Diaz Road Extension Project

Draft Initial Study/Mitigated Negative Declaration

January 2022 | 00207.00012.001

Submitted to:

City of Temecula
41000 Main Street
Temecula, CA 92590

Prepared for:

David Evans and Associates, Inc.
41951 Remington Ave., Suite 220
Temecula, CA 92590

Prepared by:

HELIX Environmental Planning, Inc.
16485 Laguna Canyon Road, Suite 150
Irvine, CA 92618

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ACRONYMS & ABBREVIATIONS

AB	Assembly Bill
Agreement	Cultural Resources Treatment and Monitoring Agreement
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
Btu	British thermal unit
BUOW	Burrowing Owl
CAL FIRE	California Department of Forestry and Fire Protection
CAP	Climate Action Plan
CARB	California Air Resources Board
CAS	Climate Action Strategies
CASSA	Criteria Area Species Survey Area
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	methane
CIP	Capital Improvement Program
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dBA	A-weighted decibels
DTSC	Department of Toxic Substances Control
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
GWP	global warming potential
HFCs	hydrofluorocarbons
IBC	International Building Code
LBVI	Least Bell's Vireo
L_{EQ}	one-hour equivalent
LOS	level of service

ACRONYMS & ABBREVIATIONS (cont.)

LRA	Local Responsibility Area
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MBtu	million Btu
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric tons
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NEPSSA	Narrow Endemic Plant Species Survey Area
NO_X	oxides of nitrogen
NSLU	noise-sensitive land use
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PFCs	perfluorocarbons
PM	particulate matter
PPV	peak particle velocity
PRMMP	paleontological resource monitoring and mitigation plan
RCA	Regional Conservation Authority
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SO_X	oxides of sulfur
SMAQMD	Sacramento Metropolitan Air Quality Management District
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWFL	Southwestern Willow Flycatcher
TAC	toxic air contaminant
TCA	traditionally culturally affiliated
TIA	Traffic Impact Analysis
USACE	U.S. Army Corps of Engineers

ACRONYMS & ABBREVIATIONS (cont.)

VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	volatile organic compounds
WQMP	Water Quality Management Plan

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1.0 Project Information

1.1 Initial Study Information Sheet

1.	Project Title:	Diaz Road Expansion Project
2.	Lead agency name and address:	City of Temecula, 41000 Main Street Temecula, CA 92590
3.	Contact person and phone number:	Avlin Odviar, P.E., Senior Civil Engineer (951) 693-3969
4.	Project location:	The approximately 2.2-linear mile project site is bordered by Rancho California Road to the south, Cherry Street to the north, and Murrieta Creek to the east (see Figure 1, *Regional Location*, and Figure 2, *USGS Topography*).
5.	Project sponsor's name and address:	City of Temecula
6.	General plan designation:	N/A
7.	Zoning:	N/A

8. Description of project:

The Diaz Road Expansion Project (project) is located in the northwestern portion of the City of Temecula (City) in Riverside County, California (refer to Figure 1, *Regional Location*). The project proposes to improve Diaz Road to meet the roadway classification requirements of a major arterial with four divided lanes, as specified by City Standard No. 101, between Cherry Street and Rancho California Road. The standards call for a 100-foot minimum right-of-way, 76-foot roadway with a 14-foot raised median, and 12-foot parkways on each side of the road. The approximately 2.2-mile segment would be improved on its current horizontal alignment and as depicted in the City's General Plan, Circulation Element, Figure C-2 Roadway Plan. As such, the proposed project would widen the existing Diaz Road segment and extend the northwestern end of Cherry Street. The project would complete the City's only existing north-south corridor west of Murrieta Creek. North of Cherry Street, this north-south corridor is planned to continue as Washington Avenue within the City of Murrieta.

The project site encompasses the existing Diaz Road segment between Rancho California Road and Cherry Street and the adjacent areas into which the roadways would be widened (refer to Figure 2, *USGS Topography*, and Figure 3, *Aerial Photograph*). At the northernmost end of the project site (north of Dendy Parkway), Diaz Road transitions to an unimproved dirt road. All widening activities would occur on the northeast side of Diaz Road, which would infringe upon public walking and biking pathways associated with the Murrieta Creek Regional Trail, as well as several small fenced/walled enclosures containing existing utility and water infrastructure (i.e., wells, piping, tanks, and small outbuildings). With the exception of the small outbuildings in these utility enclosures, there are no existing buildings on the project site. Land uses at the project site include mostly existing public roadway, a small portion of dirt road, portions of an adjoining public walking/biking pathway, and

some undeveloped land. Land uses in the vicinity of the project site consist of industrial and commercial developments to the west and south, Murrieta Creek and public walking/biking pathways to the northeast, and mostly undeveloped land to the north. The elevation of the project site ranges from approximately 1,000 to 1,040 feet above mean sea level (AMSL) and the topography is relatively flat as a graded roadway, with an overall downward slope toward the southeast, and some localized sloping toward Murrieta Creek, which is located 200 feet to the northeast.

Signing and striping improvements for intersecting streets would be provided to the extent necessary to safely transition lane configurations and turning movements to existing improvements. These improvements would be in accordance with the latest edition(s) of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and the City's requirements and specifications. Signal modifications would be needed at the intersection of Winchester Road and Rancho Way to accommodate revised turning movements and the Diaz Road widening. Landscape and planting improvements would include decorative rock, boulders and hardscape improvements for the center median, easterly parkway, and westerly parkway where existing landscape improvements do not exist. The median and parkway improvements would be in accordance with the City's landscape guidelines. In addition, streetlights would be installed as appropriate according to the City's design standards for type, location, and spacing. Storm drains would also be installed as appropriate along the expanded roadway to include catch basins and low impact development improvements.

Construction is anticipated to begin in Fall 2022 and last approximately 16 months. Construction activities would include site preparation, demolition of existing roadway, grading, installation of drainage and utilities, retaining walls, and paving. During construction, material such as vegetation, soil, old asphalt and concrete may be exported from the site and material such as soil, aggregate, asphalt and concrete may be imported to the site. Construction Best Management Practices (BMPs) would include maintaining existing slope stabilization measures, stabilizing all slopes greater than three feet in height, and providing inlet protection, gravel bags, and silt fences where applicable. In addition, a Traffic Control Plan would be implemented during construction of the project to maintain traffic flow and safety during project construction activities.

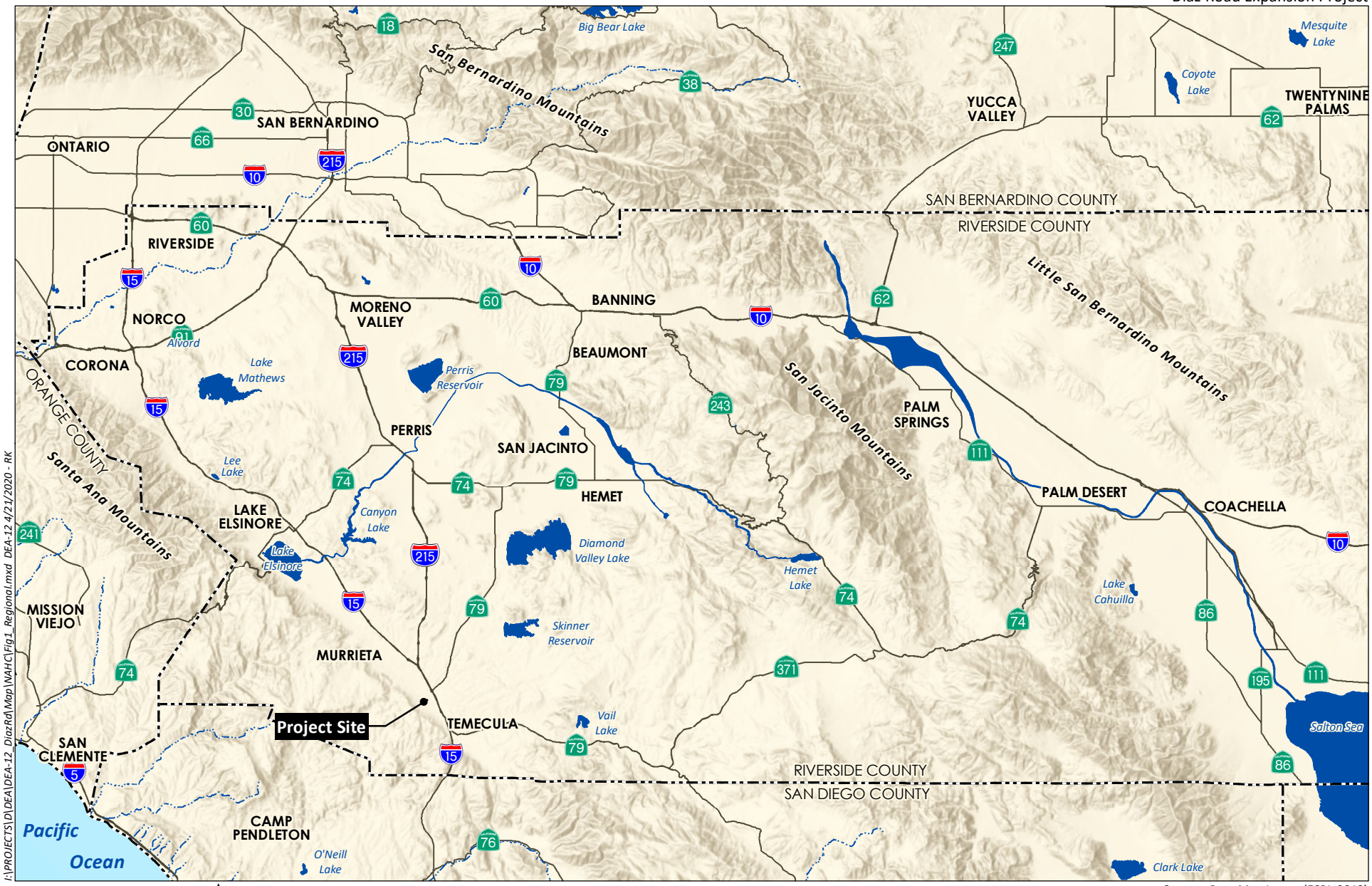
9. Surrounding Land Uses and Setting:

The approximately 2.2 linear mile project site is bordered by Rancho California Road to the south, Cherry Street to the north, and Murrieta Creek to the east. The walking/biking pathway adjoining northeast of Diaz Road and several small walled/fenced enclosures containing utility and water company infrastructure are along the northeast side of Diaz Road at several locations between Rancho California Road and Cherry Street.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

State Water Resources Control Board (SWRCB): National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan



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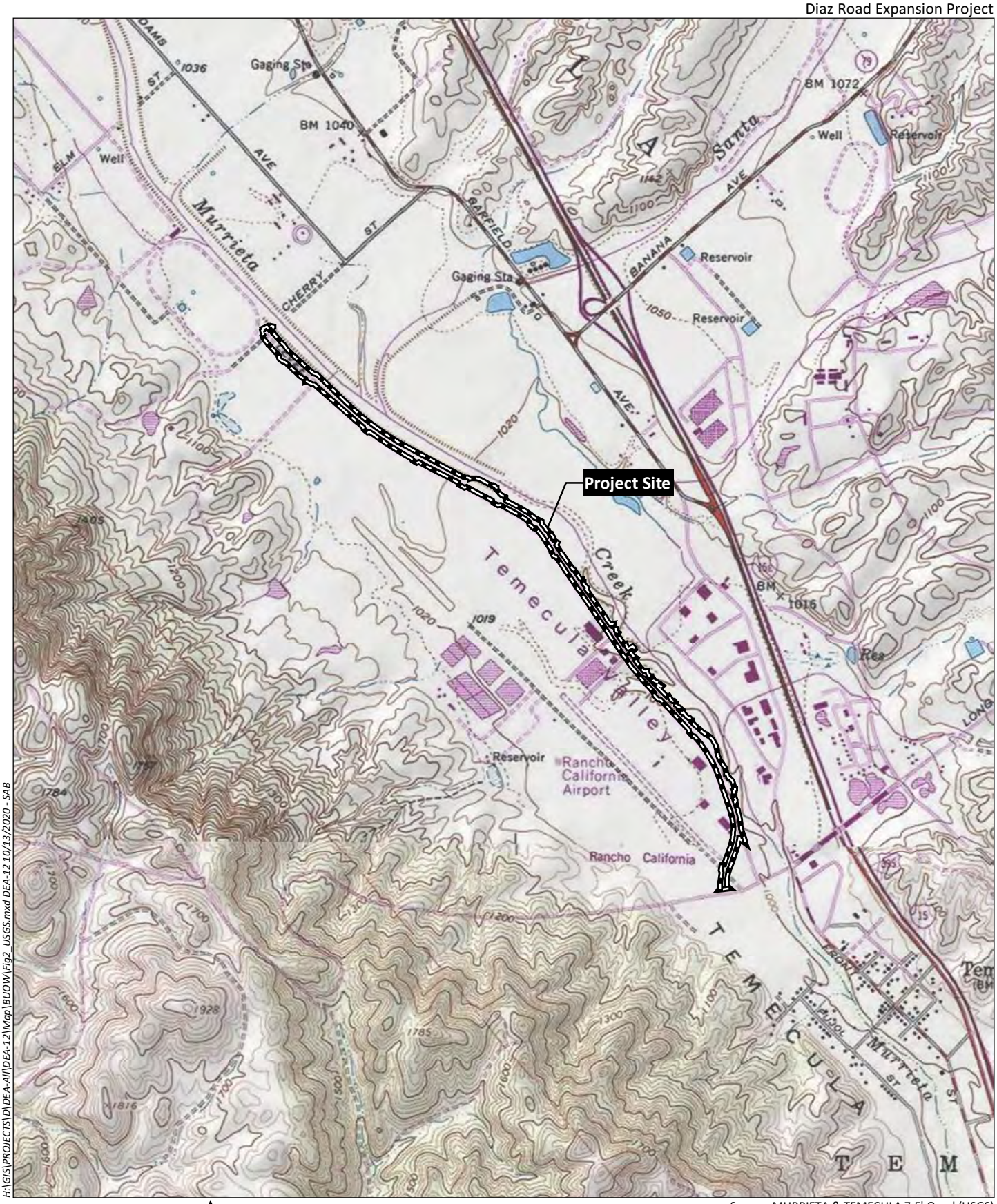
Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1



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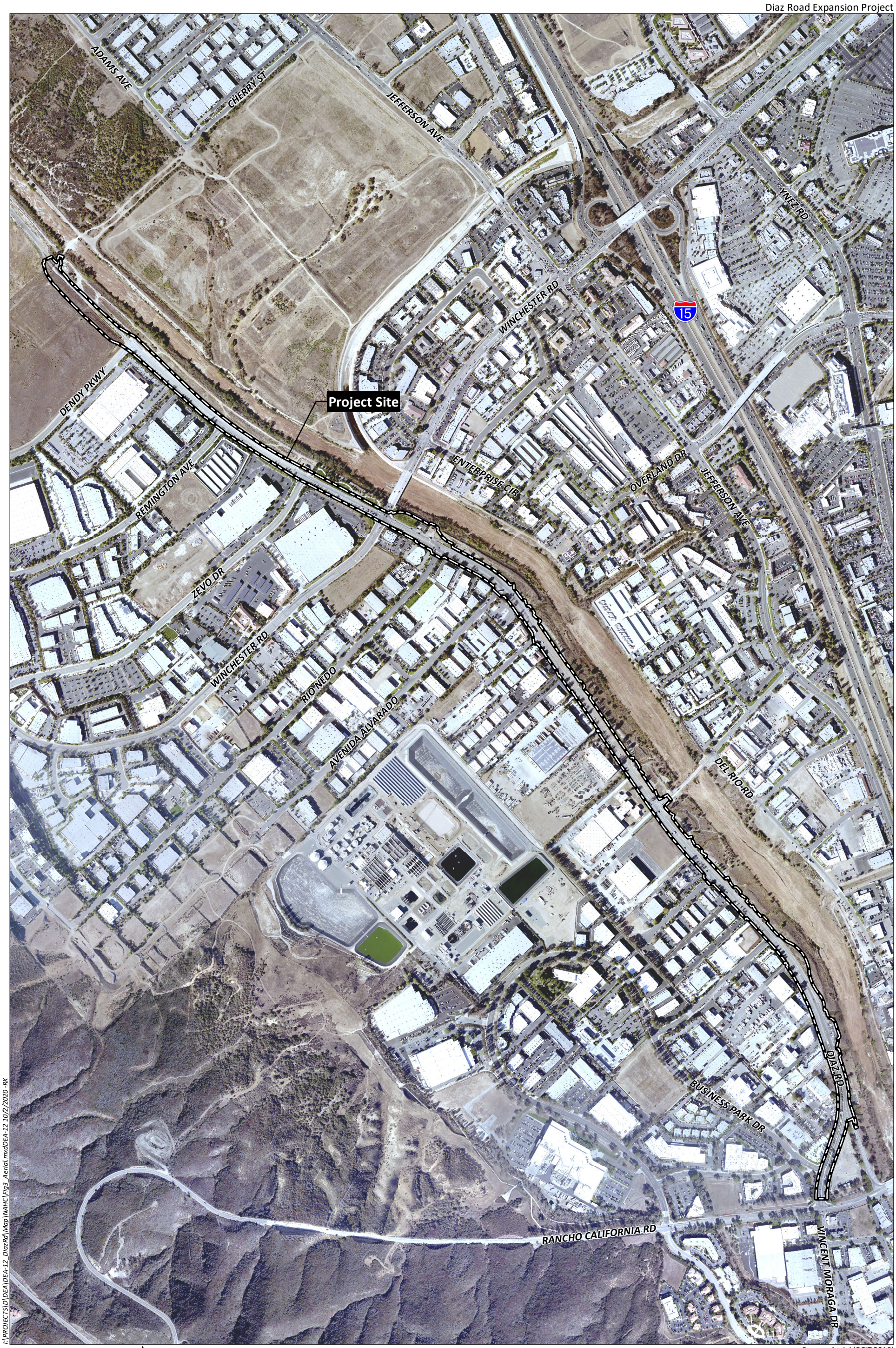
Source: MURRIETA & TEMECULA 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



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Source: Aerial (RCIT 2016)

HELIX Environmental Planning

Aerial Photograph

Figure 3

for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The City provided formal notification for the proposed project under AB 52 on June 30, 2020 to 17 tribal contacts. Responses were received from six tribes; Pechanga and Rincon both formally requested to begin consultation. The Juaneño Band of Mission Indians and the Soboba Band of Luiseño Indians both deferred to Pechanga. The Quechan Indian Tribe and the Agua Caliente Band of Cahuilla Indians deferred to local tribes without naming a specific tribe. During AB 52 consultation, the draft of this cultural resources study was provided to Pechanga and Rincon for review and comment, as was the Initial Study/Mitigated Negative Declaration (IS/MND). Rincon indicated they agreed with the mitigation measures and had no further comments. Pechanga provided minor comments/ revisions to the detailed mitigation measures in the IS/MND; their comments have been incorporated.

1.2 Environmental Factors Potentially Affected

The environmental factors checked below (■) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant With Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics		Agricultural and Forestry Resources		Air Quality
■	Biological Resources	■	Cultural Resources		Energy
■	Geology/Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
	Noise		Population/Housing		Public Services
	Recreation	■	Transportation	■	Tribal Cultural Resources
	Utilities/Service Systems		Wildfire	■	Mandatory Findings of Significance

1.3 Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect I) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Avlin R. Odviar, Project Manager	
Printed name	For

2.0 Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in item 5 below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063©(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:

    a. The significance criteria or threshold, if any, used to evaluate each question; and

    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

3.0 Environmental Checklist

I. Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed for the benefit of the general public. Temecula's natural setting offers a variety of vistas and viewsheds. The City of Temecula General Plan Community Design Element designates the southern, eastern, and western rolling hills surrounding the City, as well as Murrieta and Temecula Creeks, as significant natural features, and indicates that public views of these features should be protected and enhanced. However, no scenic vistas are listed in the city's General Plan. Views of the hillsides are available to vehicular passengers and pedestrians traveling along Diaz Road within the project alignment. The General Plan explains that all public or private development projects are subject to City review to ensure that they will not obstruct public views of scenic resources, and projects may be subject to redesign or height limitations if it is determined that development would block public views.

The project would encroach upon portions of the adjacent Murrieta Creek Regional Use Trail northeast of Diaz Road and project development would introduce paved surfaces and related roadway improvements to some previously undeveloped land. The presence of construction equipment would be temporary and would not substantially impact the viewshed. The project, once constructed, would be consistent with the surrounding development and views to Murrieta Creek would not be significantly obstructed. Therefore, impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The project is not located within a designated scenic highway corridor. The project is located near Interstate 15 (I-15), which is designated by the California Department of Transportation (Caltrans) as an Eligible State Scenic Highway; however, it is not officially designated as a State Scenic Highway (Caltrans 2015). Due to the distance and topography, the project would not be visible to those traveling on I-15. In addition, the proposed project would not involve damage to scenic resources, including trees, rock outcroppings, and historic buildings as none occur within or adjacent to the project site. Therefore, the proposed project would not damage scenic resources within a state scenic highway.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The proposed project is located in a primarily urbanized area. The project would result in a temporary change of appearance along the project alignment during construction. Construction equipment, fencing/signage, vehicles, and soil stockpiles in the construction work and staging areas would be visible predominately to those traveling along Diaz Road. These impacts would be temporary.

Permanent changes to the existing visual character of the alignment would occur from the project's addition of a wider roadway, lighting poles, street signals, storm drains, and sidewalks. These components would change the area's visual character by adding development to non-developed portions of the project alignment consistent with the existing roadway and urbanized nature of the project site and adjacent commercial uses. These roadway improvement changes, however, would not drastically alter the use or general character of the existing roadway corridor, which is mostly developed, and would not substantially degrade the existing visual character of quality of the area. Landscaping and planting improvements would include decorative rock, boulders and hardscape improvements for the center median, easterly parkway, and westerly parkway where existing landscape improvements do not exist. In addition, the improved roadway would be of similar character to other roadways in the area. Therefore, impacts after construction would be less than significant.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Less than Significant Impact. Project construction lighting would be directed to the work site to avoid unnecessary spill and would provide a level of lighting that is appropriate for work and safety for workers. Construction lighting would be shielded and/or directed away from sensitive receptors to minimize lighting impacts during construction. The proposed roadway expansion includes the addition of new streetlights along Diaz Road, which could generate additional light and glare in the area. However, the lighting would be directed downward to confine potential glare. Project design would conform to the City's Municipal Code and County of Riverside Palomar Light Pollution Ordinance No. 655. Therefore, impacts from lighting and glare would be less than significant.

II. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526 (g)), or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g))?	☐	☐	☐	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site is located in an urbanized, developed area. According to the California Department of Conservation's California Important Farmland Finder, the project site is classified as "Urban and Built-Up Land," which does not contain agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2016). As a result, the project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. As discussed above in Item II.a, the project site is in a developed area where there are no farmlands or agricultural resources. Land uses in the vicinity of the project site consist of industrial and

commercial developments to the west and south, Murrieta Creek and public walking/biking pathways to the northeast, and mostly undeveloped land to the north. The project site is not eligible for designation under a Williamson Act contract. The areas surrounding the project site are developed with urban or suburban uses and do not support existing Williamson Act contracts. The land does not include existing Williamson Act contracts (California Department of Conservation 2013). As a result, no impacts would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section l 2220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. As discussed above in item II.b, the project site is in a developed area where there is no farmland. The project site and surrounding area does not support agricultural activities. As such, the proposed project would not involve changes that would result in the conversion of farmland to non-agricultural use. Therefore, there would be no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As discussed above in item II.c, the project site is located in a developed area where there are no farmlands or forest resources. Additionally, the project would largely occur on existing paved or graded surfaces. The project site and surrounding area are classified as “Urban and Built-Up Land” and are not zoned as forest land, timberlands, or timberland zoned Timberland Production (California Department of Conservation 2016). As such, the proposed project would not result in a loss of forest land or conversion of forest land to non-forest uses. Therefore, there would be no impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Implementation of the proposed project would have no impact on agriculture and/or forestry resources. The project site is within developed areas where there are no farmlands or forest resources. The project site and surrounding areas are classified as “Urban and Built-Up Land,” which do not contain agricultural uses or areas designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2016). Furthermore, there are no Williamson Act contracts or forest lands in the project vicinity (California Department of Conservation 2013). There would be no changes in the existing environment, which, due to their location and nature, would result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use with implementation of the proposed project. Therefore, there would be no impact.

III. Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?	☐	☐	■	☐

The following analysis is based on the Air Quality and Greenhouse Gas Emissions Letter Report prepared for the proposed project by HELIX Environmental Planning, Inc. (HELIX; 2020a; Appendix A).

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The project is located within the South Coast Air Basin (SCAB), which includes Los Angeles, San Bernardino, Riverside, and Orange counties. Air quality in the SCAB is regulated by the South Coast Air Quality Management District (SCAQMD). As a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), County transportation commissions, and local governments, as well as cooperates actively with all federal and state government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs). An AQMP establishes a program of rules and regulations directed at attaining the National Ambient Air Quality Standards and California Ambient Air Quality Standards. The regional plan applicable to the proposed project is the SCAQMD's AQMP. The latest AQMP was adopted in March of 2017 (SCAQMD 2017).

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, economy, community development, and environment. Regarding air quality planning, SCAG has prepared the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a long-range transportation plan that uses growth forecasts to project trends over a 20-year period to identify regional transportation

strategies to address mobility needs. These growth forecasts form the basis for the land use and transportation control portions of the AQMP. These documents are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. Both the RTP/SCS and AQMP are based, in part, on projections originating with County and City General Plans.

The two principal criteria for conformance to the AQMP are (1) whether a project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards; and (2) whether a project would exceed the assumptions in the AQMP (SCAQMD 1993).

With respect to the first criterion, the analyses described under response III.b, below, demonstrate that the project would not generate short-term or long-term emissions that could potentially cause an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards.

With respect to the second criterion, the proposed project is improving and widening a roadway and would not result in population or employment increases and, therefore, would not exceed the growth projections assumptions in the AQMP. In addition, the proposed project would be consistent with the City General Plan Circulation Element roadway design guidelines. The project would support the City General Plan Policy 3.3 by providing Class II bicycle lanes along both sides of Diaz Road, and Policy 3.5 by providing space for future bus stops along Diaz Road.

Because the project is consistent with the City's General Plan and the growth assumptions used in developing the AQMP, pursuant to SCAQMD guidelines, the proposed project is considered consistent with the region's AQMP. As such, proposed project-related emissions are accounted for in the AQMP, which is crafted to bring the basin into attainment for all criteria pollutants. Accordingly, the proposed project would be consistent with the emissions projections in the AQMP, thus resulting in a less than significant impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. In accordance with CEQA Guidelines Section 15064(h)(3), the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. If a project is not consistent with the AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants, that project can be considered cumulatively considerable. Additionally, if the mass regional emissions calculated for a project exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards, that project can be considered cumulatively considerable. The SCAQMD thresholds of significance for construction and operational air emissions are shown in Table 1, *SCAQMD Criteria Air Pollutant Emissions Thresholds*.

Table 1
SCAQMD CRITERIA AIR POLLUTANT EMISSIONS THRESHOLDS

Criteria Pollutant	Emission Threshold (pounds per day) Construction	Emission Threshold (pounds per day) Operation
Volatile Organic Compounds (VOC)	75	55
Oxides of Nitrogen (NO_X)	100	55
Carbon Monoxide (CO)	550	550
Particulate Matter (PM_{10})	150	150
Particulate Matter ($PM_{2.5}$)	550	55
Oxides of Sulfur (SO_X)	150	150
Lead	3	3

Source: SCAQMD 2019

Construction Impacts

The project's construction emissions were estimated using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Roadway Construction Emissions Model (RCEM), version 9.0 (SMAQMD 2018). This model utilizes 2017 EMFAC factors and OFFROAD factors to calculate vehicle exhaust and fugitive dust emissions. Fugitive dust emissions are calculated estimating the maximum area (acres) of land disturbed daily. Roadway widening construction would disturb a total of 12 acres of currently undeveloped land over an approximately 16-month period (352 working days).

Project-specific input was based on general project information, assumptions provided by the project civil engineer, and default model settings to estimate reasonably conservative conditions. Construction would commence as early as Fall 2022 and require approximately 16 months to complete. Construction activities would include site preparation, demolition of existing roadway, grading, installation of drainage and utilities, retaining walls, and paving. During construction, material such as vegetation, soil, old asphalt and concrete may be exported from the site and material such as soil, aggregate, asphalt and concrete may be imported to the site.

The emissions generated from construction activities would include dust (particulate matter less than 10 microns [PM_{10}] and particulate matter less than 2.5 microns [$PM_{2.5}$]), primarily from fugitive sources such as soil disturbance and vehicle travel over unpaved surfaces, and combustion emissions of air pollutants (reactive organic gas [ROG], nitrogen oxides [NO_X], PM_{10}, $PM_{2.5}$, carbon monoxide (CO), and sulfur oxides [SO_X]), primarily from operation of heavy-duty off-road equipment. Emission estimates assume the use of water trucks, yielding a 50 percent control of fugitive dust from watering and associated dust control measures.

The results of the calculations for project construction are shown in Table 2, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SCAQMD thresholds. As shown in the table, construction emissions would not exceed SCAQMD thresholds and impacts would be less than significant.

Table 2
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Phase	VOC*	NO_X*	CO*	SO_2*	PM_{10}*	$PM_{2.5}$*
Site Preparation/Land Clearing	1.4	18.1	12.2	<0.1	10.8	2.7
Grading/Excavation	6.0	68.3	49.0	0.1	12.9	4.6
Underground Drainage/Utilities	3.5	36.9	31.7	<0.1	11.7	3.6
Paving	1.6	16.3	19.1	<0.1	0.8	0.7
Maximum Daily Emissions	**6.0**	**68.3**	**49.0**	**0.1**	**12.9**	**4.6**
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: HELIX 2020a
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SCAQMD = South Coast Air Quality Management District
* Pollutant Emissions (pounds/day)

Operational Impacts

The project proposes widening and improving an existing roadway and would only generate emissions during construction in the near term. Because the project would result in additional lanes on Diaz Road and, therefore, increase the total available miles of roadways in the region, the TIA concluded that the project would result in a regional increase in vehicles miles traveled (VMT) of 7,277 miles in the year 2040 (DEA 2020b). The calculated maximum daily emissions as a result of the increase in VMT would be less than 0.1 pounds per day for all pollutants and would not exceed any of the SCAQMD emission thresholds. Therefore, the project's operational criteria pollutant and ozone precursor emissions would not result in a cumulatively considerable net increase of any criteria pollutant. Impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

Criteria Pollutants

Impacts to sensitive receptors would have the potential to occur as a result of criteria pollutant and toxic air contaminant (TAC) emissions during construction. The localized effects from the on-site portion of daily construction emissions were evaluated at sensitive receptor locations potentially impacted by the project according to the SCAQMD's Localized Significance Thresholds (LST) method (SCAQMD 2009). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard; they are developed based on the ambient concentrations of that pollutant for each Source Receptor Area (SRA). The LST methodology is recommended to be limited to projects of five acres or less and to avoid the need for complex dispersion modeling. For projects that exceed five acres, such as the proposed project, the five-acre LST look-up values can be used as a screening tool to determine which pollutants require detailed analysis. This approach is conservative as it assumes that all on-site emissions would occur within a five-acre area and over-predicts potential localized impacts (i.e., more pollutant emissions occurring within a smaller area and within closer proximity to potential sensitive receptors). If a project exceeds the LST look up values, then the SCAQMD recommends that project-specific localized air quality modeling be performed.

The project is in SRA 26, Temecula Valley, and sensitive receptors are located within 500 meters (1,640 feet) south of the 2.2-mile long project site. Therefore, the LSTs being applied to the project are based on SRA 26, receptors located within 500 meters, and a disturbed area not to exceed 5 acres to provide a conservative analysis as noted above. Consistent with the LST guidelines, when quantifying mass emissions for localized analysis, only emissions that occur on-site are considered. Emissions related to off-site delivery/haul truck activity and construction worker trips are not considered in the evaluation of construction-related localized impacts, as these do not contribute to emissions generated on a project site. As shown in Table 3, *Maximum Localized Daily Construction Emissions*, localized emissions for all criteria pollutants would remain below their respective SCAQMD LSTs.

Table 3
MAXIMUM LOCALIZED DAILY CONSTRUCTION EMISSIONS

Phase	NO_X*	CO*	PM_{10}*	$PM_{2.5}$*
Site Preparation/Land Clearing	1.3	10.5	10.6	2.6
Grading/Excavation	5.8	45.7	12.7	4.5
Underground Drainage/Utilities	3.3	29.2	11.5	3.5
Paving	1.5	17.4	0.7	0.7
Maximum Daily Emissions	**5.8**	**45.7**	**13.7**	**4.5**
SCAQMD LSTs	*1,072*	*29,265*	*207*	*105*
Significant Impact?	***No***	***No***	***No***	***No***

Source: HELIX 2020a
NO_X = nitrogen oxides; CO = carbon monoxide; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SCAQMD = South Coast Air Quality Management District; LST = Localized Significance Threshold
* Pollutant Emissions (pounds/day)

Toxic Air Contaminants

The greatest potential for TAC emissions during construction would be related to diesel particulate matter associated with heavy equipment operations during earth-moving activities. SCAQMD does not consider diesel-related cancer risks from construction equipment to be an issue due to the short-term nature of construction activities. Construction activities associated with the proposed project would be sporadic, transitory, and short term in nature, lasting approximately 16 months. The closest sensitive receptors to the project site are multi- and single-family homes approximately 1,600 feet south of Rancho California Road (the southernmost extent of the proposed roadway improvements). The assessment of cancer risk is typically based on a 30-year exposure period. Because exposure to diesel exhaust would be well below the 30-year exposure period, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons. As such, project-emission impacts during construction would be less than significant.

As relates to long-term operations, the expanded roadway would not notably increase the number or frequency of truck trips or associated emission in the immediate area compared to existing conditions, as truck activity would not be generated by the project. Rather, some trucks may utilize the expanded right of way along Diaz Road for localized trips that would otherwise have occurred on other nearby roadways. While the truck activity in the immediate area of the project site could be incrementally increased due to the expanded traffic capacity, the increase would not result in a notable increase in the concentration of TACs that could adversely affect sensitive population. As such, operational impacts would also be less than significant.

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?

Less than Significant Impact. The project could produce odors during proposed construction activities resulting from heavy diesel equipment exhaust and application of asphalt; however, standard construction practices would minimize the odor emissions and their associated impacts. The increase of construction odors would be minimal, as vehicle exhaust is already prevalent in the area due to its proximity to I-15. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. Therefore, odor impacts from construction of the project would be less than significant due to the duration of exposure.

The project proposes widening and improvement of an existing roadway. Odors generated by traffic on the improved portion of Diaz Road would be similar to existing odors from traffic on streets and highways in the area. Therefore, long-term operation of the project would not result in a change to existing odors in the project vicinity, and there would be no impact.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	■	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	■	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Conflict with any applicable policies protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	■	☐	☐

The following analysis is based on the General Biological Resources Assessment (GBRA) prepared for the proposed project by HELIX in July 2021 (Appendix B).

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated. The discussion presented under the subheadings below addresses the potential impacts to the various sensitive habitats or species in the project area.

Rare Plant Species

According to the database search results presented in the project GBRA (Appendix B of this Draft IS/MND), total of 17 of the 29 rare plant species recorded within the vicinity of the study area were not considered to have a potential to occur based on geographic range, elevation range, and/or lack of suitable habitat (see Appendix E of the GBRA). Of the remaining 12 species, nine of the species with a potential to occur are either fully or conditionally covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The species include Coulter's goldfields, little mousetail, long-spined spineflower, Orcutt's brodiaea, Parry's spineflower, prostrate vernal pool navarretia, San Diego ambrosia, spreading navarretia, and vernal barley. Since the study area is not located within a Narrow Endemic Plant Species Survey Area (NEPSSA) or Criteria Area Species Survey Area (CASSA), focused surveys were not warranted, and project impacts (if present) would be covered.

One Riparian/Riverine plant species (smooth tarplant) was observed within Drainage A2.1 in the northern portion of the study area. Smooth tarplant is a conditionally covered species under the MSHCP. Surveys for this species are required if a project occurs within a CASSA 1, 2,3, or 4. Since the study area is not located within a CASSA, impacts to this species would be covered under the MSHCP.

Two species (alkali marsh aster and San Bernardino aster) are considered to have a low potential to occur in the study area and are not covered under the MSHCP. Alkali marsh aster is a California Rare Plant Rank (CRPR) 2B.2 species and San Bernardino aster is a CRPR 1B.2 species. Although potentially suitable habitat is present, these two species are not expected to occur since records within the vicinity of the study area are historical records from the early 1900s. There are no recent observations of alkali marsh aster in Riverside County. The most recent observation of San Bernardino aster in Riverside County was 2015 in the San Jacinto Mountains, approximately 29 miles to the northeast of the project site.

Sensitive Animal Species

Of the 29 sensitive animal species recorded within the vicinity of the study area, 15 species were considered to have no potential to occur on the study area due to lack of suitable habitat (see Appendix F). Therefore, no significant impacts to these 15 sensitive wildlife species are anticipated by the project. Fourteen of the remaining 29 species (in addition to the Southwestern Willow Flycatcher [SWFL]) were determined to have a potential to occur on the study area. Potential project impacts to these species are discussed in detail below.

Low Potential Species

Four species have a low potential to occur based on the presence of low quality and isolated habitat, limited acreage of habitat, surrounding development, and lack of recent observations within the immediate vicinity of the study area. These species include coast range newt, San Diego black-tailed jackrabbit, Swainson's hawk (foraging potential only), and western mastiff bat (foraging potential only). The project would have a low potential to affect these species.

Coast range newt, San Diego black-tailed jackrabbit, and Swainson's hawk are fully covered species under the MSHCP. With payment of the MSHCP Local Development Mitigation Fee (LDMF), no additional mitigation is required for potential impacts to these species.

Western mastiff bat is not an MSHCP covered species and does not carry a federal or state listing as threatened or endangered. This species is listed as a Species of Special Concern (SSC) by CDFW. The study area does not support suitable roosting habitat for this species. There is some potential for foraging habitat on the study area, although the habitat is considered low quality based on the presence of surrounding development. The nearest observation recorded on the California Natural Diversity Database (CNDDB) was made in 2001, approximately 0.25 mile to the southeast of the study area. Based on the presence of surrounding development, lack of recent observations, and absence of suitable roosting habitat, no significant impacts to western mastiff bat are anticipated by the project.

Moderate Potential Species

Six species were determined to have a moderate potential to occur based on the presence of suitable habitat and recent observations within the vicinity of the study area. These include red diamond rattlesnake, Southern California legless lizard, southwestern pond turtle, Stevens Kangaroo Rat (SKR), two-striped gartersnake, and western spadefoot.

Red diamond rattlesnake, southwestern pond turtle, and western spadefoot are fully covered species under the MSHCP. With payment of the MSHCP LDMF, no additional mitigation is required for potential impacts to these species.

SKR is a fully covered species under the MSHCP. In addition, the study area is located within the SKR HCP and is required to pay an SKR mitigation fee for incidental take authorization under the SKR HCP.

Southern California legless lizard and two-striped gartersnake are SSC and are not covered species under the MSHCP. Although the study area supports potentially suitable habitat for these species, the habitat is considered low quality due to its small extent and heavily disturbed surrounding areas. The project would impact less than 0.5 acre of potentially suitable habitat, which overlaps with CDFW jurisdictional areas. Since the study area supports low quality habitat, the study area is not expected

to support large populations of these species. If present, a loss of a few individuals would not be expected to reduce regional population numbers. Impacts to these species would be considered less than significant, and no mitigation measures are considered required.

High Potential Species

Coastal whiptail and white-tailed kite are fully covered species under the MSHCP. With payment of the MSHCP Local Development Mitigation Fee (LDMF), no additional mitigation is required for potential impacts to these species. Potential direct and/or indirect impacts to white-tailed kite during the nesting season (January 15 through August 31) would be avoided by implementing Measure BIO-3.

Presumed Absent

Burrowing Owl (BUOW) and SWFL are conditionally covered species under the MSHCP. Focused surveys were conducted in 2020. Survey results were negative, and these species are presumed absent from the study area (Appendices G and I of the GBRA). Therefore, no direct or indirect impacts are anticipated to these species.

Since the study area supports suitable habitat for BUOW, focused surveys were conducted in accordance with the County's survey protocol (2006). No BUOWs or BUOW sign were observed on the study area during the focused survey; therefore, BUOW is currently presumed absent from the study area. However, consistent with the requirements of the MSCHP, a measure requiring a pre-construction survey and avoidance of active nests and/or relocation of BUOW (if BUOWs are observed) is included as Mitigation Measure BIO-1 below. With the implementation of Measure BIO-1, the project would not result in significant impacts to BUOW.

Presumed Present

Least Bell's Vireo (LBVI) is a federally and state endangered species and an MSHCP conditionally covered species. Since the study area supports suitable habitat, focused surveys were conducted during the 2020 season in accordance with USFWS' survey protocol (2001). Four males and one pair were observed within the study area (see Appendix H of the GBRA).

The project would not permanently or temporarily impact suitable LBVI habitat (Fremont cottonwood forest and woodland, arroyo willow thicket). However, LBVI was observed within the study area. Since project construction could have indirect impacts to LBVI that occupy habitat adjacent to Diaz Road, an avoidance/minimization measure is provided as Measure BIO-2 below, to avoid potential indirect impacts to LBVI during construction. The measure requires construction activities to be conducted outside of the LBVI nesting season (September 1 through March 14), as feasible. If construction activities are proposed within the nesting season (March 15 through August 31), weekly pre-construction surveys must be conducted ahead of project construction and a 300-foot avoidance buffer from occupied habitat must be established if LBVI are observed. If construction is proposed within the 300-foot buffer, a biological monitor would be required at all times and would have the authority to stop work. Additionally, daily noise monitoring would be required. Noise levels at the edge of occupied LBVI habitat may not exceed 60 A-weighted decibels (dBA), or an hourly average increase of 3 dBA if existing ambient noise levels already exceed 60 dBA. Please see Measure BIO-2 for more details. With the implementation of Measure BIO-2, the project would not result in significant impacts to LBVI.

Mitigation Measures

Implementation of mitigation measures BIO-1 through BIO-3 would reduce potentially significant impacts to sensitive species and habitats to a less-than-significant level:

BIO-1 **Burrowing Owl**: In compliance with the MSHCP, a pre-construction survey shall be conducted on the study area within 30 days prior to ground disturbance to determine presence of burrowing owls. If the pre-construction survey is negative and burrowing owl is confirmed absent, then ground-disturbing activities (i.e., earthwork, clearing, and grubbing) shall be allowed to commence and no further mitigation would be required.

If BUOW is observed during the pre-construction survey, active burrows shall be avoided by the project in accordance with the California Department of Fish and Wildlife's (CDFW) *Staff Report on Burrowing Owl Mitigation* (2012) or CDFW's most recent guidelines. The Project Proponent shall immediately inform the Western Riverside County Regional Conservation Authority (RCA) of BUOW observations. A BUOW Protection and Relocation Plan (plan) shall be prepared by a qualified biologist, which must be sent for approval by RCA prior to initiating ground disturbance. The RCA will coordinate directly with CDFW as needed to ensure that the plan is consistent with the MSHCP and CDFW guidelines. The plan shall detail avoidance measures that shall be implemented during construction and passive or active relocation methodology. Relocation shall only occur outside of the nesting season (September 1 through January 31). The RCA may require translocation sites to be created within the MSHCP Conservation Area for the establishment of new colonies. If required, the translocation sites must take into consideration unoccupied habitat areas, presence of burrowing mammals, existing colonies, and effects to other MSHCP Covered Species in order to successfully create suitable habitat for BUOW. The translocation sites must be developed in consultation with RCA. If required, translocation sites would also be described in the agency-approved plan.

BIO-2 **Least Bell's Vireo:** Due to presence of LBVI in the vicinity of the study area, the following avoidance and minimization measures shall be implemented to avoid potential impacts:

(1) To the extent feasible, construction activities (i.e., earthwork, clearing, and grubbing) shall occur outside of the nesting season for LBVI (September 1 through March 14).

(2) If construction activities are proposed within the LBVI nesting season (March 15 through August 31), the following measures (a. through g.) shall be implemented to avoid potential indirect impacts.

(a) At the start of each new stretch of construction, weekly limits will be identified by the contractor, and a qualified biologist will conduct weekly pre-construction surveys to determine the presence of LBVI nest-building activities, egg incubation activities, or brood-rearing activities within 300 feet of anticipated construction activities for the coming week. Surveys will be conducted more frequently if construction could progress beyond the limits of the weekly surveyed area.

(b) If nesting LBVI is observed during the weekly pre-construction surveys, a qualified biological monitor shall clearly delineate a 300-foot avoidance buffer around occupied habitat. The 300-foot avoidance buffer shall be clearly marked with flags and/or fencing prior to commencement of construction. No construction activities

shall occur within the 300-foot buffer during the nesting season without the presence of a biological monitor.

(c) If construction activities (e.g., ground disturbance and canopy trimming) must occur within 300 feet of occupied habitat, the following measures shall be implemented:

    (i) A biological monitor shall be present to perform daily surveys for LBVI and monitor construction activities. The biological monitor shall have the authority to stop work and notify the construction supervisor if the biologist feels construction activities could alter the birds' normal behavior. The activities shall cease until additional minimization measures have been determined through coordination with CDFW and/or USFWS.

    (ii) A qualified acoustician shall also be retained to determine ambient noise levels and construction-related noise levels at the edge of occupied habitat. Noise levels at the edge of the occupied habitat shall not exceed an hourly average of 60 dBA, or an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA. If project-related noise levels exceed the threshold described above, construction activities shall cease until additional minimization measures, such as visual and auditory barriers (e.g., sound wall), are taken to reduce project-related noise levels to below an hourly average of 60 dBA, or below an hourly average increase of 3 dBA if existing ambient noise levels exceed 60 dBA. If additional measures do not decrease project-related noise levels below the thresholds described above, construction activities shall cease until CDFW and/or USFWS are contacted to discuss alternative methods.

(d) All project personnel shall attend a Workers Environmental Awareness Program training presented by a qualified biologist prior to construction activities. The training program will inform project personnel about the life history of LBVI and all avoidance and minimization measures.

(e) The construction contractor shall only allow construction activities to occur during daylight hours.

(f) The construction contractor shall require functional mufflers on all construction equipment (stationary or mobile) used within or immediately adjacent to any 300-foot avoidance buffers to reduce construction equipment noise. Stationary equipment shall be situated so that noise generated from the equipment is not directed towards any occupied habitat for the LBVI.

(g) The construction contractor shall place staging areas as far as possible from any suitable occupied habitat for the LBVI.

(h) The biological monitor shall prepare written documentation of all monitoring activities at the completion of construction activities, which shall be submitted to CDFW and/or USFWS.

BIO-3 **Nesting Birds:** To the extent possible, construction activities (i.e., earthwork, clearing, and grubbing) shall occur outside of the general bird nesting season for migratory birds, which is March 15 through August 31 for songbirds and January 15 to August 31 for raptors.

If construction activities (i.e., earthwork, clearing, and grubbing) must occur during the general bird nesting season for migratory birds (March 15 to August 31) and raptors (January 15 to August 31), a qualified biologist shall be retained to perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the MBTA and CFG Code. The pre-construction survey shall be performed no more than seven days prior to the commencement of construction activities. The results of the pre-construction survey shall be documented by a qualified biologist. If construction is inactive for more than seven days, an additional survey shall be conducted.

If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no impacts within 300 feet (500 feet for raptors) of the active nest shall occur until the young have fledged the nest, and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The biological monitor may modify the buffer as applicable for the specific bird species and type of work, or propose other recommendations to avoid indirect impacts to nesting birds.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation Incorporated.

California Department of Fish and Wildlife Sensitive Vegetation Communities/Habitats

The majority of permanent impacts are proposed within existing developed areas (25.28 acres; 79 percent; see Table 4, *Impacts to Vegetation and Land Uses*, below, and Figures 8a-h, *Impacts to Vegetation*, in the project GBRA). The majority of temporary impacts are proposed within areas that support upland mustards (0.16 acre; 80 percent). The project would entirely avoid permanent and temporary impacts within CDFW sensitive vegetation communities, including Fremont cottonwood forest and woodland and arroyo willow thicket. Therefore, no mitigation is warranted.

Table 4
IMPACTS TO VEGETATION AND LAND USES

Vegetation Community/Land Use	Temporary Impacts (acres)[1]	Permanent Impacts (acres)[1]
Arroyo Willow Thicket[2]	0.00	0.00
Fremont Cottonwood Forest and Woodland[2]	0.00	0.00
Riverwash	0.00	0.00
Developed	0.01	25.28
Disturbed	0.02	2.51
Eucalyptus Grove	0.01	0.49
Upland Mustards	0.16	3.69
TOTAL	**0.20**	**31.97**

[1] Acreage is rounded to the nearest hundredth.
[2] Sensitive habitats pursuant to CDFW's Natural Communities List (2020).

California Department of Fish and Wildlife Riparian Habitat and Streambed

The Jurisdictional Delineation (JD) survey area supports approximately 1.495 acres of jurisdictional streambeds pursuant to Section 1602 of the CFG Code as regulated by CDFW. The project would result in permanent impacts to approximately 0.265 acre and temporary impacts to 0.076 acre of CDFW jurisdiction on the study area (see Table 5, *Impacts to CDFW Jurisdiction*, below, and Figures 9a-f, *Impacts to Jurisdictional Features and MSHCP Riparian/Riverine Areas*, in the project GBRA). CDFW jurisdiction within Murrieta Creek would be entirely avoided.

Table 5
IMPACTS TO CDFW JURISDICTION

Drainage	Permanent Impacts (acres)[1]	Temporary Impacts (acres)[1]
Murrieta Creek	0.000	0.000
A1	0.000	0.000
A2	0.000	0.000
A2.1	0.064	0.026
B	0.000	0.000
C	0.027	0.005
D	0.027	0.006
E	0.036	0.009
F	0.000	0.000
G	0.021	0.006
H	0.024	0.007
I	0.020	0.005
I[1]	0.010	0.001
J	0.016	0.006
K	0.020	0.005
TOTAL	**0.265**	**0.076**

[1] Acreage is rounded to the nearest thousandth

Impacts to CDFW jurisdiction will require a Section 1602 Stream Alteration Agreement from the CDFW, as described in Measure BIO-4 included in Section 6.0 below. Compensatory mitigation for permanent impacts to CDFW jurisdiction would be required as part of subsequent Section 1602

permitting requirements. Permanent impacts to CDFW jurisdiction shall be mitigated through on-site or off-site enhancement, restoration, and/or creation of jurisdictional streambed at a ratio of no less than 2:1 as detailed in Measure BIO-4. With the implementation of Measure BIO-4, the project would not result in significant impacts to jurisdictional resources.

Mitigation Measures

Implementation of mitigation measure BIO-4 would reduce potentially significant impacts to riparian habitat or other sensitive natural community to a less-than-significant level:

BIO-4 **Jurisdictional Resources**: Prior to issuance of a grading permit for impacts to jurisdictional resources, the City shall obtain regulatory permits from USACE, RWQCB, and CDFW (collectively, the "Resource Agencies"). Compensatory mitigation for permanent impacts to jurisdiction shall be required as part of subsequent permitting requirements. Permanent impacts to jurisdictional resources shall be mitigated through on-site or off-site enhancement, restoration, and/or creation of jurisdictional streambed at a mitigation-to-impact ratio of no less than 2:1. The following minimization measures will be implemented during construction:

- Use of standard BMPs to minimize the impacts during construction.
- Construction-related equipment will be stored in developed areas, outside of drainages.
- Source control and treatment control BMPs will be implemented to minimize the potential contaminants that are generated during and after construction. Water quality BMPs will be implemented throughout the project to capture and treat potential contaminants.
- To avoid attracting predators during construction, the project shall be kept clean of debris to the extent possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.
- Employees shall strictly limit their activities, vehicles, equipment, and construction material to the proposed project footprint, staging areas, and designated routes of travel.
- Exclusion fencing should be maintained until the completion of construction activities.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation Incorporated. The Jurisdictional Delineation (JD) survey area supports approximately 0.096 acre of USACE/RWQCB non-wetland waters of the U.S. and 0.093 acre of wetlands pursuant to Sections 404/401 of the CWA as regulated by USACE and RWQCB, respectively. The project would result in permanent impacts to approximately 0.032-acre non-wetland waters of the U.S. and 0.018 acre of wetlands (see Table 6, *Impacts to USACE/RWQCB Jurisdiction*, below, and Figure 9 in the GBRA). The project would also require temporary impacts to approximately 0.005 acre of non-wetland waters of the U.S. and 0.005 acre of wetlands.

Table 6
IMPACTS TO USACE/RWQCB JURISDICTION

Drainage	Permanent Impacts Non-Wetland (acres)[1]	Permanent Impacts Wetland (acres)[1]	Temporary Impacts Non-Wetland (acres)[1]	Temporary Impacts Wetland (acres)[1]
A1	0.000	0.000	0.000	0.000
A2	<0.000[2]	0.000	0.000	0.000
A2.1	0.001	0.000	<0.000[3]	0.000
B	0.000	0.000	0.000	0.000
C	0.005	0.004	0.000	0.001
D	0.003	0.007	0.000	0.002
E	0.012	0.000	0.003	0.000
F	0.000	0.000	0.000	0.000
G	0.003	0.000	<0.000[4]	0.000
H	0.003	0.000	<0.000[5]	0.000
I	0.001	0.004	0.000	0.001
I1	0.002	0.000	<0.000[6]	0.000
J	0.002	0.000	<0.000[7]	0.000
K	0.000	0.003	0.000	0.001
TOTAL	**0.032**	**0.018**	**0.005**	**0.005**

[1] Acreage is rounded to the nearest thousandth.
[2] Actual acreage is 0.0004 acre.
[3] Actual acreage is 0.0003 acre.
[4] Actual acreage is 0.0004 acre.
[5] Actual acreage is 0.0004 acre.
[6] Actual acreage is 0.00003 acre.
[7] Actual acreage is 0.0004 acre.

Impacts to USACE/RWQCB jurisdiction will require a Section 404 permit from USACE and a Section 401 permit from RWQCB, as described in Measure BIO-4. Compensatory streambed mitigation for permanent impacts to USACE/RWQCB jurisdiction will be required as part of subsequent Section 404/401 permitting requirements. Permanent impacts to USACE/RWQCB jurisdiction shall be mitigated through on-site or off-site enhancement, restoration, and/or creation of jurisdictional streambed at a ratio of no less than 2:1 as required by Measure BIO-4. With the implementation of Measure BIO-4, the project would not result in significant impacts to jurisdictional resources.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation Incorporated.

Wildlife Movement

The study area is located within Proposed Constrained Linkage 13, which consists of Murrieta Creek. Regional wildlife movement is expected to occur within Murrieta Creek. However, the project would avoid Murrieta Creek and most of its tributaries. The proposed impacts within the project site are mostly restricted to existing developed areas. The project will implement Urban/Wildland Interface Guidelines to reduce potential indirect impacts to wildlife movement through Proposed Linkage 13,

which includes Murrieta Creek. Therefore, the project will not significantly impact movement of wildlife or impede the use of native wildlife nursery sites.

Migratory Species

Development of the proposed project could disturb or destroy active migratory bird nests, including eggs and young. Disturbance to or destruction of migratory bird eggs, young, or adults is in violation of the MBTA and is considered a potentially significant impact. Although suitable habitat for nesting birds on the study area is limited, herbaceous ground cover, shrubs, and trees located throughout the study area could provide habitat for protected nesting bird species. A mitigation measure is provided as Measure BIO-3, which would help ensure the project is in compliance with MBTA regulations. With implementation of Measure BIO-3, the project would reduce impacts to migratory bird species to less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation Incorporated. The project will comply with the City's Heritage Tree Ordinance (Section 8.48 of the City's Municipal Code). The study area supports trees that may be subject to tree protection measures. In accordance with Mitigation Measure BIO-5, prior to impacts, a tree survey will be conducted prior to construction. If protected trees are located within the project site and must be damaged or removed, a Heritage Tree Removal or Relocation Permit must be obtained. Therefore, implementation of Mitigation Measure BIO-5 would reduce any direct impacts to City-protected trees to less than significant.

Mitigation Measures

Implementation of mitigation measure BIO-5 would reduce potentially significant impacts to protected trees to a less-than-significant level:

BIO-5 **Protected Trees:** Prior to impacting any trees within the project site, a tree survey shall be conducted in accordance with the City of Temecula's Heritage Tree Ordinance (Section 8.48 of the City's Municipal Code). If trees subject to this ordinance must be damaged or removed within the project site, a Heritage Tree Removal or Relocation Permit must be obtained prior to damage or removal.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant Impacts with Mitigation Incorporated.

As above, the project site is located within the Southwest Area Plan of the MSHCP. The following sections demonstrate the project's compliance with MSHCP requirements.

MSHCP Reserve Assembly Requirements

The study area is located within the Subunit 1 (Murrieta Creek) of the Southwest Area Plan of the MSHCP. The study area includes portions of Criteria Cells 6656, 6781, 6782, 6783, 6890, 6891, 7021, and 7078 (Figure 7 of the project GBRA). The conservation requirements for these Criteria Cells are

presented in Table 3, *Conservation Requirement of the MSHCP Criteria Cells*, of the project GBRA. Although the study area is within several Criteria Cells, the project site is mostly within existing developed areas. The project site is not targeted for conservation or is an area that would contribute to the MSHCP reserve assembly.

Furthermore, Diaz Road is considered a "covered road" under the MSCHP. According to MSHCP Section 7.3.4, "safety improvements to other publicly maintained existing roadways within the Criteria Area are Covered Activities. The proposed road widening is considered a safety improvement and is, therefore, a "covered activity." Implementation of the proposed project would avoid and minimize impacts to sensitive species and habitats adjacent to the existing roadway. To minimize and avoid impacts to sensitive species and habitats occurring adjacent to the project site, the project will comply with Best Management Practices (BMPs), as detailed in Section 7.5.3 and Appendix C of the MSHCP. Ultimately, the project would not conflict with the MSHCP reserve assembly.

Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2)

The identification of MSHCP Riparian/Riverine resources is based on the potential for the habitat to support, or be a tributary to habitat that supports, Riparian/Riverine Covered Species. Riparian/Riverine Covered Species are identified in MSHCP Section 6.1.2. The MSHCP defines Riparian/Riverine habitat as "lands which contain Habitat dominated by trees, shrubs, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year" (Dudek and Associates 2003). The MSHCP defines Vernal Pools as "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season" (Dudek and Associates 2003). Artificially created wetlands, except for those created intentionally to provide habitat or resulting from the creation of open waters or alteration of natural stream courses, are not considered MSHCP Vernal Pools.

Riparian/Riverine Habitat

The MSHCP Riparian/Riverine Areas mapped on the study area are equivalent to CDFW jurisdiction. Implementation of the proposed project would result in permanent impacts to approximately 0.256 acre of MSHCP Riparian/Riverine habitat and temporary impacts to 0.076 acre of Riparian/Riverine habitat (see Figure 9 in the GBRA and Table 7*, Impacts to MSHCP Riparian/Riverine Areas*).

Since the project proposes impacts to Riparian/Riverine Areas, the project is required to prepare a Determination of Biologically Equivalent or Superior Preservation, which provides a detailed account of impacts and proposed mitigation to compensate for impacts. Mitigation for permanent impacts to the Riparian/Riverine Areas would be met by implementing required mitigation for impacts to CDFW jurisdiction. Mitigation would include off-site enhancement, restoration, and/or creation at a ratio of no less than 2:1, as required by Measure BIO-4. With the implementation of Measure BIO-4, the project would not result in significant impacts to MSHCP Riparian/Riverine Areas.

Table 7
IMPACTS TO MSHCP RIPARIAN/RIVERINE AREAS

Drainage	Permanent Impacts (acres)[1]	Temporary Impacts (acres)[1]
Murrieta Creek	0.000	0.000
A1	0.000	0.000
A2	0.000	0.000
A2.1	0.064	0.026
B	0.000	0.000
C	0.027	0.005
D	0.027	0.006
E	0.036	0.009
F	0.000	0.000
G	0.021	0.006
H	0.024	0.007
I	0.020	0.005
I1	0.010	0.001
J	0.016	0.006
K	0.020	0.005
TOTAL	**0.265**	**0.07**

[1] Acreage is rounded to the nearest thousandth.

Riparian/Riverine and Vernal Pool Species

One Riparian/Riverine plant species (smooth tarplant) was observed within Drainage A2.1 in the northern portion of the study area. Smooth tarplant is a conditionally covered species under the MSHCP. Surveys for this species are required if a project occurs within a CASSA 1, 2,3, or 4. Since the study area is not located within a CASSA, impacts to this species would be covered under the MSHCP. Four other Riparian/Riverine plant species were determined to have a low potential to occur within the study area. These species were not incidentally observed within the study area during field surveys.

Four males and one pair were observed within the study area. The project would not permanently or temporarily impact suitable LBVI habitat (Fremont cottonwood forest and woodland, arroyo willow thicket). However, project construction could have indirect impacts to LBVI that occupy habitat adjacent to Diaz Road. Indirect impacts to this species during the nesting season (March 1 through August 31) would be a significant impact. To avoid potential indirect impacts to LBVI, an avoidance/minimization measure is provided as Measure BIO-2. No other Riparian/Riverine animal species are expected to occur on the study area.

Narrow Endemic Plant Species (MSHCP Section 6.1.3)

The study area is not located within a NEPSSA; therefore, no focused surveys were required, and the proposed project is consistent with Section 6.1.3 of the MSHCP.

Urban/Wildland Interface Guidelines (MSHCP Section 6.1.4)

Proposed developments adjacent to MSHCP Conservation Areas may create edge effects that can impact conserved biological resources. The MSHCP provides several guidelines that address potential

indirect effects from proposed developments that are in proximity to MSHCP Conservation Areas. These guidelines include measures addressing the quantity and quality of runoff generated by the development (i.e., drainage and toxics), night lighting, noise, non-native invasive plant species, barriers to humans and animal predators, and grading/land development encroachment.

The eastern portion of the study area is located within Proposed Constrained Linkage 13, which consists of Murrieta Creek. As discussed below, the project will comply with each applicable guideline to ensure consistency with MSHCP Section 6.1.4.

Drainage

The project will incorporate measures to avoid the discharge of untreated surface runoff into downstream waters. Measures will include those required for construction pursuant to the State Water Resources Control Board General Construction Storm Water Permit and the project Storm Water Pollution Prevention Program, while post-construction water quality measures will be implemented in compliance with the National Pollutant Discharge Elimination System, Municipal Storm Drain Permit requirements, and subsequent 401 Water Quality Certification from RWQCB for the project. The project will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes downstream from the study area. In addition, post-construction BMPs are intended to help ensure that post-project hydrologic conditions remain consistent with pre-project conditions, therefore minimizing the potential for downstream erosion and/or sedimentation that could otherwise result from implementation of the proposed project.

Toxics

Land uses that use chemicals or generate bio-products that are potentially toxic or may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge into downstream waters. Measures such as those employed to address drainage issues would be implemented by the proposed project to avoid the potential impacts of toxics.

Lighting

Temporary construction lighting and ambient lighting from the proposed development are required to be selectively placed, directed, and shielded away from the MSHCP Conservation Area. In addition, large spotlight-type lighting directed into conserved habitat will be prohibited.

Noise

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

Temporary construction-related noise impacts will be reduced by the implementation of a number of measures, including the following:

- During all excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the study area.

- The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the study area during all project construction.

- All construction work shall occur during the daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours to be determined by the County.

- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass through sensitive land uses or residential dwellings.

Invasives

The project shall not use invasive plants for erosion control, landscaping, wind rows, or other purposes. Mitigation Measure BIO-6 requires the project to comply with the MSHCP and avoid the use of invasive, non-native plants in accordance with MSHCP Table 6.2.

Barriers

Since the project consists of widening an existing road, barriers and signage are not necessary.

Grading/Land Development

Since the project consists of widening an existing road, manufactured slopes are not necessary.

Additional Surveys (MSHCP Section 6.3.2)

The study area is not within a CASSA or an Amphibian or Mammal Species Survey Area. No impacts to CASSA species or sensitive amphibian or mammal species are proposed.

The study area is within the MSHCP Burrowing Owl Survey Area, and the study area supports suitable habitat. Focused surveys were conducted in accordance with the County's survey protocol. No burrowing owls or sign of burrowing owls were observed within the study area. Due to the presence of suitable habitat, a pre-construction survey is required within 30 days of ground disturbance pursuant to the MSHCP. A mitigation measure requiring a pre-construction survey, avoidance or replacement of burrowing owl habitat and individuals (if three or more pairs are observed), and avoidance of active nests and/or relocation of burrowing owl (if burrowing owls are observed) is included as Measure BIO-1.

As discussed above, the proposed project is consistent with MSHCP Section 6.3.2.

Fuels Management (MSHCP Section 6.4)

Because the proposed project consists of widening an existing road within a heavily developed portion of the City, a fuel modification zone is not incorporated into the proposed project. The proposed project is consistent with Section 6.4 of the MSHCP.

Multiple Species Habitat Conservation Plan and Stephens' Kangaroo Rat Fees

In order for the project to participate in the MSHCP, the project proponent is required to pay an LDMF in order to finance the acquisitions of conservation areas to provide habitat for MSHCP covered species (County 2003). The LDMF must be paid prior to issuance of a building permit. The applicant shall pay the LDMF as determined by the County. Final fee credits shall be determined through coordination with the County.

The study area is also within the SKR HCP but is not located within any of the core reserves (County 1996). Therefore, the project is required to pay an SKR mitigation fee for incidental take authorization under the SKR HCP. Mitigation Measure BIO-7 requires the project proponent to pay the MSHCP LDMF and SKR HCP fees, which would reduce SKR impacts to less than significant.

Mitigation Measures

Implementation of mitigation measures BIO-6 and BIO-7 would reduce potentially significant impacts to adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans to a less-than-significant level:

BIO-6 **MSHCP Landscaping Restrictions**: In accordance with MSHCP Section 6.1.4, no species listed in Table 6-2, *Plants that Should Be Avoided Adjacent to the MSHCP Conservation Area*, of the project GBRA shall be used in the project landscape plans (including hydroseed mix used for interim erosion control).

BIO-7 **Habitat Conservation Plan Fees**: The City is subject to the MSHCP LDMF and the SKR HCP Fee, which shall be paid prior to issuance of any grading permit.

V. Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	■	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	■	☐	☐

The following analysis is based on the Cultural Resources Study prepared for the proposed project by HELIX (2020b; Appendix C).

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. As part of the Cultural Resources Study (HELIX 2020b), HELIX requested a record search of the California Historical Resources Information System (CHRIS) from the Eastern Information Center (EIC) on April 23, 2020. The records search results were received on September 9, 2020. The records search covered a one-mile radius around the project alignment and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. The records search did not identify any historic resources in proximity to the project site. Furthermore, no historic resources that could be directly or indirectly affected by implementation of the proposed project are located within or adjacent to the proposed alignment or areas to be disturbed during construction activities. As such, because no historic resources have been identified in the area that could potentially be adversely affected by project implementation, no impacts would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. HELIX contacted the Native American Heritage Commission (NAHC) on April 24, 2020 for a Sacred Lands File search and list of Native American contacts for the project area. The NAHC indicated in a response dated April 27, 2020 that the results were positive and that the Pechanga Band of Luiseño Indians should be contacted. Also provided was a list of 15 Native American tribal contacts who may have knowledge of cultural resources in the project area. Letters were sent on May 7, 2020 to Native American representatives and interested parties identified by the NAHC. Two responses have been received to date. The Rincon Band of Luiseño Indians (Rincon) stated that, while the project area is within the territory of the Luiseño people and Rincon's "specific area of Historic interest," they have no knowledge of any cultural resources within the project area. The Quechan Indian Tribe responded stating that they do not wish to comment on the project and defer to local Tribes. If any additional responses are received, they will be forwarded to City staff.

A pedestrian survey was conducted at the project alignment by HELIX and a Native American monitor on May 28, 2020. Most of the project alignment and surrounding area is built upon, disturbed, or paved, thus reducing the likelihood for the presence of archaeological resources. The survey covered the areas located adjacent to the northern, eastern, and southern boundaries of the alignment. The northern and southern portions of the alignment were heavily disturbed due to recent trenching for an underground pipeline. The eastern edge of Diaz Road was also disturbed; ground visibility in this area was minimal due to presence of the bike/walking path and landscaped areas. No cultural material was observed during the survey.

The project site is located within an area where alluvial soils occur. Based on the presence of young alluvial deposits, cultural resources may be present within the project site. Grading and other ground-disturbing activities would therefore have the potential to cause a substantial adverse change in the significance of an archaeological resource, and impacts would be potentially significant. Therefore, the

project would implement an archaeological and Native American monitoring program, as detailed in mitigation measures CUL-1 through CUL-5, to reduce impacts to less than significant.

Mitigation Measures

Implementation of mitigation measures CUL-1 through CUL-5 would reduce potentially significant impacts to cultural resources to a less-than-significant level:

CUL-1 At least 30 days prior to the start any ground-disturbing activities, the City shall contact the Pechanga Tribe to develop a Cultural Resources Treatment and Monitoring Agreement ("Agreement"). The Agreement shall address the treatment and final disposition of any tribal cultural resources, sacred sites, human remains, or archaeological resources inadvertently discovered on the project site; project grading, ground disturbance, and development scheduling; the designation, responsibilities, and participation of tribal monitor(s) during grading, excavation, and ground disturbing activities; and compensation for the tribal monitors, including overtime, weekend rates, and mileage reimbursements.

CUL-2 A qualified archaeologist and Pechanga tribal monitor shall attend a pre-construction meeting with City staff, the contractor, and appropriate subcontractors to discuss the monitoring program, including protocols to be followed in the event that cultural material is encountered.

CUL-3 A qualified archaeological monitor and a Pechanga tribal monitor shall be present for ground-disturbing activities in areas with a potential for encountering cultural material; monitoring will not be required in areas that have been previously graded/cut to below cultural levels. At least seven business days prior to project grading, the City shall contact the tribal monitors to notify the Tribe of grading/excavation and the monitoring program/schedule, and to coordinate with the Tribe on the monitoring work schedule. Both the archaeologist and the tribal monitor shall have the authority to stop and redirect grading activities in order to evaluate the nature and significance of any archaeological resources discovered within the Area of Potential Effect (APE). Such evaluation shall include culturally appropriate temporary and permanent treatment pursuant to the Agreement, which may include avoidance of cultural resources, in-place preservation, data recovery, and/or reburial so they are not subject to further disturbance in perpetuity, per CUL-1. Any reburial shall occur at a location predetermined between the City and the Pechanga tribe, details of which are to be addressed in the Cultural Resources Treatment and Monitoring Agreement in mitigation measure CUL-1. Treatment may also include curation of the cultural resources at a tribal curation facility, as determined in discussion among the City, the qualified archaeologist, and the tribal representatives and addressed in the Cultural Resources Treatment and Monitoring Agreement referenced in mitigation measure CUL-1.

CUL-4 All artifacts discovered at the development site shall be inventoried and analyzed by the qualified archaeologist and tribal monitor(s). A monitoring report will be prepared, detailing the methods and results of the monitoring program, as well as the disposition of any cultural material encountered.

CUL-5 The City shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts that are found within the project area, for proper treatment and disposition pursuant to the Agreement required in mitigation measure CUL-1.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation Incorporated. No human remains are known to exist within the project area. However, although unlikely, it is possible that ground disturbance associated with the proposed project may encounter and damage or destroy previously undiscovered human remains. Therefore, impacts are assessed as potentially significant, and the project would implement mitigation measure CUL-6.

Mitigation Measures

Implementation of mitigation measure CUL-6 would reduce potentially significant impacts related to the discovery of human remains to less than significant:

CUL-6 If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the NAHC must be contacted within 24 hours. The NAHC must then immediately identify the most likely descendant(s) for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours of being granted access to the site and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98 and the agreement described in mitigation measure CUL-1.

VI. Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	■	☐

The following analysis is based on the Air Quality and Greenhouse Gas Assessment prepared for the proposed project by HELIX (2020a; Appendix A).

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. Energy usage is typically quantified using the British thermal unit (Btu) and large quantities of energy are often reported as million Btu (MBtu). As a point of reference, the

approximate amounts of energy contained in common energy sources are gasoline—0.124 MBTU per gallon and diesel—0.139 MBtu per gallon.

The project would involve the consumption of energy resources during construction. Construction of the project is estimated to last approximately 16 months during which time diesel and gasoline fuel is anticipated to be the primary energy consumed. It is not anticipated that the project would require significant use of natural gas or electricity (from the electrical grid) during construction. As a result, natural gas and electricity use during construction would be temporary and a negligible portion of the total construction energy. Diesel and gasoline fuel consumption would be associated with heavy-duty equipment, haul trucks involved in the transport of soil and construction materials, and workers commuting to and from the site.

The project's estimated construction energy consumption was calculated using off-road equipment types, horsepower, count and hours from the SMAQMD Road Construction Emissions Model version 9.0 (described in the air quality analysis, above); off-road fuel consumption factors from the CARB OFFROAD2017-ORION Web Database version 1.0.1; and on-road fuel consumption factors from the CARB EMFAC2017 Web Database version 1.0.2. The estimated fuel and total energy consumed during project construction is shown in Table 8, *Construction Energy Consumption*.

Table 8
CONSTRUCTION ENERGY CONSUMPTION

Phase	Fuel (gallons) Diesel	Fuel (gallons) Gasoline	Total (MBtu)
Grubbing/Land Clearing	4,909	494	744
Grading/Excavation	43,605	5,384	6,729
Drainage/Utilities/Sub-Grade	21,364	2,765	3,312
Paving	4,676	1,100	786
Construction Total	**74,554**	**9,741**	**11,571**

Source: HELIX 2020a.
Notes: Totals may not sum due to rounding; MBtu = million British thermal units.

The total petroleum consumption would be temporary and would cease upon completion of project implementation, would be typical of similar roadway construction projects, and would not require the development of new energy resources and distribution infrastructure. Once operational, the project would not result in notably increased energy usage beyond the energy usage of the road segment without implementation of the project. Based on these considerations, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and the impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. Federal and state agencies regulate energy use and consumption through various means and programs. Federal and state agencies influence and regulate transportation energy consumption through the establishment and enforcement of fuel economy standards for automobiles and light trucks, funding of energy-related research and development projects, and funding for transportation infrastructure improvements.

There are no state or local plans for renewable energy or energy efficiency directly applicable to the construction energy consumption from a roadway improvement project. However, a project's energy consumption is closely related to a project's GHG emissions. A described in the GHG analysis, below, the project's amortized GHG construction emissions would not exceed the SCAQMD threshold, and the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, including the City's CAP. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and the impact would be less than significant.

VII. Geology and Soils

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

The following analysis is based on the Geotechnical Design Report prepared for the proposed project by David Evans and Associates, Inc. (2020a; Appendix D).

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

Less than Significant Impact. The City, like the rest of southern California, is located within a seismically active region as a result of being located near the active margin between the North American and Pacific tectonic plates. The most significant known active fault zones that are capable of seismic ground shaking and can impact the City are the Elsinore Fault Zone, San Jacinto Fault Zone, Newport-Inglewood Fault Zone, and the San Andreas Fault Zone.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones must inform the public regarding the location of these zones, which are usually one-quarter mile or less in width. Proposed development plans within these earthquake fault zones must be accompanied by a geotechnical report prepared by a qualified geologist describing the likelihood of surface rupture. As shown on Figure PS-1 of the City General Plan (City 2005), the Elsinore Fault Zone is an Alquist-Priolo Earthquake Fault Zone that passes through the City to the west of Interstate 15. The fault is located approximately 0.3 miles east the project site near Jefferson Avenue. Due to this distance, it is unlikely that the project would be subjected to fault rupture at the Elsinore Fault Zone. Therefore, impacts would be less than significant.

ii. Strong seismic ground shaking?

Less than Significant with Mitigation Incorporated. As described under response VI.a.i, the Elsinore Fault Zone is located approximately 0.3 miles east of the project site along Jefferson Avenue. This fault, and other faults in the region, could create seismic ground shaking at the project site. Ground-shaking could affect the integrity of the project's components (e.g., retaining walls, roadway, etc.); therefore, the proposed project would potentially be subject to severe ground shaking hazards from earthquake events. Accordingly, ground shaking could potentially result in significant impacts to the proposed project roadway structures. This impact would be mitigated through implementation of mitigation measure GEO-1.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant with Mitigation Incorporated. Liquefaction is the phenomenon where saturated granular soils develop high-pore water pressures during seismic shaking and behave like a heavy fluid. This phenomenon generally occurs in areas of high seismicity where groundwater is shallow and loose granular soils or hydraulic fill soils subject to liquefaction are present. For liquefaction to occur, loose granular sediments below the groundwater table must be present and shaking of sufficient magnitude and duration must occur. As shown on Figure PS-1 of the City General Plan (2005), the vast majority of the project alignment is located within a Liquefaction Hazard Zone. Therefore, the project components (e.g., retaining walls, roadway, etc.) may be at risk from liquefaction, which could affect the integrity

of the project components. Potentially significant impacts related to liquefaction would be mitigated through implementation of mitigation measure GEO-1.

iv. Landslides?

No Impact. According to the City's General Plan Public Safety Element, the site is not identified as being in an area where landslides have occurred (City 2005). While the Murrieta Creek runs parallel to the alignment, appropriate slope retention methods and retaining walls would be used to prevent slope instability. Therefore, no impact from landslides would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Potential short-term erosion and sedimentation impacts would be addressed through a Stormwater Pollution Prevention Plan (SWPPP), prepared specifically for the proposed roadway improvements, in accordance with the NPDES permit. The SWPPP would incorporate BMPs in accordance with the California Stormwater Best Management Practices Handbook to control erosion and protect the quality of surface water runoff during project construction. Due to the proximity of Murrieta Creek, the use of sediment controls to prevent off-site sediment transport would be employed, potentially including silt fencing, fiber rolls, gravel bags, temporary sediment basins, street sweeping, sediment stockpiles, and use of properly fitted covers for sediment transport vehicles. Based upon compliance with the NPDES permit and implementation of a SWPPP, impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant with Mitigation Incorporated. See responses VI.a and VI.b, above. The project alignment is not located in an area that would be exposed to landslides. The project alignment has a high potential for liquefaction and is located near earthquake faults that may generate strong seismic ground shaking (City 2005); therefore, the project components (e.g., retaining walls, roadway, etc.) may be exposed to unstable geologic conditions, and impacts would be potentially significant. Implementation of mitigation measure GEO-1 would reduce impacts to less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant Impact. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content and a significant decrease in volume with a decrease in water content. Changes in the water content of an expansive soil can result in severe distress to structures constructed upon the soil. Development would occur within soils with some potential for expansion. The soil underneath the project alignment is identified as a variety of sandy and silty loam soil types, which have a low clay content and are not identified as having a shrink-swell potential (United States Department of Agriculture 2017). Therefore, impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. As a roadway improvement project, the proposed project does not include septic tanks. No impacts would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. A Paleontological Technical Study was prepared for the proposed project (Paleo Solutions, Inc. 2020; Appendix E). The technical study involved an analysis of existing paleontological data as well as a field survey of the project site. The analysis of existing data included a geologic map review, a literature search, and a museum records search at the Western Science Center (WSC) in Hemet, California. Geologic mapping indicates that the project area is primarily underlain by Holocene- and late Pliocene-age young alluvial valley deposits (Qyva) and Pleistocene-age older alluvial flood plain deposits (Qoa). Within a half mile of the project area, Pleistocene-age Pauba Formation, Sandstone Member (Qp, Qpfs), Pleistocene-age Pauba Formation, Fanglomerate Member (Qpf, Qpff), Cretaceous-age tonalite undivided (Kt), and Cretaceous- and Jurassic-age metavolcanics and metasedimentary rocks (KJm) are present and may underlie the geologic units mapped at the surface within the project area at shallow depth. In addition, recent artificial fill (af) from previous development may be present within the bounds of the project area. Of these geologic units, two, the Pleistocene-age Pauba Formation and Fanglomerate Member (Qpf, Qpff), have high paleontological potentials. One unit, the Pleistocene-age older alluvial flood plain deposits (Qoa), has moderate paleontological potential. The remaining four units have either low or very low paleontological potentials. Due to the presence of geologic units with moderate and high paleontological potentials, grading and other ground-disturbing activities associated with construction of the proposed project would have the potential to destroy a paleontological resource, and impacts would be potentially significant. Therefore, the project would implement a paleontological monitoring program, as detailed in mitigation measures PAL-1 and PAL-2.

Mitigation Measures

The following mitigation measure GEO-1 would mitigate the potentially significant impacts associated with seismic hazards identified under this section to less than significant.

GEO-1 Site-specific Geotechnical Investigation. A site-specific geotechnical investigation shall be completed prior to final site design approval by the City to identify site-specific criteria related to considerations such as grading, excavation, fill, and structure/facility design. All applicable results and recommendations from the geotechnical investigation will be incorporated into the project design and construction documents to address identified potential geologic and soil hazards, including but not necessarily limited to: (1) seismic hazards including ground rupture, ground acceleration (ground shaking), soil liquefaction (and related issues such as dynamic settlement and lateral spreading), landslides/slope instability, and seiche effects; and (2) non-seismic hazards including manufactured slope instability, subsidence/compressible soils, expansive or corrosive soils, and trench/excavation instability. The final project design and construction documents will also encompass applicable standard design and construction practices from established regulatory/ industry sources including the California Building Code (CBC), International Building Code (IBC), California Geological Survey (CGS), Greenbook standards, as well as the results/recommendations of geotechnical review and field

observations/testing to be conducted during project excavation, grading, and construction activities (with all related requirements to be included in applicable engineering/design drawings and construction contract specifications).

Implementation of the following mitigation measures PAL-1 and PAL-2 would reduce potentially significant impacts to paleontological resources to less than significant:

PAL-1 Prior to construction, a paleontological resource monitoring and mitigation plan (PRMMP) shall be prepared. It shall provide detailed recommended monitoring locations; a description of a paleontological resources worker environmental awareness program to inform construction personnel of the potential for fossil discoveries and of the types of fossils that may be encountered; detailed procedures for monitoring, fossil recovery, laboratory analysis, and museum curation; and notification procedures in the event of a fossil discovery by a paleontological monitor or other project personnel. In the event that paleontological resources are discovered during the construction phase of the project, a curation agreement from the Western Science Center, or another accredited repository, shall also be obtained.

PAL-2 Construction excavations that disturb the Pleistocene-age Pauba Formation, Fanglomerate Member, or Pleistocene-age older alluvial flood plain deposits shall be monitored full-time by a qualified paleontologist. Additionally, artificial fill, young alluvial fan deposits, and young alluvial channel deposits shall be initially spot-checked to determine if older, more paleontologically sensitive deposits are disturbed at depth. If older sedimentary geologic units are not disturbed by construction activities in these areas, then monitoring can be reduced or ceased at the discretion of a qualified paleontologist in consultation with the City.

VIII. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	☐	☐	■	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

The following analysis is based on the Air Quality and Greenhouse Gas Emissions Letter Report prepared for the proposed project by HELIX (2020a; Appendix A).

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. Greenhouse gases (GHG) include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). GHGs vary widely in the power of their climatic effect; therefore, climate scientists have established a

unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, since CH_4 and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

There are no established federal, state, or local quantitative thresholds applicable to the project to determine the quantity of GHG emissions that may have a significant effect on the environment. The California Air Resources Board (CARB), the SCAQMD, and various cities and agencies have proposed, or adopted on an interim basis, thresholds of significance that require the implementation of GHG emission reduction measures. For the proposed project, the most appropriate screening threshold for determining GHG emissions is the SCAQMD proposed Tier 3 screening threshold (SCAQMD 2010), as the project construction period and equipment is similar to a commercial or residential project to which Tier 3 applies. Therefore, a significant impact would occur if the proposed project would exceed the SCAQMD proposed Tier 3 screening threshold of 3,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year.

Construction Impacts

Construction GHG emissions would be generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, and worker commuting trips. Construction GHG emissions were calculated by using RCEM. The estimated construction GHG emissions for the project are shown in Table 9, *Estimated Greenhouse Gas Emissions*. For construction emissions, SCAQMD recommends that the emissions be amortized (i.e., averaged) over 30 years and added to operational emissions. Averaged over 30 years, the proposed construction activities would contribute approximately 37.8 MT CO_2e emissions per year. Therefore, the proposed project would generate GHG emissions below the SCAQMD threshold and impacts would be less than significant.

Table 9
ESTIMATED GREENHOUSE GAS EMISSIONS

Phase	CO_2e (MT)
Site Preparation/Land Clearing	35.0
Grading/Excavation	668.5
Underground Drainage/Utilities	261.4
Paving	64.6
Total Emissions	**1,134.7**
Amortized Emissions	**37.8**
SCAQMD Threshold	*3,000*
Significant Impact?	***No***

Source: HELIX 2020a
CO_2e = carbon dioxide equivalent; MT = metric tons; SCAQMD = South Coast Air Quality Management District

Operational Emissions

The project proposes widening and improving an existing roadway and would only generate emissions during construction in the near term. Because the project would result in additional lanes on Diaz Road and, therefore, increase the total available miles of roadways in the region, the TIA concluded

that the project would result in a regional increase in VMT of 7,277 miles in the year 2040 (DEA 2020b). The GHG emissions resulting from the increase in VMT were calculated using data from EMFAC2017. As shown in Table 10, *Operational Greenhouse Gas Emissions*, the combined operational emissions from the increased VMT and the amortized construction emissions would be 40.0 MT CO_2e per year and would not exceed the SCAQMD threshold of 3,000 MT CO_2e per year. The impact would be less than significant.

Table 10
OPERATIONAL GREENHOUS GAS EMISSIONS

Source	Emissions (MT CO_2e)
Operational Emissions from VMT Increase	2.2
Amortized Construction Emissions	37.8
Total Operational Emissions	**40.0**
SCAQMD Threshold	*3,000*
Significant Impact?	***No***

Source: Helix 2020a
CO_2e: carbon dioxide equivalent; MT: metric tons; SCAQMD = South Coast Air Quality Management District

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall state plan and policy is Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. Senate Bill (SB) 32 would require further reductions of 40 percent below 1990 levels by 2030. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the low carbon fuel standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed.

The twelve cities of the Western Riverside Council of Governments (WRCOG), which includes the City of Temecula, adopted a Subregional Climate Action Plan (CAP) in September 2014. The CAP provides a 2010 baseline inventory of GHG emissions for the subregion cities of 5,834,400 MT of CO2e. Approximately 57 percent of the GHG inventory was from transportation sources, 21 percent from commercial/industrial energy use, 20 percent from residential energy use, and the remaining from wastewater and solid waste sources. The CAP established a target of reducing subregional GHG emissions 15 percent below 2010 levels by 2020 and 49 percent below 2010 levels by 2035. To achieve the 2020 reduction target, the CAP identifies 14 State and regional measures, 3 local energy sector measures, 18 local transportation sector measures, and 2 solid waste sector measures. The CAP does not identify GHG reduction measures for achieving goals beyond 2020 (WRCOG 2014). The CAP does not include thresholds for determining the significance of a project's GHG emissions, nor does it include a checklist or other methodology for determining consistency of a project with the goals and measures in the CAP.

The project would involve widening and improvements to an existing roadway and only the transportation sector local reduction measures would be potentially applicable. The project would support the CAP local transportation sector measures T-1, *Bicycle Infrastructure Improvements*, and T-5 *Transit Service Expansion*, by providing.

- Class II bicycle lanes in both directions of Diaz Road.
- Improved crossings and signal-controlled crossings for pedestrians and bicyclists using the multi-use trail paralleling the north side of Diaz Road to the north.
- Conformance with the latest ADA standards throughout the corridor.
- Space for future bus stops out of the traffic lanes that improve transit safety and operational efficiency.

In addition, as the project involves widening and improving an existing roadway to accommodate existing and future projected traffic volumes, and would not generate new vehicle trips itself, the proposed project would not result in an increase to population or employment and would therefore be consistent with the growth projections in the GHG emissions inventory projections. As previously discussed, the project's increase in GHG emissions from construction activities would also not exceed the SCAQMD screening threshold, which was crafted to comply with the reduction goals of AB 32.

Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant.

IX. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	■	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	■
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	■

The following analysis is based on the Phase I Environmental Site Assessment (ESA) prepared for the proposed project by Leighton Consulting, Inc. (Leighton 2020; Appendix F).

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. Project construction would require the use of materials that are typically associated with construction activities, such as diesel fuels, hydraulic liquids, oils, solvents, and paint. Hazardous materials used during project construction would be transported, used, and stored in accordance with state and federal regulations regarding hazardous materials. The use of these materials would be temporary, and impacts during construction would be less than significant. With regard to long-term operation, the project would not increase the use or disposal of hazardous materials in the area once constructed and operational. While the project would facilitate increased traffic capacity along the affected segment of Diaz Road, it would not substantially increase the number or frequency of trucks or other vehicles transporting hazardous materials through the project area such that it would create a significant hazard to the public or the environment. Therefore, operational impacts in this regard would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. The Phase I ESA prepared for the project site indicated that no known or potential Recognized Environmental Conditions (RECs), including the presence of notable amounts of hazardous materials, exist within or adjacent to the proposed alignment. Further, the proposed project is not anticipated to result in a release of hazardous materials into the environment. During the temporary, short-term construction period, there is the possibility of accidental release of hazardous substances such as spilling of hydraulic fluid or diesel fuel associated with construction equipment maintenance. The level of risk associated with the accidental release of these hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials. The construction contractor would be required to use standard construction controls and safety procedures to avoid or minimize the potential for accidental release of such substances into the

environment. Therefore, the impact of the proposed project with respect to exposing the public or the environment to hazardous materials through upset and accident conditions would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The school nearest to the project alignment is Vail Elementary School, located approximately 1.2 miles to the east of the project alignment. Hazardous materials used during construction would not be handled within one-quarter mile of the school. Furthermore, the use of these materials would be temporary and in accordance with applicable standards and regulations. Therefore, impacts related to the handling of hazardous materials within one-quarter mile of a school would not occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Pursuant to Government Code Section 65962.5 (Cortese List) requirements, and as part of the Phase I ESA records review, the SWRCB GeoTracker database (SWRCB 2020) and the California Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC 2020) were searched for hazardous materials sites within the project area. According to these databases, there are no listed hazardous materials sites within or adjacent to the project alignment. Therefore, no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The French Valley Airport is located approximately 5 miles north of the project alignment. The project alignment is not located within the Airport Influence Area (Riverside County Airport Land Use Commission 2004). Furthermore, the project is not located within the vicinity of a private airstrip. Therefore, no impacts would occur**.**

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. During construction, parts of the roadway would be closed to vehicular traffic; however, a Traffic Control Plan would be implemented to identify traffic control measures through the duration of project construction activities. The Traffic Control Plan would maintain adequate access and the project would therefore not interfere with an emergency response plan or emergency evacuation plan. Upon completion of construction, the improved roadway would include more lanes and would therefore allow for improved access to the surrounding areas. As such, impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The project site is not located within or near an area designated as a state responsibility area (California Department of Forestry and Fire Protection [CAL FIRE] 2007, 2011) nor is it classified as a Very High Fire Hazard Severity Zone (VHFHSZ) or located near a VHFHSZ (CAL FIRE 2007, 2011). The project site is mapped as Non-VHFHSZ per the CAL FIRE Fire Hazard Severity Zone Maps prepared under the Fire and Resource Assessment Program (FRAP). According to the VHFHSZ Maps prepared by the City in collaboration with CAL FIRE, the nearest VHFHSZ is located approximately one mile west of the project near the City's western boundary. Furthermore, the proposed roadway improvements would not house people and would not be at risk from wildlife. Therefore, no impacts would occur.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of imperious surfaces, in a manner which would:	☐	☐	■	☐
i. result in substantial erosion or siltation on- or offsite;	☐	☐	■	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	■	☐
iii. create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
iv. impede or redirect flood flows?	☐	☐	■	☐
d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation?	☐	☐	■	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. Potential water quality impacts associated with the proposed project would be generally limited to short-term construction-related erosion and sedimentation. During operation, the discharge of minor amounts of fuels or other pollutants associated with automobiles into storm drains during rain events may occur. As the roadway is widened, the project would construct catch basins and storm drains in compliance with City design standards. Furthermore, the project would prepare a Water Quality Management Plan (WQMP) to illustrate how low impact development BMPs have been incorporated into project construction and design. The WQMP would incorporate BMPs in accordance with the California Stormwater BMPs Handbook and the City's BMP Design Manual to control erosion and protect the quality of surface water runoff. This would result in operational effects to water quality that are similar or improved compared to existing conditions. Therefore, operational impacts to water quality would be less than significant.

As required under the NPDES, a SWPPP would be created specifically for construction of the proposed roadway improvements. The plan would address erosion control measures that would be implemented to avoid or minimize erosion impacts to exposed soil associated with construction activities, particularly given the project's proximity to Murrieta Creek. The SWPPP would include a program of BMPs to provide erosion and sediment control and reduce potential impacts to water quality that may result from construction activities. BMPs would include maintaining existing slope stabilization measures and providing gravel bags and silt fences where applicable. Implementation of the SWPPP for the proposed roadway improvements and associated BMPs would reduce or eliminate the discharge of potential pollutants from stormwater runoff to the maximum extent practicable. Therefore, impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. Implementation of the proposed project would not result in the use of groundwater. While the proposed project would result in additional impervious surfaces on the site, the project size would have a minimal effect on the existing groundwater infiltration. Therefore, the proposed project would not substantially interfere with groundwater recharge or Murrieta Creek such that the project may impede sustainable groundwater management of the basin and impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of imperious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site;

Less than Significant Impact. No streams or rivers are present within the project alignment; however, the Murrieta Creek channel is immediately northeast of the project alignment. While the project would not alter the course of a stream or river, it would increase the number of impervious surfaces and alter the existing drainage pattern of the area in a manner that would increase the amount of surface runoff. However, the increase in the amount of runoff would be minimal and the runoff would be accommodated by the proposed catch basins, storm drains, and low impact development improvements which would be designed in conformance with the City's requirements and specifications. Implementation of the design standards as described in the City's BMP Design Manual and the project-specific WQMP would ensure substantial erosion and siltation would not occur on or off site. Therefore, impacts would be less than significant.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than Significant Impact. Murrieta Creek is located immediately northeast of the project alignment; however, the project would not alter the course of the creek. An increase in impervious surfaces resulting from the roadway improvements would alter the existing drainage pattern of the area in a manner that would increase the amount of surface runoff. However, the increase in the amount of runoff would be minimal and accommodated by the proposed catch basins and storm drains, which would be designed in conformance with City design standards. The project would follow the City's BMP Design Manual standards for low impact development and include the implementation of a project-specific WQMP. Therefore, flooding would not occur on or off site. Impacts would be less than significant.

iii. create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. An increase in impervious surfaces resulting from the roadway improvements would increase the amount of surface runoff on site. This runoff may contain pollutants such as fuels and oils from automobiles; however, the increase in the amount of runoff would be minimal and the runoff would be sufficiently accommodated by the proposed catch basins, storm drains, and low impact development improvements. Therefore, the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; impacts would be less than significant.

iv. impede or redirect flows?

Less than Significant Impact. An increase in impervious surfaces resulting from the roadway improvements would alter the existing drainage of the area in a manner that would change flows from existing conditions; however, the changes would be minimal. The project involves improvements to existing roadways, which would not substantially impede or redirect flows. Therefore, impacts would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation?

Less than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center (FEMA 2020), the majority of the project site is mapped within a special flood hazard area given its proximity to Murrieta Creek. The project alignment runs parallel to the creek boundary along the northeast side of Diaz Road. This portion is mapped as Zone A and AE, which signify a special flood hazard area and base floodplain. However, it is not anticipated that the project would result in the release of pollutants due to inundation associated with mapped flood hazard areas. While the project area would be subject to potential flooding, the project would improve conveyance of storm water due to the implementation of low impact development and catch basins. In addition, the loading and staging area for construction equipment would be protected from flood hazards by locating them in areas with higher ground elevation and adequate drainage, reducing the likelihood of construction equipment releasing pollutants during a potential creek channel flood, and BMPs would ensure that hazardous materials equipment would not be in the area during a flood event. For these reasons, impacts associated with flooding would be less than significant.

The possibility of seiches and tsunamis impacting the City is considered remote due to the great distance to large bodies of water. Therefore, the potential for the project to result in the release of pollutants associated with inundation from tsunamis and seiches is considered remote. As such, impacts related to the release of pollutants due to project site inundation in flood hazard, tsunami, and seiche zones would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. As specified above, the project would comply with applicable City of Temecula and County of Riverside stormwater requirements and would be required to obtain coverage under the NPDES General Construction Permit. In addition, the project would not adversely impact a groundwater management plan because project-related runoff would not otherwise impede groundwater replenishment in the Murrieta-Temecula Groundwater Basin. In addition, as noted above, project implementation would not have the potential to result in significant adverse impacts to surface water and groundwater quality or otherwise conflict with or obstruct implementation of the Water Quality Control Plan for the San Diego Basin (Basin Plan).

XI. Land Use and Planning

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Physically divide an established community?	☐	☐	☐	■
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■

a) Physically divide an established community?

No Impact. The project would widen and extend an existing roadway and other elements within the right-of-way to a total width of 100 feet, which is consistent with the City's General Plan Circulation Element and would not physically divide an established community. Therefore, no impacts would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project would widen and extend an existing roadway consistent with the City's General Plan Circulation Element and thus would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, no impacts would occur.

XII. Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	■	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	■	☐

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less Than Significant Impact. The Surface Mining and Reclamation Act of 1975 required the State Geologist to initiate mineral land classification to help identify and protect mineral resources in areas within the state. In accordance with guidelines established by the State Mining and Geology Board, mineral deposits in western Riverside County have been classified into Mineral Resource Zones (MRZ). According to the City of Temecula General Plan, the project area has been classified by the State Division of Mines and Geology as MRZ-3a. This area contains sedimentary deposits that have the potential to supply sand and gravel for concrete and crushed stone for aggregate. However, these areas are not considered to contain deposits of significant economic value. Given the limited area the project would disturb and the fact that the surrounding area is generally developed or zoned for future development, the project would not result in the loss of availability of a mineral resource valuable to the region or state.

XIII. Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c) For a project located within the vicinity of a private airstrip an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

The following analysis is based on the Acoustical Analysis Report prepared for the proposed project by HELIX (2020c; Appendix G).

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ}, with a specified duration. The Community Noise Equivalent Level (CNEL) is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night sound level (L_{DN}), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on dBA. The maximum sound level (L_{MAX}) is the maximum level during a measurement period or noise event. These metrics are used to express noise levels for both measurement and municipal regulations, as well as for land use guidelines and enforcement of noise ordinances.

Construction Noise

The City's Municipal Code states that construction noise limits apply to projects within one quarter mile of an occupied residence. According to the Acoustical Analysis, the hotels located along Jefferson Road, Marriott SpringHill Suites and Hampton Inn Suites, located approximately 1,000 feet and 700 feet from the nearest portion of the project alignment, were conservatively analyzed as occupied residences for the purposes of this analysis (HELIX 2020c). The most substantial noise increases from construction activities that may affect off-site uses would occur during the grading phase. The loudest

equipment used during this phase would be a grader and excavator. The equipment would be in operation for 40 percent of a typical construction hour. At a distance of 700 feet, the grading equipment would generate a noise level of 58.1 dBA L_{EQ}. The City does not adopt noise level standards for construction noise. However, construction would not occur between the hours of 6:30 p.m. and 7:00 a.m., Monday through Saturday, and all-day Sunday, as required by the Municipal Code. Therefore, noise generated by construction equipment would be less than significant.

Traffic Noise

A significant increase in noise levels would occur if project-added traffic results in an increase of 3 CNEL or more. The project's primary operational noise source would be vehicular traffic. According to the TIA prepared for the proposed project by David Evans and Associates, Inc., the project would not result in a doubling of average daily trips (ADT; David Evans and Associates, Inc. 2020b). A doubling of ADT would cause a doubling in noise (a 3 CNEL increase), which is often noticeable to sensitive receptors and would be perceived as a significant increase. The project would not generate nearly enough trips to result in a doubling of roadway noise. The nearest noise-sensitive land uses (NSLUs) to the project site are two hotels along Jefferson Road, Marriott SpringHill Suites and Hampton Inn Suites, located approximately 1,000 feet and 700 feet from the nearest portion of the project alignment.

According to the Acoustical Analysis, at a distance of 700 feet, the existing noise level with 9,000 daily trips is approximately 60.6 CNEL. The project would result in a long-term increase to 14,300 daily trips, which corresponds to a noise level of approximately 62.4 CNEL (HELIX 2020c). An increase of 1.8 CNEL would not exceed 3 CNEL and would not be discernable to the human ear. In addition, given the comparatively small change in distance associated with expanding the road from two lanes to four lanes, the topography and intervening distance across Murrieta Creek would contribute to the negligible change in noise levels. Since project-added trips would not increase existing noise levels by 3 CNEL, transportation noise impacts to off-site land uses would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. According to the project's Acoustical Analysis, construction activities known to generate excessive ground-borne vibration, such as pile driving or blasting, would not be conducted by the project. A possible source of vibration during general project construction activities would be a vibratory roller, which may be used for ground compaction beneath the roadway surface. A vibratory roller would generate approximately 0.046 inch per second peak particle velocity (PPV) at a distance of 100 feet (HELIX 2020c). At this distance, vibration generated by the project would be lower than what is considered a "severe" impact for humans of 0.4 inches per second PPV, and the structural damage impact to older residential structures of 0.5 inches per second PPV. Furthermore, the nearest vibration-sensitive land uses, the Hampton Inn Suites Hotel and Home2 Suites Temecula, would both be located approximately 700 feet from the project alignment. Therefore, given the intervening distance between where a vibratory roller may be used and the nearest vibration sensitive land uses, impacts associated with the roller (and other potential equipment) would be less than significant.

c) For a project located within the vicinity of a private airship or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is subject to some distant aircraft noise, though the site is not located near an active airport. The nearest airports are the Bear Creek Airport, located approximately 4 miles to the north, and the French Valley Airport, located approximately 5 miles to the northeast. At these distances, no effects related to airport noise would occur at the project site, and impacts would be less than significant.

XIV. Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	■	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The proposed project is designed to meet the roadway classification requirements of a major arterial with four divided lanes, as specified by City Standard No. 101 and included in the City's General Plan Circulation Element Figure C-2. The expanded roadway will accommodate future traffic levels projected under buildout of the General Plan. Therefore, although the project involves the expansion of infrastructure, it would accommodate planned growth rather than induce growth. The project does not include land uses, such as homes or business, that would directly induce population growth. As such, the project would not induce direct or indirect population growth, and impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would involve improvements to an existing roadway. There are no existing residences within the project alignment and no people or housing units would be displaced. No impact would occur.

XV. Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	■	☐
b) Police protection?	☐	☐	■	☐
c) Schools?	☐	☐	☐	■
d) Parks?	☐	☐	☐	■
e) Other public facilities?	☐	☐	☐	■

a) Fire protection?

Less than Significant Impact. Operation of the roadway would not generate an increased demand for fire protection services beyond existing conditions. During construction, fire protection may be required in the case of accident conditions, but these would be short-term demands and would not require increases in the level of service offered or affect these agencies' response times. Because of the low probability and short-term nature of potential fire protection needs during construction, the proposed project would result in less-than-significant impacts.

b) Police protection?

Less than Significant Impact. The proposed project would not result in an increase in demand for police protection services beyond existing conditions, and therefore, would not have operational impacts to police protection or cause a need for new or altered police protection facilities. A police protection need could occur during project construction if theft or crime associated with the construction equipment or construction site would occur; however, these types of events would not trigger an increase above provided police protection levels. Therefore, the project would result in less than significant impacts.

c) Schools?

No Impact. The proposed project would place no demand on school services because it would not involve the construction of facilities that would generate school-aged children and would not involve the introduction of a temporary or permanent population into this area. Therefore, the project would have no impact on schools.

d) Parks?

No Impact. The proposed project would place no demand on parks because it would not involve the introduction of a temporary or permanent population into the area that would use parks. Therefore, the project would have no impact on parks.

e) Other public facilities?

No Impact. The proposed project would not involve the introduction of a temporary or permanent human population into this area. Therefore, the project would have no impact on other public facilities.

XVI. Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	■	☐

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project would not generate a population that would increase demand for parks or recreational facilities. Therefore, the proposed project would not affect use of existing facilities. No impacts to recreation would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. The proposed roadway improvements would not generate a population that would increase demand for parks or recreational facilities. The project would include the removal of portions of the adjoining public walking/biking pathway along the northeast side of Diaz Road. However, these would be replaced in the currently undeveloped buffer area between Diaz Road and Murrieta Creek. The analysis associated with constructing these facilities is included this document. Therefore, the proposed project would not require the construction or expansion of existing recreational facilities that would have an adverse physical effect on the environment. Impacts to recreation would be less than significant.

XVII. Transportation

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	■	☐
d) Result in inadequate emergency access?	☐	☐	■	☐

The following analysis is based on the Traffic Impact Analysis (TIA) prepared for the proposed project by DEA (DEA 2020b; Appendix H) and a project-specific Vehicle Miles Traveled (VMT) Analysis prepared by Urban Crossroads, Inc. (Urban Crossroads 2021, Appendix I).

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant with Mitigation Incorporated. A TIA was prepared for the project (DEA 2020b) to describe the existing roadway and intersection functions under current conditions and to analyze future roadway and intersection functions following implementation of the proposed project, which involves improving Diaz Road from two lanes to four lanes between Cherry Street and Rancho California Road. The City's General Plan Circulation Element classifies Diaz Road as a Major Arterial (4 Lanes Divided), per City Standard No. 101. The typical cross-section calls for a 100-foot minimum right-of-way, 76-foot roadway with a 14-foot raised median, and 12-foot parkways on each side of the road. This segment of Diaz Road would complete the City's only existing north-south corridor west of Murrieta Creek. In addition, per the City's Circulation Element, project intersections shall be designed to include two through lanes, two left-turn lanes, and one right-turn lane. The study is summarized below, and the complete TIA is included as Appendix H of this Initial Study.

Roadway segment and intersection operating conditions are typically described in terms of level of service (LOS). LOS is a scale used to indicate the quality of traffic flow on roadway segments and at intersections, with a range from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion). The City General Plan Circulation Element (City 2005) identifies LOS E as the acceptable LOS for roadway segment operations and LOS D as the acceptable LOS for peak hour intersection operations.

Existing Operations

Intersections

Intersection operations under existing conditions are shown in Table 11, *Existing Intersection Operations*. As shown in the table, one intersection operates at an unacceptable LOS under existing conditions, Diaz Road at Via Montezuma.

Table 11
EXISTING INTERSECTION OPERATIONS

Intersection	Peak Hour	Existing Delay[1]	Existing LOS[2]
Diaz Road at Rancho California Road	AM	36.2	D
	PM	39.4	D
Diaz Road at Rancho Way	AM	8.0	A
	PM	4.3	A
Diaz Road at Via Montezuma	AM	44.5	E
	PM	28.4	D
Diaz Road at Avenue Alvarado	AM	13.5	B
	PM	13.2	B
Diaz Road at Winchester Road	AM	29.4	C
	PM	17.8	B

Source: David Evans and Associates, Inc. 2020b
[1] Average delay expressed in seconds per vehicle.
[2] Level of Service.
DNE = does not exist; MSSC = minor street strop controlled; TWSC = two way stop controlled

Roadway Segments

Roadway segment operations under the existing conditions are shown in Table 12, *Existing Roadway Segment Operations*. As shown in Table 12, all five roadway segments operate at an acceptable LOS (LOS E or better) under existing conditions. In addition, the project would improve the roadway segments LOS.

Table 12
EXISTING ROADWAY SEGMENT OPERATIONS

Intersection	Classification	Capacity	Existing ADT	Existing LOS
Rancho California Road to 1,600 feet +/- north of Rancho California Road	Major Arterial (4 Lanes Divided)	36,000	8,800	E or better
1,600 feet +/- north of Rancho California Road to Via Montezuma	Major Arterial (4 Lanes Divided)	36,000	9,000	E or better
Via Montezuma to 300 feett south of Avenue Alvarado/Overland Drive	Limited Secondary Arterial (2 Lanes Divided)	16,000	9,100	E or better
South of Avenue Alvarado/Overland Drive to Dendy Parkway	Major Arterial (4 Lanes Divided)	36,000	3,700	E or better
Dendy Parkway to Cherry Street	Future Segment	NA	NA	NA

Long-Term Year 2040 Scenario

To determine intersection and roadway segment operations under the Long-Term Year 2040 scenario, the TIA used forecasted regional growth from the Riverside County Travel Analysis Model (RIVTAM) travel demand forecasting model.

Intersections

Intersection operations under the Long-Term Year 2040 scenario are shown in Table 13, *Long-Term Year 2040 Intersection Operations*. As shown in the table, three intersections would operate at an unacceptable LOS (LOS E) under the Long-Term Year 2040 scenario without the project:

- Diaz Road/Rancho Way intersection;
- Diaz Road/Via Montezuma intersection; and
- Diaz Road/Avenue Alvarado intersection.

Under the Long-Term Year 2040 With Project scenario, all intersections would operate at an acceptable LOS. The project would reduce delays at these intersection during the AM and PM peak hour scenarios. Therefore, no impacts would occur to the intersections under the Long-Term Year 2040 With Project scenario.

Table 13
LONG-TERM YEAR 2040 INTERSECTION OPERATIONS

Intersection	Peak Hour	Long-Term Year 2040 Delay[1]	Long-Term Year 2040 LOS[2]	Long-Term Year 2040 With Project Delay	Long-Term Year 2040 With Project LOS	Δ Delay[3]
Diaz Road/	AM	40.4	D	37.8	D	-2.6
Rancho California Road	PM	39.6	D	36.6	D	-3.0
Diaz Road/	AM	56.8	E	33.5	C	-23.3
Rancho Way	PM	38.4	D	31.9	C	-6.5
Diaz Road/	AM	5253.5	F	--	--	N/A
Via Montezuma	PM	353.7	F	--	--	N/A
Diaz Road/	AM	633.8	F	41.9	D	-591.1
Avenue Alvarado	PM	360.5	F	37.0	D	-323.0
Diaz Road/	AM	36.9	D	36.0	D	-0.9
Winchester Road	PM	35.4	D	32.0	D	-3.4
Diaz Road/	AM	9.7	A	9.2	A	-0.5
Dendy Parkway	PM	9.6	A	9.1	A	-0.5

Source: David Evans and Associates, Inc. 2020b
[1] Average delay expressed in seconds per vehicle.
[2] Level of Service.
[3] Change in delay due to project.
N/A = not applicable

Roadway Segments

Roadway segment operations under the Long-Term Year 2040 scenario are shown in Table 14, *Long-Term Year 2040 Roadway Segment Operations*. As shown in Table 14, all five roadway segments would operate at an acceptable LOS (LOS E or better) under the Long-Term Year 2040 Without Project

scenario. Under the Year 2040 With Project scenario, the same five roadway segments would operate at an acceptable LOS. This analysis concludes that intersections on Diaz Road, rather than the roadway segments themselves, are the choke points requiring expansion of Diaz Road. Despite growth in traffic volumes, all segments of Diaz Road would operate under the capacity of a major four lane arterial. Therefore, no impacts to roadway segments would occur under the Long-Term Year 2040 scenario.

Table 14
LONG-TERM YEAR 2040 ROADWAY SEGMENT OPERATIONS

Intersection	Classification	Capacity	Existing ADT	Existing LOS
Rancho California Road to 1,600 feet +/- north of Rancho California Road	Major Arterial (4 Lanes Divided)	36,000	8,900	E or better
1,600 feet +/- north of Rancho California Road to Via Montezuma	Major Arterial (4 Lanes Divided)	36,000	14,300	E or better
Via Montezuma to 300 feet south of Avenue Alvarado / Overland Drive	Major Arterial (4 Lanes Divided)	36,000	13,400	E or better
South of Avenue Alvarado / Overland Drive to Dendy Parkway	Major Arterial (4 Lanes Divided)	36,000	7,000	E or better
Dendy Parkway to Cherry Street	Major Arterial (4 Lanes Divided)	36,000	4,500	E or better

With regard to pedestrian and bicycle facilities and alternative transportation, the project would maintain public access during construction to allow for continued use of the right-of-way by pedestrians and cyclists. With regard to the Murrieta Creek Regional Trail, the construction specifications will require that the contractor maintain access to the trail at all times to the extent feasible. Any temporary closures to portions of the trail would require approval by the City Engineer and would only be allowed when necessary to perform work in the immediate area or for public safety purposes. The duration of any temporary closures would be minimized. Use of alternative transportation such as transit and ridesharing services would not be notably affected, as traffic access would also be maintained throughout construction activities. Once constructed, the new relocated regional trail and new parkway facilities would provide enhanced access for pedestrian and bicycle users, while the expanded roadway would facilitate transportation via transit and ridesharing services, to the extent these are already available in the project area.

Overall, the widening of Diaz Road would result in improved traffic operations in both the near-term and long-term timeframes. The volume-to-capacity ratios would be improved, allowing for a more efficient and effective circulation system, including improvements to alternative transportation facilities. As such, the project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than Significant Impact. The analysis of VMT in CEQA Guidelines section 15064.3 provides that transportation impacts of projects are, in general, best measured by evaluating the project's VMT. VMT reflects both the number and the distance of the trips taken. Construction activities would require the delivery of construction equipment and materials to the project site, in addition to the

removal of construction waste from the site; however, such trips would be both brief and infrequent; as such, construction-related VMT impact would be less than significant.

As relates to long-term operational VMT impacts, according to the VMT analysis prepared by Urban Crossroads (2020, Appendix I of this Draft IS/MND), the City's guidelines state that the threshold of significance for VMT impacts related to a transportation project is a net increase in total existing VMT for the area. Temecula is located in western Riverside County, which is also known as the Western Riverside Council of Governments (WRCOG) Region. Consistent with Governor's Office of Planning and Research (OPR)'s Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) recommendations, it is appropriate to measure the total net change in VMT related to the implementation of a transportation project like the proposed project. To determine whether or not there is a significant impact, the WRCOG Region's total VMT with the project's proposed additional lanes is compared to without project conditions. The WRCOG Region without Project lanes is estimated at 45,506,338, whereas with the Project's additional lanes, the WRCOG Region VMT is estimated at 45,503,455. Because the project results in a cumulative sub-region VMT decrease under the project condition compared to the no project condition, the project's effect on VMT is not considered significant. As such, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 and impacts would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. During construction, a Traffic Control Plan would be implemented to maintain safe roadway conditions for travelers along Diaz Road. Upon completion of construction, the proposed median, streetlights, bike lanes, and sidewalks would minimize hazards to vehicular travelers, bicyclists, and pedestrians. Therefore, impacts would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impact. During construction, certain lanes and/or parts of the roadway may be closed to vehicular traffic; however, a Traffic Control Plan would be implemented and would maintain adequate access to areas along portions of Diaz Road. Upon completion of construction, the improved roadway would include more lanes and would therefore allow for improved access to the surrounding areas. As such, impacts would be less than significant.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	■	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

The following analysis is based on the Cultural Resources Study prepared for the proposed project by HELIX (2020b; Appendix C). City correspondence with affected tribal groups as part of the AB 52 consultation process are provided in Appendix J of this Draft IS/MND.

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

   ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant with Mitigation Incorporated. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources, as defined in subdivision (k) of Public Resources Code Section 5020.1, or determined to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1. As discussed in response V.b, cultural resources (including tribal cultural resources) may be present within the project alignment based on the presence of young alluvial deposits, the NAHC's indication of the area's cultural sensitivity, and tribal importance of the project area. Grading and other ground-disturbing activities would therefore have the potential to cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be potentially significant. Therefore, the project would implement an archaeological and Native American monitoring program, as detailed in mitigation measures CUL-1 through CUL-5, which would reduce potentially significant impacts to tribal cultural resources to a less-than-significant level.

XIX. Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	■	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	■
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	■

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The proposed project would not generate wastewater, require wastewater service, or result in the construction or expansion of wastewater treatment facilities. The project would use a minimal amount of water required for dust control during the temporary construction period and landscaping during project operation; the project would not require a substantial water supply that would require or result in the construction of new water treatment facilities or expansion of existing facilities**.** However, the proposed project would include the construction of storm drains within the project alignment. In addition, the project would infringe upon several small fenced/walled enclosures containing existing utility and water infrastructure (i.e., wells, piping, tanks, and small outbuildings) on the northeast side of Diaz Road. These facilities would be entirely reconstructed in the existing buffer zone adjacent to the roadway. Since the project would return the utility infrastructure to preconstruction conditions, impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. The project would use a minimal amount of water required for dust control during the temporary construction period and landscaping during project operation. The project would not require a substantial water supply, and sufficient water supplies would be available to serve the project in the reasonably foreseeable future during normal, dry and multiple dry years. Therefore, impacts would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed project would not require wastewater service. Therefore, the project would not exceed the wastewater capacity of the local wastewater treatment provider. No impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. The proposed project would generate a minimal amount of construction waste. All non-recyclable solid waste generated during construction would be taken to a landfill with sufficient permitted capacity. During operation, the project would not generate substantial solid waste; the limited waste generated along public roadways is typically diffuse litter. As a result, the proposed project would have a negligible effect on landfill capacity. Based on this small quantity of material, the proposed project would not generate solid waste in excess of federal, state, and local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, no impacts would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed project would generate a minimal amount of construction waste and no ongoing operational waste. Concrete and asphalt waste would be recycled and reused to the extent feasible to limit the volume of construction wastes requiring off-site disposal. Solid waste produced by the proposed project would be disposed of at a properly permitted facility in accordance with federal, state, and local laws. Therefore, no impacts would occur.

XX. Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	■	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	■	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	■	☐

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. Emergency management services are overseen by the Temecula Fire Department composed of one Division Chief, two Battalion Chiefs, and sixty firefighting personnel that serve from five fire stations located within the city limits. The closest station to the project area is at 27415 Enterprise Circle West, south of Winchester Road and east of Diaz Road. The Temecula Fire Department fire engines are all four-person staffed, paramedic assessment engines, which ensures that a minimum of one paramedic and three emergency medical technician (EMT)- level personnel at the scene of all emergencies (City 2020).

Construction activities associated with implementation of the proposed project would temporarily restrict access for emergency vehicles due to the closure of segments of Diaz Road while under construction. However, construction would be required to comply with the County of Riverside's Emergency Operations Plan to ensure the appropriate emergency access by means of adjacent

roadways. Furthermore, a Traffic Control Plan would be implemented to identify traffic control measures through the duration of project construction activities. Operations associated with the widened roadway would be similar to existing conditions, but would provide incrementally increased traffic capacity to accommodate future traffic volumes, which would also facilitate emergency response and evacuation activities in the project area. As such, implementation of the project would not impair an emergency response or evacuation plan, and impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant Impact. The City is subject to both wildland and urban fires due to its climate, topography, and native vegetation. The extended droughts characteristic of the region's Mediterranean climate and increasingly severe dry periods associated with global warming result in large areas of dry native vegetation that provide fuel for wildland fires. State law requires that all local jurisdictions identify VHFHSZs within their areas of responsibility (California Government Code Sections 51175–51189). Inclusion within these zones is based on vegetation density, slope severity, and other relevant factors that contribute to fire severity.

The project site is not located within or near an area designated as a state responsibility area (CAL FIRE, 2007, 2011) nor is it classified as or located near a VHFHSZ (CAL FIRE 2007, 2011). The project site is mapped as Non-VHFHSZ per the CAL FIRE Fire Hazard Severity Zone Maps prepared under the FRAP. According to the VHFHSZ Maps prepared by the City in collaboration with CAL FIRE, the nearest VHFHSZ is located approximately one mile west of the project near the City's western boundary. In addition, the proposed project would not result in an increase in the City's population which could potentially result in the expose of additional people. As a result, project implementation would not exacerbate wildlife risk, and impacts would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact. As stated above in item XX.a, the project site is not located within a VHFHSZ so the site is not considered to be at a great risk for wildfires (CAL FIRE 2007, 2011). The proposed project includes the expansion of an existing roadway, which would infringe upon public walking and biking pathways as well as several small fenced/walled enclosures containing existing utility and water infrastructure (i.e., wells, piping, tanks, and small outbuildings). However, the majority of the land impacted by the roadway expansion is currently undeveloped. While the project would relocate the impacted utility infrastructure and public walking and biking pathways, such activities would not exacerbate wildfire risk as they would be installed in the existing buffer zone adjacent to the roadway. Operation and maintenance of the project would not differ from the current usage as a public right-of-way. Therefore, operation and maintenance of the proposed project would not exacerbate wildfire risk or result in temporary or ongoing impacts to the environment. No impacts would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant Impact. As stated in item XX.a, above, the project site is not located within a VHFHSZ so the site is not considered to be at a great risk for wildfires (CAL FIRE 2007, 2011). Additionally, the project would include construction BMPs which would minimize impacts related to downslope or downstream flooding or landslides, including maintaining the existing slope near Murrieta Creek and providing silt fences where applicable. As such, impacts would be less than significant.

XXI. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?	☐	■	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. Although no burrowing owls or burrowing owl signs were observed on the project alignment or potential off-site staging areas, the project alignment does contain on-site burrows with potential to support burrowing owl. In addition, LBV and SWFL

were observed within the study area. The project alignment also contains vegetation that may provide nesting habitat for migratory birds, which are protected under the MBTA and could be affected if construction occurs during the breeding season. Mitigation measures BIO-1 through BIO-3 would reduce potential impacts to burrowing owl, LBV, SWFL, and migratory birds to a less-than-significant level. The project would also implement mitigation measures BIO-6 and BIO-7 to ensure consistency with the Western Riverside MSHCP. Therefore, impacts to biological resources would be less than significant. Although cultural and tribal cultural resources were not identified within the project alignment, the potential for such resources exists due to the sensitivity of the area. Therefore, the project would implement mitigation measures CUL-1 through CUL-5 to reduce potential impacts to a less-than-significant level. Similarly, potential impacts to paleontological resources would be addressed through implementation of mitigation measures PAL-1 and PAL-2; as such, impacts to paleontological resources would be less than significant.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. Only one project has been identified to potentially occur within the vicinity of the project alignment during the time of the proposed construction. This project, the Murrieta Creek Bridge at Overland Drive Project, would extend Overland Drive from its existing southwestern terminus at Enterprise Circle West across Murrieta Creek to connect with Diaz Road. While the timing of implementation of this project has not been determined, its construction would entail activities similar in nature to the proposed Diaz Road Expansion Project but would be more limited in terms of footprint and duration. If the bridge project and proposed project were constructed concurrently, there would be the potential for additive effects in the vicinity of the bridge location. However, it is not anticipated that these additive effects would result in significant cumulative impacts given the mitigation measures that would be required to be implemented for both projects. Such measures, as well as compliance with applicable regulatory requirements, would limit the individual impacts of each project such that even if performed concurrently the combined impacts would not be significant. Further, because both projects would be undertaken by the City, the activities of each project would be coordinated as to minimize the potential for cumulative impacts to occur. Potential impacts have been identified in the categories of biological resources, cultural resources, geology and soils (including paleontological resources), and Tribal Cultural Resources. The evaluation contained in this document determined that potential impacts to the environment can be reduced to a less than significant level with implementation of the identified mitigation measures. Based on data provided in this document, including the type of project proposed and its location, it is concluded that implementation of the proposed project will not result in impacts that are either individually or cumulatively considerable or significant when viewed in relation to past, present or probable future projects.

c) Have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. The proposed project will not result in any identifiable substantial adverse effects on humans either directly or indirectly. The goal of the proposed Project is to provide better circulation within the City of Temecula as envisioned by the City's General Plan. Exposure to environmental effects associated with geology and soils (e.g., seismic

shaking and liquefaction) may result in substantial adverse effects to humans. Implementation of mitigation measure GEO-1 would ensure adherence to regulatory codes, ordinances, regulations, standards, and guidelines for geology and soils. With implementation of the required mitigation no substantial adverse effect to humans will result from carrying out the proposed Project. Therefore, impacts from construction and operation of the proposed project to human beings would be less than significant with mitigation.

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