
			paleontological	paleontological	paleontological	paleontological	paleontological	projects to provide information on these resources from the
			resources, natural	MCP project that may be useful to those agencies in				
				communities, wetlands		communities, wetlands	communities, wetlands	mitigating impacts to those resources. The cumulative loss of
			and other waters, plant	farmlands has been previously acknowledged by the County				
			species, animal	and the Cities of Corona, Perris, and San Jacinto as an				
			species, and	unavoidable adverse impact resulting from the planned				
			threatened and	growth within western Riverside County.				
			endangered species.					

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Table S.2 Summary of Use Impacts to Section 4(f) Properties by Alternative

Section 4(f) Property	Use Impacts By Alternative
El Cerrito Sports Park	Alternatives 4, 5, 6, 7, and 9: 0.95 ha (2.36 ac)
	Alternatives 4, 5, 6, 7, and 9 with the Temescal Wash Area
	Design Variation: No use
	Alternatives 1A and 1B: No use
Lake Mathews/Estelle Mountain	Alternatives 4 and 5: 168.0 ha (415.1 ac)
Reserve	Alternatives 6 and 7: 218.7 ha (540.3 ac)
	Alternative 9: 68.3 ha (168.7 ac)
	Alternatives 1A and 1B: No use
El Sobrante Landfill Multiple	Alternatives 4 and 5: 9.1 ha (22.4 ac)
Species Habitat Conservation Plan	Alternatives 1A, 1B, 6, and 7: No use
Area	Alternative 9: 8.9 ha (22.0 ac)
Paragon Park	Alternatives 1A, 1B, 4, 5, 6, 7, and Alternative 9 with Rider
	Street Design Variation: No use
	Alternative 9: 3.62 ha (8.95 ac)
	Alternative 9 with the elevated grade design variation: 3.73
	ha (9.21 ac)
P-33-4759/H (CA-RIV-4759/H)	Alternatives 1A, 1B, 4, 5, and 9: No use
Cajalco Tin Mine District	Alternatives 6 and 7: 25.2 ha (62.5 ac)
P-33-13791 (CA-RIV-7843)	Alternatives 4, 5, 6, and 7: 8.3 ha (20.5 ac)
Cajalco Creek Site	Alternatives 1A, 1B, and 9: No use
P-33-16598 (CA-RIV-8712) Multi-	Alternatives 4, 5, 6, 7, and 9: 2.1 ha (5.2 ac)
Use Prehistoric Site	Alternatives 1A and 1B: No use

Source: LSA Associates, Inc. (2008).

Table S.3 Section 4(f) Properties – Evaluation of Net Harm after Mitigation

Section 4(f)	Use Impacts by Alternative and Areas	Net Harm After Mitigation
Property	Used	
El Cerrito Sports Park (planned park)	Alternatives 4, 5, 6, 7, and 9: 0.95 ha (2.36 ac) The area used by these Alternatives is on the west side of the site for this proposed park. These Alternatives would remove landscaping, and the westernmost edges of three sports fields; the area used under all five Alternatives represents approximately 8.9 percent of the total site for this planned park.	Alternatives 4, 5, 6, 7, and 9 would include continuation of existing coordination and consultation with the County of Riverside, including ongoing discussions with the County regarding minor modifications to the planned layout of this park, to accommodate the minor use of land on the west side of the park for Alternatives 4, 5, 6, 7, and 9; this would fully mitigate the impacts of the use related to the three sports fields. In summary, the harm to this park under Alternatives 4, 5, 6, 7, and 9 can be substantially reduced. The alternatives with the Temescal Wash Area Design Variation would not use property from this park.
	Alternatives 4, 5, 6, 7, and 9 with the Temescal Wash Area Design Variation would result in no use of this Section 4(f) property	
Lake Mathews- Estelle Mountain Reserve	Alternatives 4 and 5: 168.0 ha (415.1 ac) Alternatives 6 and 7: 218.7 ha (540.3 ac) Alternative 9: 68.3 ha (168.7 ac) The parts of the Lake Mathews-Estelle Mountain Reserve used under these Alternatives contain biological and water	Alternatives 4 and 5 would pass through the Lake Mathews-Estelle Mountain Reserve south of Lake Mathews and would use approximately 3.5 percent of the total area of this reserve. These impacts would be mitigated through replacement of impacted lands at a minimum ratio of 1:1, designating the remaining portions of this reserve as ESAs, biological monitoring, and provision of wildlife crossings across the MCP facility to facilitate wildlife movement.
	resources that provide habitat for wildlife species.	Alternatives 6 and 7 would pass through the Lake Mathews-Estelle Mountain Reserve north and south of Lake Mathews and would use approximately 4.5 percent of the total area of this reserve. These impacts would be mitigated through replacement of impacted lands at a minimum ratio of 1:1, designating the remaining portions of this reserve as ESAs, biological monitoring, and provision of wildlife crossings across the MCP facility to facilitate wildlife movement.
		Alternative 9 would pass through the Lake Mathews-Estelle Mountain Reserve south of Lake Mathews and would use approximately 1.4 percent of this reserve. These impacts would be mitigated through replacement of impacted lands at a minimum ratio of 1:1, designating the remaining portions of this reserve as ESAs, biological monitoring, and provision of wildlife crossings across the MCP facility to facilitate wildlife movement.

Table S.3 Section 4(f) Properties – Evaluation of Net Harm after Mitigation

Section 4(f) Property	Use Impacts by Alternative and Areas Used	Net Harm After Mitigation
El Sobrante Landfill Multiple Species Habitat Conservation Plan (MSHCP) Area	Alternatives 4 and 5: 9.1 ha (22.4 ac) Alternatives 6 and 7: No use Alternative 9: 8.9 ha (22.0 ac) The parts of the El Sobrante Landfill MSHCP area used by Alternatives 4, 5, and 9 contain biological and water resources that provide habitat for wildlife species.	Alternatives 4 and 5 would pass along the north side of the El Sobrante Landfill MSHCP area and would use approximately 3 percent of the total area of the El Sobrante Landfill MSHCP area. These impacts would be mitigated through replacement of impacted lands at a minimum ratio of 1:1, designating the remaining portions of the El Sobrante Landfill MSHCP area as ESAs, biological monitoring, and provision of wildlife crossings across the MCP facility to facilitate wildlife movement. Alternative 9 would pass along the north side of the El Sobrante Landfill MSHCP area and would use approximately 1.4 percent of the total area of the El Sobrante Landfill MSHCP area. These impacts would be mitigated through replacement of impacted lands at a minimum ratio of 1:1, designating the remaining portions of the El Sobrante Landfill MSHCP area as ESAs, biological monitoring, and provision of wildlife crossings across
Paragon Park	Alternative 9: 3.62 ha (8.95 ac) Alternative 9 with the elevated grade design variation: 3.73 ha (9.21 ac) Alternatives 4, 5, 6, 7, and Alternative 9 with Rider Street Design Variation: No use	the MCP facility to facilitate wildlife movement. Alternatives 6 and 7 would not use property from the El Sobrante Landfill MSHCP area. Alternative 9 and Alternative 9 with the elevated grade design variation pass through the northern part of this park and would use approximately 58.9 and 60.1 percent, respectively, of the total area of this park. The areas used by these Alternatives include tennis courts, a basketball court, four handball courts, and a playground. Replacement park land including these types of sports and play functions would be provided north and east of the existing park, as shown on Figure 4.6. The design of the replacement park areas would be developed in consultation with the City of Perris. Appropriate pedestrian access from the remaining part of the existing park and the two replacement park areas would be provided. Alternatives 4, 5, 6, 7, and Alternative 9 with Rider Street Design Variation would not use
P-33-4759/H (CA-RIV-4759/H) Cajalco Tin Mine District	Alternatives 6 and 7: 25.2 ha (62.5 ac) Alternatives 4, 5, and 9: No use Alternatives 6 and 7 would use the part of this historic site that has the main concentration of resources in the District. Specifically, Alternatives 6 and 7 pass through the part of this District that once contained a well-developed infrastructure of buildings and roads dating to the Civil War	Alternatives 4, 5, 6, 7, and Alternative 9 with Rider Street Design Variation would not use property from this park. Alternatives 6 and 7 would cross the northerly portion of this site and would use approximately 11.1 percent of the total area of this historic site. If these alternatives were selected for implementation, mitigation measures would include preparing and implementing a data recovery plan to collect, analyze, and curate any artifacts from this site prior to construction. During construction, ESA fencing would be provided, and archaeological monitoring would be conducted to ensure that the remaining portions of the site were not harmed. These measures would substantially mitigate the effects of the use of this part of the historic district by Alternatives 6 and 7. In summary, the net harm of the use of this historic district by Alternatives 6 and 7 can be minimized.

Table S.3 Section 4(f) Properties – Evaluation of Net Harm after Mitigation

Section 4(f) Property	Use Impacts by Alternative and Areas Used	Net Harm After Mitigation
	era. None of those structures is still standing.	Alternatives 4, 5, and 9 would not use property from this historic site.
P-33-13791 (CA-RIV-7843) Cajalco Creek Site	Alternatives 4, 5, 6, and 7: 8.3 ha (20.5 ac) Alternative 9: No use Alternatives 4, 5, 6, and 7 cross the three loci at this site and would partially use land at these loci. At Locus 33-816, the cupules would be avoided, but the southernmost part of this locus would be used; at Locus 33-817, the southernmost part of this locus would be used; and at Locus 33-818, the northern internal locus would be used, but the southern internal locus would be avoided. No important parts of this site, such as rock art, would be used by Alternatives 4, 5, 6, and 7.	Alternatives 4, 5, 6, and 7 would cross the central portion of the site and would use approximately 3.9 percent of the total area of this historic site. Three loci of the site, 33-816, 33-817, and 33-818, will be at least partially impacted by Alternatives 4, 5, 6, and 7, although the cupule boulder rock art feature at 33-816 will be avoided by bridging the area. If these alternatives were selected for implementation, mitigation measures would include preparing and implementing a data recovery plan to collect, analyze, and curate any artifacts from this site prior to construction. During construction, ESA fencing would be provided and archaeological monitoring would be conducted to ensure that the remaining portions of the site were not harmed. These measures would substantially mitigate the effects of the use of part of the site by Alternatives 4, 5, 6, and 7. In summary, the net harm of the use of this site by Alternatives 4, 5, 6, and 7 can be minimized. Alternative 9 would result in no use of this historic site.
P-33-16598 (CA-RIV-8712) Multi-Use Prehistoric Site	Alternatives 4, 5, 6, 7, and 9: 2.1 ha (5.2 ac)	Alternatives 4, 5, 6, 7, and 9 would all cross the northerly edge of this site and would use approximately 6.6 percent of the total area of this historic site. Although this part of this historic site was determined to have limited data potential, the Native American Tribes indicated in their consultations that the site as a whole is important and significant. No important parts of this site, such as rock art, would be used by these alternatives. If these alternatives were selected for implementation, mitigation measures would include preparing and implementing a data recovery plan to collect, analyze, and curate any artifacts from this site prior to construction. During construction, ESA fencing would be provided and archaeological monitoring would be conducted to ensure that the remaining portions of the site were not harmed. These measures would substantially mitigate the effects of the use of part of the site by Alternatives 4, 5, 6, 7, and 9. In summary, the net harm of the use of this site by Alternatives 4, 5, 6, 7, and 9 can be minimized.

Source: LSA Associates, Inc. (2008). ac = acres ESAs = Environmentally Sensitive Areas ha = hectares MCP = Mid County Parkway

Table S.4 Permits and Approvals Needed

Agency	Permit/Approval	Timeline
United States Fish and Wildlife Service (USFWS)	 Section 7 consultation for Threatened and Endangered Species Section 7 consultation with USACE on Section 404 permit Concur on RCTC's MSHCP Consistency Determination Concurrence on Determination of Biologically Equivalent or Superior Preservation (DBESP) Approval of amendment to western Riverside County MSHCP Approval of amendment to El Sobrante Landfill MSHCP (USA Waste is permittee) Approval of any replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat. Approval of any amendments to the Lake Mathews MSHCP and Natural Communities Conservation Plan. 	 Section 7 consultations are to be conducted following identification of a Preferred Alternative and preparation of the MSHCP Consistency Determination, which will serve as the Biological Assessment (BA). The MSHCP Consistency Determination and DBESP will be prepared and submitted for USFWS concurrence following identification of a Locally Preferred Alternative and prior to approval of the Final EIS. The amendment to the MSHCP will be requested by RCTC after the Record of Decision is approved for the MCP EIS. Approval of replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat and amendments to other Habitat Conservation Plans will be requested by RCTC after the Record of Decision is approved for the MCP EIS.
United States Army Corps of Engineers (USACE) United States Department of	Section 404 Permit for filling or dredging waters of the United States Approval of replacement lands pursuant to the Habitat	Application to be submitted following identification of a Preferred Alternative Approval of replacement lands pursuant to the Habitat
the Interior–Bureau of Land Management (BLM)	Conservation Plan for the Stephens' kangaroo rat; applicable only to BLM-managed lands	Conservation Plan for the Stephens' kangaroo rat will be requested by RCTC after certification of the Final EIR.
California Department of Fish and Game (CDFG)	 Section 1602 Lake and Streambed Alteration Agreement Concur on RCTC's MSHCP Consistency Determination Approval of MSHCP Amendment Approval of amendment to El Sobrante Landfill MSHCP (USA Waste is permittee) Approval of replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat Concurrence on DBESP Approval of any amendments to the Lake Mathews MSHCP and Natural Communities Conservation Plan. 	Section 1602 Notification is to be submitted and agreement obtained prior to the start of construction. The MSHCP Consistency Determination and DBESP will be prepared and submitted for CDFG concurrence following identification of a Preferred Alternative and prior to certification of the Final EIR. The amendment to the MSHCP will be requested by RCTC after the Final EIR is certified. Approval of replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat and amendments to other Habitat Conservation Plans will be requested by RCTC after certification of the Final EIR.
State Water Resources Control Board	Water Discharge Permit, approval of Notice of Intent to comply with General Construction Activity NPDES Permit.	Application to be submitted prior to construction

Table S.4 Permits and Approvals Needed

Agency	Permit/Approval	Timeline
Western Riverside County Regional Conservation Authority (RCA)	Concur on RCTC's MSHCP Consistency Determination	To be conducted following approval of a Preferred Alternative
County of Riverside, Riverside County Habitat Conservation Agency (RCHCA)	 Approval of replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat Section 4(f) consultation 	Approval of replacement lands pursuant to the Habitat Conservation Plan for the Stephens' kangaroo rat will be requested by RCTC after certification of the Final EIR. Section 4(f) consultation will be completed prior to completion of the Final EIR/EIS.
Regional Water Quality Control Board 8, Santa Ana Region (RWQCB)	Section 401 Water Quality certification	Application to be submitted following approval of a Preferred Alternative
County of Riverside, Cities of Corona, Perris, and San Jacinto	 Freeway Agreement with Caltrans should the MCP project be adopted as a State Highway by the California Transportation Commission Approval of encroachment permits and street construction permits, street closures and re-routing, and associated improvements in the public right of way Section 4(f) consultation for El Cerrito Sports Park (County) and Paragon Park (City of Perris) 	Actions/permits would be issued prior to start of construction. Section 4(f) consultation will be completed prior to completion of the Final EIR/EIS.
Riverside County Flood Control District (RCFCD)	Encroachment permits for improvements affecting RCFCD facilities	Application(s) to be submitted prior to construction
Metropolitan Water District of Southern California	For Alternatives 4, 5, 6, or 7, Lake Mathews Habitat Conservation Plan amendment and Section 4(f) consultation	To be determined after the approval of a Preferred Alternative
USA Waste	For Alternatives 4, 5, or 9, El Sobrante Landfill MSHCP standard amendment	To be determined after the approval of a Preferred Alternative
State Historic Preservation Officer	Concurrence with the agencies' determinations of eligibility and on the findings of effect.	SHPO has given a preliminary concurrence on the agencies' preliminary determinations of eligibility and for the preliminary findings of effect. Final concurrence will occur after submittal of the final Historic Properties Survey Report (which will occur prior to completion of the Final EIR/EIS).

Table S.4 Permits and Approvals Needed

Agency	Permit/Approval	Timeline
Interested Native American	Required consultation under Section 106 of the National	Native American Consultation for the MCP is ongoing.
Tribes	Historic Preservation Act on the overall project cultural	
	work completed to date, including (but not limited to)	
	determinations of eligibility, findings of effect, and future	
	work that includes involvement with the memorandum of	
	Agreement, Archaeological Monitoring Plan, and Data	
	Recovery Plan.	

Caltrans = California Department of Transportation

EIR = Environmental Impact Report

EIS = Environmental Impact Statement

MCP = Mid County Parkway
MSHCP = Multiple Species Habitat Conservation Plan

NPDES = National Pollutant Discharge Elimination System RCTC = Riverside County Transportation Commission

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