Initial Study/Mitigated Negative Declaration

Hamner Avenue Widening Project (Schleisman Road to Citrus Street and Detroit Street to Sixth Street)

Riverside County Transportation Project C9-0019

Norco and Eastvale, California

Prepared for:

City of Norco
2870 Clark Avenue
Norco, CA 92860
Contact: Steve King, Planning Director
951.735.3900

Prepared by:

ICF
49 Discovery, Suite 250
Irvine, CA 92618

July 2020

ICF. 2020. *Hamner Avenue Widening Project (Schleisman Road to Citrus Street and Detroit Street to Sixth Street) Initial Study/Mitigated Negative Declaration*. Administrative Draft. May. 00520.19. Norco, CA. Prepared for City of Norco.

Contents

Tables

Figures

Follows Page

Acronyms and Abbreviations

Acronym/ Abbreviation	Definition
AB	Assembly Bill
ADL	Aerially Deposited Lead
AQMP	air quality management plan
Basin	South Coast Air Basin
BMPs	Best Management Practices
BSA	biological study area
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH_4	methane
City	City of Norco
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibels
EAP	Energy Action Plans
EDR	Environmental Data Resources
EIR	Environmental Impact Report
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
FMMP	Farmland Mapping and Monitoring Program
FR	Federal Register
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GWP	global warming potential
I-15	Interstate 15
IS	initial study
L_{dn}	day-night sound level
L_{eq}	equivalent sound level

Acronym/ Abbreviation	Definition
L_{min} and L_{max}	minimum and maximum sound levels
LOS	Level-of-Service
LSAA	Lake or Streambed Alteration Agreement
L_{xx}	percentile-exceeded sound levels
MM	Mitigation Measure
MMBTU	million British thermal units
$MMTCO_2e$	million metric tons
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zones
MS4s	Municipal Separate Storm Sewer Systems
MSAR	Middle Santa Ana River
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2e$	metric tons carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NMFS	National Marine Fisheries Service
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OHWM	ordinary high water mark
PAL	project area limits
PBFs	Physical and Biological Features
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
POAQC	project of air quality concern
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppm	part per million
PPV	peak particle velocity
PQP	Public/Quasi-Public
PRC	Public Resource Code
RCA	Regional Conservation Authority
RCDEH	Riverside County Department of Environmental Health
RCRA	Resource Conservation and Recovery Act
RE	Resident Engineer
RECs	Recognized Environmental Conditions
ROW	right-of-way
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Government
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SFM	State Fire Marshal

Acronym/ Abbreviation	Definition
SIP	State Implementation Plan
SLMs	Sound Level Meters
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
TCEs	temporary construction easements
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
TNM	Traffic Noise Model
TPH-g	total petroleum hydrocarbons from gasoline
TUMF	Transportation Uniform Mitigation Fee
U.S. EPA	U.S. Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USTs	underground storage tanks
VMT	vehicle miles traveled
VOC	volatile organic compound
WoS	waters of the state
WoUS	waters of the U.S.

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The City of Norco (City), in cooperation with the City of Eastvale and the County of Riverside Transportation Department, proposes to widen two segments of Hamner Avenue from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street in the cities of Norco and Eastvale in Riverside County, California. The project covers a total distance of 0.63 mile and would widen Hamner Avenue from four lanes (two lanes in each direction) to six lanes (three lanes in each direction). The City of Norco is the lead agency under the California Environmental Quality Act (CEQA).

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the City of Norco's intent to adopt an MND for this project. This does not mean that the City's decision regarding the project is final. This MND is subject to modification based on comments received by interested agencies and the public.

An Initial Study has been prepared for this project; pending public review, the City expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

1. The proposed project would have no effect on: Agricultural and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.
2. In addition, the proposed project would have no significant effect on: Aesthetics, Air Quality, Cultural Resources, Energy, Geology/Soils/Paleontological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.
3. The proposed project would have less-than-significant effects with mitigation for Biological Resources. Mitigation measures for impacts on these resource areas are as follows:

   BIO-1: A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities to ensure that no owls have colonized the site in the days or weeks preceding construction. If burrowing owls have colonized the project site prior to the initiation of construction, the project proponent will immediately inform the Western Riverside Regional Conservation Authority (RCA) and the wildlife agencies and coordinate further with RCA and the wildlife agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, which would be subject to the review and approval of the RCA and wildlife agencies prior to initiating ground disturbance. Potential measures may include establishing an avoidance buffer around active burrows, eliminating potential unoccupied burrows, and/or passive relocation.

   BIO-2: Prior to any construction activities occurring adjacent to least Bell's vireo foraging and breeding habitat areas during the breeding season (March 15–September 15), a qualified

biologist will conduct preconstruction nesting surveys within 3 days prior to construction activities to identify the locations of any individual least Bell's vireo. If nesting activities or active nests are discovered within the riparian habitat directly adjacent to the northern staging area, a buffer zone will be clearly marked in the field by construction personnel under the guidance of the biologist, and no activities will occur within the buffer zone until the young have fledged or the nest is no longer active. If the designated biologist determines that activities within the staging area are disturbing or disrupting nesting activities, then they will notify the Resident Engineer, who has the authority to halt activity to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, preventing idling of vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, minimizing activities in the immediate vicinity, or working in other areas until the young have fledged.

BIO-3: Between March 15 and September 15, a biological monitor will monitor at the edge of the northern staging area along riparian habitats to ensure noise levels do not result in a disruption to least bell's vireo or other riparian birds. If construction noise is negatively affecting nesting birds (e.g., a discernable negative change in behavior is observed, such as nest flushing or adults not immediately returning to the nest with prey), then activity will cease in the immediate area (unless authorized by the wildlife agencies) until adequate noise barriers can be established to reduce noise levels at the edge of the riparian corridor. Noise barriers may include temporary noise blankets, noise shrouds, and/or sound walls. It may be most effective to construct noise barriers well prior to March 15 to ensure construction delays do not occur. All noise barriers will be constructed within the staging area boundaries.

BIO-4: To the extent feasible, no nighttime work will be conducted in areas adjacent to least Bell's vireo suitable habitat. If the work has to be performed during nighttime, then the lights will be shielded and/or directed away from the habitat to prevent light intrusion into the habitat area.

BIO-5: If vegetation clearing is to occur during the breeding season for passerine birds (i.e., February 1–September 1) or raptors (i.e., January 1–September 1), the designated biologist will conduct a preconstruction survey of construction areas and an appropriate buffer no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, an appropriate buffer will be established by a qualified biologist around each nest site. To the extent feasible, no construction will take place within this buffer until the nest is no longer active. In the event that construction must occur within the buffer areas, the designated biologist will ensure construction activities do not disturb or disrupt nesting activities. If the designated biologist determines that construction activities are disturbing or disrupting nesting activities, then they will notify the Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, preventing idling of vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, minimizing activities in the immediate vicinity, or working in other areas until the young have fledged. Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days.

BIO-6: A qualified bat biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and tree inspection, sampling, exit counts, and acoustic surveys.

BIO-7: If trimming or removal of mature trees and snags is necessary for project construction, trimming/removal activities should be performed outside of the general bat maternity season, which occurs from March 1 through October 1, to avoid direct effects to nonvolant (i.e., flightless) young that may roost in trees within the study area. If trimming or removal of trees during the general bat maternity season cannot be avoided, a qualified biologist will monitor tree removal unless nighttime surveys conducted within one week of removal indicates no tree-roosting bat activity within the study area. Frond removal will follow a two-step process:

- DAY 1: Contractor must only trim the outermost fronds (i.e., no more than 50 percent of the palm fronds) using chainsaws only (i.e., no dozers, backhoes, cranes, or other heavy equipment, other than to provide access for tree cutters using chainsaws).
- DAY 2: The palm tree must be felled. Day 2 activities must occur the day immediately following the Day 1 activities.
- To accomplish this, work may need to be phased and Day 1/Day 2 steps can be repeated. Should bats emerge during the tree trimming, trimming activities must temporarily cease at the individual tree until bats are no longer actively emerging from the tree.

WQ-1: Treatment control BMPs will be implemented to the maximum extent practicable, consistent with the requirements of the NPDES permit and Waste Discharge Requirements for Riverside County Municipal Stormwater Permit Order No. R8-2010-0033, NPDES Permit No. CAS618033. The project design will incorporate post-construction measures and other permanent erosion control elements to ensure that stormwater runoff would not cause channel erosion or hydromodification within the Santa Ana River. The proposed project will incorporate stormwater treatment BMPs that preserve the existing hydrology to the maximum extent practical at two locations along Hamner Avenue near the intersection of Citrus Street to treat runoff prior to their discharge into the retention basins.

WQ-2: The proposed project will comply with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Order No. 2009-0009-DWQ, NPDES No. CAS000002, and any subsequent permits in effect at the time of construction. The proposed project will comply with the Construction General Permit by preparing and implementing a SWPPP to address issues related to construction-related activities, equipment, and materials that have the potential to affect water quality. The SWPPP is a project-specific document that calculates the site's risk level during construction, includes guidelines for monitoring and reporting, and provides Erosion Control Plan and BMP details for the construction site. The SWPPP also includes Construction Site BMPs, which are implemented to minimize sediment and erosion during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants, such as sediment control measures, catch basin inlet protection, construction materials management, and non-stormwater BMPs.

Permit Registration Documents, which include a Notice of Intent, Risk Assessment, Site Map, SWPPP, and other compliance-related documents required by the Construction General Permit, would be electronically filed through the SWRCB's Storm Water Multiple Application and Report Tracking System (SMARTS) prior to the start of construction. Additionally, within 90 days of when construction is complete and the site is stabilized, a Notice of Termination will be electronically filed through the SWRCB's SMARTS.

NOI-1: Although construction noise would be temporary and limited to the duration of the construction, the following noise control measures will be incorporated into the project contract specifications in order to minimize construction noise effects:

- Require the construction contractor to maintain all noise-producing project equipment and vehicles using internal combustion engines to be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) will be equipped with shrouds and noise-control features readily available for that type of equipment.
- All mobile or fixed noise-producing equipment used on the project that is regulated for noise output by a local, state, or federal agency will comply with such regulations while in the course of project activity.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas will be located as far as practicable from noise-sensitive receptors.
- Construction site access road speed limits will be established and enforced during the construction period.
- The hours of construction, including noisy maintenance activities and spoils and material transport, will be restricted to the periods and days permitted by the local noise or other applicable ordinance. Noise-producing project activity will comply with local noise control regulations affecting construction activity or obtain exemptions there from.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.
- No project-related public address or music system will be audible at any adjacent receptor.

TMP-1: A Traffic Management Plan (TMP) will be prepared during final project design in order to minimize delays associated with project construction activities. The TMP will include provisions related to work zones and staging, signage, pedestrian and bicyclist detours, and advance notification of lane closures to residents, businesses, and drivers.

TCR-1: Prior to commencement of construction, there will be a pre-construction meeting in which the construction staff and Resident Engineer (RE) will meet to conduct preconstruction archaeological resource sensitivity and awareness training. This meeting will also discuss the specifications and safety to ensure that all parties understand the described regulatory requirements. It is critical that all parties understand the methods and goals, as well as the protocols, for the inadvertent discovery of archaeological resources and/or human remains during construction. Record of this meeting will be placed in the RE file.

TCR-2: If archaeological resources are encountered during construction, the contractor will follow these procedures:

- Halt all work within a 60-foot radius and immediately inform the RE.
- Following notification, a qualified archaeologist will make a preliminary assessment of the discovery to determine whether the find is an isolated artifact or a recent deposit. If the find is determined to be isolated or recent, construction will be allowed to resume.

- Should the archaeologist determine the discovery is potentially significant, the archaeologist will evaluate the discovery and, if necessary, formulate appropriate mitigation measures after consultation with the City of Norco.
- If the discovery contains Native American archaeological resources, all Native American tribes and individuals who requested to be contacted will be informed of the discovery. The archaeological resource discovery, including human remains, will not be disturbed (i.e. photographed, videoed, or moved) until fully assessed by the archaeologist.

Additionally, if prehistoric or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area must halt within a 60-foot radius until a qualified archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation and/or mitigation measures.

Should the deposit contain Native American resources, all interested Native American parties must be first consulted as to how the deposit and any associated artifacts and features should be treated.

Once the archaeologist has determined that the archaeological deposit has been sufficiently documented, recovered/removed, and concluded that further construction activities would not affect additional archaeological deposits in the immediate area, construction activity can resume in that area.

TCR-3: In the event that human remains are discovered during construction at any time, the following provisions will apply:

All construction activity will immediately be halted within 60 feet of the discovery, and the RE will be informed. The RE will then immediately contact the Riverside County Coroner and the archaeologist, if not already present. The coroner will have 2 working days to inspect the remains after receiving notification. During this time, all remains, associated soils, and artifacts will remain in situ and be protected from public viewing. The City will take appropriate measures to protect the discovery site from disturbance during any negotiations. This may include restricting access to the discovery site and the need to hire 24-hour security.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance will occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American and not under the coroner's jurisdiction, within 24 hours the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD will complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Work will be suspended within a 100-foot radius of the human remains until the MLD's recommendations are implemented.

The archaeologist will work with the MLD in regard to the treatment of the remains and all associated funerary objects and ensure that any identified human remains will be secured while they are left in place and treatment decisions are in progress. Information concerning the

discovery will not be disclosed pursuant to the specific exemption set forth in California Government Code Section 6254.5(e).

The City will relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all Native American archaeological artifacts and non-human remains found within City right of way (ROW) through one or more of the following methods and provide evidence of same:

- A fully executed reburial agreement with the appropriate culturally affiliated Native American tribes or bands. This will include measures and provisions to protect the future reburial area from any future impacts. Reburial will not occur until all cataloguing and basic recordation have been completed.
- A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.
- Should reburial of collected cultural items be preferred, it will not occur until after the Archaeological Resources Monitoring Report/Data Recovery Report has been submitted to the City. Should curation be preferred, the City is responsible for all costs and the repository and curation method will be described in the Archaeological Resources Monitoring Report/Data Recovery Report.
- Artifacts found outside the City ROW are not subject to these requirements and may be relinquished to the Tribe(s) by the property owner for suitable curation or ownership. It is the responsibility of the Tribe(s) to come to agreement with the property owner.
- According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the City and MLD disagree about the disposition of the remains, State law will apply, and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

TCR-4: Any archaeological resources collected will be documented, analyzed, catalogued, and prepared for eventual curation in accordance with the State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections" unless otherwise specified. All archaeological resources will be evaluated for listing eligibility in the *National Register/California Register* according to the measures set forth in the California Public Resources Code. Documentation of identification and evaluation efforts and results will be documented in the Archaeological Resources Monitoring Report/Data Recovery Report.

Archaeological materials will be sorted by material type and age (historic vs prehistoric) and grouped according to provenience. Great care will be taken during the cleaning process to maintain provenience information; archeological materials will be cleaned to the extent necessary for identification and analysis. Care will be taken during cleaning to preserve any diagnostic information, such as paper bottle labels, delicate decoration on ceramics, and intact bottle contents. The following artifacts will be dry-brushed rather than washed with water: bone, metal, low-fired earthenware, wood, paper, textiles, and structural materials, such as

plaster and earthen wall material. As appropriate, other artifacts will be washed prior to labeling and cataloging.

All artifacts will be collected, analyzed and processed offsite and stored in an approved, qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation. Historic-era artifacts may be incorporated into an educational/public display within Riverside County, pending approval of the City.

Should reburial of collected cultural items be preferred, it will not occur until after the Archaeological Resources Monitoring Report/Data Recovery Report has been submitted to the City. Should curation be preferred, the City is responsible for all costs and the repository and curation method will be described in the Archaeological Resources Monitoring Report/Data Recovery Report.

7-21-2020

STEVE KING
Planning Director
City of Norco

Date

This page intentionally left blank.

Chapter 1
Introduction and Project Description

1.1 Project Location

The City of Norco (City) in cooperation with the City of Eastvale and the County of Riverside Transportation Department, proposes to widen two segments of Hamner Avenue from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street in the cities of Norco and Eastvale in Riverside County, California (proposed project). The project covers a distance of 0.63 mile. See Figure 1-1 and Figure 1-2 for the regional location and project vicinity, respectively. The City of Norco is the lead agency under the California Environmental Quality Act (CEQA).

1.2 Project Background

Hamner Avenue is an approximately 6.4-mile stretch of road extending through the cities of Norco and Eastvale, contiguous with Milliken Avenue to the north and Main Street to the south. Hamner Avenue runs parallel to Interstate 15 (I-15) and extends from Riverside Drive in the city of Eastvale at the north end to the southern boundary of the city of Norco at the south end. Hamner Avenue serves as a local arterial, an alternate route to I-15, and a link between Norco, Eastvale, and cities in San Bernardino County to the north.

The northern portion of the project alignment on Hamner Avenue between Schleisman Road and Citrus Street is located approximately 0.5 mile west of I-15 in the city of Eastvale. The portion of the project between Detroit Street to Sixth Street/Norco Drive is located as close as 400 feet west of I-15 in the city of Norco.

The existing northern and southern project segments have four traffic lanes, two in each direction. Hamner Avenue carries heavy traffic bypassing I-15 when there is congestion or maintenance activities on the freeway. The existing width of Hamner Avenue in the project limits ranges from 76 feet to 82 feet in width.

1.3 Project Description

The total project area is approximately 6 acres and roughly 0.63 mile in length. The proposed street improvements include two segments of Hamner Avenue: the Schleisman Road to Citrus Street Segment (cities of Eastvale and Norco) and the Detroit Street to Sixth Street/Norco Drive Segment (City of Norco), described in the subsections below.

Construction would occur in three stages, with improvements on the west side of Hamner Avenue constructed in Stage One, improvements on the east side in Stage Two, and the southerly portion's median improvements constructed in Stage Three. Construction is scheduled to begin in January 2021, and take approximately 4 months to complete. The project is being constructed concurrently with the Hamner Avenue Bridge Replacement Project, which was approved by the Norco City

Council and the California Department of Transportation (Caltrans) in April 2019 and has an anticipated duration of 36 months.

The project would be funded through the Transportation Uniform Mitigation Fee (TUMF) Program administered by the Western Riverside Council of Governments.

1.3.1 Schleisman Road to Citrus Street Segment

The Schleisman Road to Citrus Street Segment is located in the cities of Eastvale and Norco. The project would widen both the west and east sides of Hamner Avenue to expand the segment from four lanes (two lanes in each direction) to six lanes (three lanes in each direction). Project design features include:

- Widening of the west side of Hamner Avenue from approximately 200 feet north of Citrus Street for 900 feet, joining the existing roadway. Improvements include pavement improvements, new curb and gutter and 6-foot wide sidewalk, construction of approximately 500 feet of retaining wall at the back of walk, relocation of an existing 20-inch waterline in the parkway, relocation of streetlights and signage, and replacement of any parkway landscaping that is affected by the project.
- Widening of the east side of Hamner Avenue from Citrus Street to approximately 500 feet north to join the existing roadway. Improvements include protecting the existing Southern California Edison transmission poles in place, pavement improvements, new curb and gutter and 6-foot wide sidewalk, reconstruction of one catch basin, reconstruction of decorative fence at the back of walk, minor grading behind the sidewalk, and replacement of any parkway landscaping that is affected by the project.
- Striping improvements to provide dual southbound left-turn lanes into the SilverLakes Athletic Fields at Citrus Street, three lanes in each direction at the intersection, transitioning to provide Class II bike lanes north of the southbound left turn pocket transitions, and a painted median extending to Schleisman Road with one northbound left turn lane.

All work on the west side of Hamner Avenue for this segment would be within the existing parkway and no temporary construction easements (TCEs) or slope easements would be necessary. On the eastern side of Hamner Avenue, the improvements would remain within the right-of-way (ROW) and SilverLakes Park owned by the City of Norco, but would require a TCE to the north of Citrus Street. There would be a raised median from Schleisman Road to approximately 600 feet south, ending at the Eastvale city limit line.

The staging area for the Schleisman Road to Citrus Street Segment is anticipated to be the same site as used for the Bridge Replacement Project, although it is uncertain whether the contractor would need to use the site or an alternate location that has not yet been identified. The proposed staging area is a gravel overflow parking lot for the SilverLakes Sports Complex on the east side of Hamner Avenue, located approximately 1,400 feet south of Citrus Avenue.

1.3.2 Detroit Street to Sixth Street/Norco Drive Segment

The Detroit Street to Sixth Street/Norco Drive Segment is located in the City of Norco. The project would widen the west side of Hamner Avenue to expand the segment from four lanes (two lanes in each direction) to six lanes (three lanes in each direction); the east side would not be widened to

avoid the relocation of electrical transmission lines and poles located near the east curb face. Project design features include:

- Widening of the west side of Hamner Avenue from approximately 200 feet north of Taft Street, transitioning to join the proposed improvements at Detroit Street. Improvements would include roadway widening, new curb and gutter and 6-foot wide sidewalk, relocation of streetlights and traffic signs, reconstruction of a retaining wall between Hamner Avenue and the existing Park-and-Ride lot, and removal of the City Monument entry sign.
- Reconstruction of the raised median from Taft Street to Detroit Street. Improvements include pavement construction, new raised median curb, and replacement of irrigation and landscaping.
- Striping improvements to provide three 12-foot wide travel lanes in each direction and a dedicated right turn lane at Detroit Street.
- Reconstruction of the City Monument entry sign at the same location or relocated near the intersection of Alhambra Street.
- Replacement of traffic pole to accommodate a longer mast arm.

1.4 Project Objectives

The objectives of the proposed project are to:

- Improve circulation and mobility in the project area.
- Remove an existing capacity bottleneck.

Hamner Avenue is one of few roadways that connect the cities of Norco and Eastvale. The Hamner Avenue bridge that connects to Hamner Avenue is also one of the few local roadways that cross the Santa Ana River. The existing traffic lanes on Hamner Avenue are narrower than the traffic lanes on the Hamner Avenue Bridge, and Hamner Avenue is a capacity bottleneck, providing only one- to two-lane traffic in each direction. Given the existing and projected increase in demand, congestion is expected to increase over time.

1.5 Purpose of this Initial Study with Proposed Negative Declaration

CEQA was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of proposed projects; identifying means of avoiding environmental damage and disclosing to the public the reasons behind a project's approval, even if it leads to environmental damage. As the CEQA lead agency, the City of Norco has determined that the proposed project is subject to CEQA, and no exemptions apply. Therefore, preparation of an Initial Study (IS) is required.

An IS is a preliminary analysis conducted by the lead agency, in consultation with other agencies (e.g., responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, after implementation of mitigation, may have a significant effect on the environment, an

Environmental Impact Report (EIR) should be prepared; otherwise the lead agency may adopt a negative declaration or mitigated negative declaration.

This IS has been prepared in accordance with CEQA (Public Resource Code [PRC] § 21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations [CCR] § 15000 et seq.).

1.6 Reviews and Approvals Needed

The following reviews and approvals would be required for project construction:

Table 1-1. Reviews and Approvals Needed

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	Multiple Species Habitat Conservation Plan (MSHCP) Consistency Review for Biological Resources	Provide request to CDFW for MSHCP Consistency
United States Fish and Wildlife Service (USFWS)	MSHCP Consistency Review for Biological Resources	Provide request to USFWS for MSHCP Consistency
Western Riverside Regional Conservation Authority (RCA)	MSHCP Consistency Review for Biological Resources	Provide request to RCA for MSHCP Consistency

Signed in 2015, the Service Agreement for Preliminary Engineering and Environmental Documentation By and Between County of Riverside, City of Eastvale, and City of Norco for Hamner Avenue Bridge Improvements at Santa Ana River recognizes that although the project is located within the jurisdictional boundaries of the City of Norco, the County of Riverside has experience in the development and implementation of bridge projects involving federal and state agencies. The service agreement further states the County of Riverside will work with regulatory agencies to review, circulate, and approve the environmental document and obtain the necessary construction permits from the regulatory agencies. The service agreement identified that the City of Norco will act as the Lead Agency under CEQA.

Chapter 2
Environmental Checklist

1. **Project Title**: Hamner Avenue Widening Project
2. **Lead Agency Name and Address**: City of Norco
   2870 Clark Avenue
   Norco, CA, 92860
3. **Contact Person and Phone Number**: Steve King; (951) 270-5661
4. **Project Location**: Norco and Eastvale, Riverside County, California
5. **Project Sponsor's Name and Address**: City of Norco
   2870 Clark Avenue
   Norco, CA, 92860
6. **General Plan Designation**: Not applicable – transportation ROW
7. **Zoning**: Not applicable – transportation ROW
8. **Description of Project**:

   The City of Norco (City), in cooperation with the City of Eastvale and the County of Riverside Transportation Department, proposes to widen two segments of Hamner Avenue from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street in the cities of Norco and Eastvale in Riverside County, California. The project covers a distance of 0.63 mile.

9. **Surrounding Land Uses and Setting**:

   Land uses immediately adjacent to the project area are zoned for residential, commercial, and open space/recreational use. The existing northern and southern project segments have four traffic lanes, two in each direction. Hamner Avenue carries heavy traffic, bypassing I-15 when there is congestion or maintenance activities on the freeway. The existing width of Hamner Avenue in the project limits ranges from 76 to 82 feet.

10. **Other Public Agencies Whose Approval is Required**:

    California Department of Fish and Wildlife (CDFW)

    United States Fish and Wildlife Service (USFWS)

    Western Riverside Regional Conservation Authority (RCA)

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, has consultation begun?** Yes.

    Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

2.1 Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

Aesthetics	Agricultural and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology/Soils/ Paleontological Resources	Greenhouse Gas Emissions	Hazards and 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

2.2 Determination

On the basis of this initial evaluation:

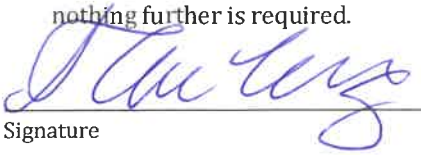
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X 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 to 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 an impact on the environment that is "potentially significant or "potentially significant unless mitigated" but at least one effect (1) 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.



Signature

7-21-2020

Date

Steve King, Planning Director, City of Norco

Printed Name

2.3 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 if 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 offsite as well as onsite, 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, 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 Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "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 #5 below, may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
    a. **Earlier Analysis Used**. Identify and state where earlier analyses 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 that 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, when 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. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. 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 a less-than-significant level.

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?				x
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				x
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?				x
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (California PRC § 21001 (b)). As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to aesthetic resources must be evaluated.

The State Scenic Highways Program (Streets and Highways Code §§ 260 to 263) lists highways that are either eligible for designation as a scenic highway or already are designated as a scenic highway. A highway may be designated as scenic based on the amount of natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view (Caltrans 2017). The Streets and Highway Code stablishes state responsibility for protecting, preserving, and enhancing California's natural scenic beauty of scenic routes and areas that require special scenic conservation and treatment.

Environmental Setting

The existing visual environment in the project area includes recreational resources, single-family residences, open space, and undeveloped land. The existing project site consists of a four-lane roadway (two northbound lanes and two southbound lanes) on Hamner Avenue in the cities of Eastvale and Norco.

The *City of Eastvale General Plan* identifies the goal of maintaining the Santa Ana River corridor as an important resource for open space, recreation, and scenic beauty (Goal OS-4; City of Eastvale 2012:11–4). The Design chapter of the *City of Eastvale General Plan* also identifies the importance of maintaining and enhancing desirable views, and specifically calls out the Santa Ana River as an area of focus. The City of Norco Open Space Element also discusses the following as distinctive land features in Norco: the hills of eastern Norco (approximately 2 miles east of the project site), the Santa Ana River (between the northern and southern project segments), Beacon Hill (adjacent to the southern project segment), and Lake Norconian (approximately 1 mile southwest of the southern project segment). Although not identified as scenic resources, the Santa Ana, San Gabriel, San Bernardino, and San Jacinto mountains are all within the project viewshed.

Hamner Avenue is not identified as a scenic highway. The project is approximately 4 miles north of the segments of I-15 and State Route (SR) 91 that have been determined by Caltrans to be Eligible State Scenic Highways, although neither segment has been officially designated.

Discussion

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

No Impact. Construction activities would introduce heavy equipment and associated vehicles into the viewshed of drivers, residents, and visitors in the project area. The proposed project's general construction activities, construction staging/stockpiling, storage of construction materials, presence of construction equipment, and temporary traffic barricades would result in temporary construction impacts by altering the composition of the viewsheds throughout the project corridor. During the construction period, landscaping, retaining walls, and streetlights would be removed, but would be relocated or replaced prior to the completion of construction activities. Construction activities would be temporary in duration (approximately 4 months) and occur within the transportation ROW or immediately adjacent areas. Only the Santa Ana River and Beacon Hill are near locations where construction activities would be conducted, and views of these resources would not be affected, as equipment would be of limited height and would not change the views of surrounding areas. More distant views of the hills of eastern Norco, Lake Norconian, and surrounding mountain ranges would not be affected by project construction activities.

With respect to long-term project operation, the project would involve the widening of existing roadway segments to the north and south of the Santa Ana River. Landscaping, retaining walls, and streetlights that are currently present in the project corridor would either be replaced in kind or relocated so that no significant change in the visual environment would occur. The Santa Ana River located between the northern and southern project segments is a key visual resource. Given that the project would be implemented approximately one-quarter mile to the north and south of the banks of the Santa Ana River and would involve the widening of an existing roadway, the project would not impair views of the Santa Ana River. The proposed project would not obstruct more distant views (in the middleground and background of any given viewshed) to the mountain ranges that lie north and south, to the hills that lie east and west, or any other visual resources within the project corridor. Although the proposed project may slightly alter the visual composition of views within the project corridor by adding new and/or altered visible elements, the changes would be minor. Therefore, no impacts are expected, and no mitigation measures are required.

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

No Impact. There are no roadways in the project area that are officially designated by state plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds. The proposed project is approximately 4 miles north of the segments of I-15 and SR-91 that have been determined by Caltrans to be Eligible State Scenic Highways, although neither segment has been officially designated

As discussed in the environmental setting, scenic resources identified in the general plans of the cities of Norco and Eastvale include the Santa Ana River, the hills of eastern Norco, Beacon Hill, and Lake Norconian. Short-term construction and long-term operations would occur near the Santa Ana River and Beacon Hill, but given that the modifications to Hamner Avenue would occur within, or immediately adjacent to, the existing ROW, views of these features would not be altered or damaged. Landscaping, retaining walls, and streetlights that are currently present in the project corridor would either be replaced in kind or relocated so that no significant change in the visual environment would occur. Project construction and operation would have no effects on views of the hills of eastern Norco, Lake Norconian, or more distant mountains. Therefore, no impacts on scenic or historic buildings would occur, and no mitigation measures are required.

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?

No Impact. As discussed above, the project area is an existing roadway surrounded by single-family residences and recreational land uses, as well as areas that have not been developed. Project construction activities would involve staging/stockpiling, storage of construction materials, the presence of construction equipment, and temporary traffic barricades. However, construction activities would be minor and temporary in duration and would therefore not substantially degrade the existing visual character or quality of views. During the construction period, landscaping, retaining walls, and streetlights would be removed, but would be relocated or replaced prior to the completion of construction activities. Because the project would involve modification of an existing roadway and would not change surrounding land uses, changes to the existing visual character would not be substantially degraded. As such, no impact would occur.

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

No Impact. The proposed project would not create a new source of substantial light or glare that would negatively affect daytime or nighttime views in the area. Streetlights in the project area would be relocated from their existing locations to accommodate the wider roadway, but changes would be minor, as there is currently a landscaped buffer between the streetlights and adjacent residences. In addition, the existing street lighting extends over the roadway and is focused downward and away from adjacent residences and would continue to be angled in this fashion once relocated. Based on the minor changes in roadway lighting, the project would not create a new source so substantial light or glare that would adversely affect daytime or nighttime views in the area. No impacts are expected, and no mitigation measures are required.

Mitigation Measures

No measures are required.

II. Agricultural and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?				x
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				x
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				x
d. Result in the loss of forest land or conversion of forest land to non-forest use?				x
e. Involve other changes in the existing environment that, 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?				x

Regulatory Setting

CEQA requires analysis of a project to determine whether it would convert agricultural land, Williamson Act contract land, and forest land to other uses.

Environmental Setting

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is Prime Farmland. Areas in and around the project corridor are designated by the FMMP as Urban and Built-Up land (California Department of Conservation 2016). According to the State of California Department of Conservation, no agricultural uses including Prime, Unique, or Farmland of Statewide Importance exist within or immediately adjacent to the proposed project. The area to the east of the southern project segment is zoned for residential agricultural uses in the City of Norco General Plan, and some properties include equestrian facilities. No agricultural preserved zoning or parcels under Williamson Act contracts exist within the project area. No land is zoned for forest land, timberland, or timberland zones. Timberland Production within the project vicinity. In addition, land uses immediately adjacent to the project area are zoned for residential, commercial, and open space use.

Discussion

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 proposed project would widen the existing four-lane Hamner Avenue roadway to six lanes with three 12-foot-wide lanes in each direction. No new permanent ROW would be required. As discussed, no agricultural uses including Prime, Unique, or Farmland of Statewide Importance exist within or immediately adjacent to the proposed project; therefore, no impacts related to the conversion of farmland would occur.

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

No Impact. The proposed project area is not zoned for agricultural uses and is not subject to the provisions of the Farmland Protection Policy Act. In addition, there are no agricultural preserves or parcels under Williamson Act contracts within the project area. Therefore, the proposed project would not conflict with existing zoning for agricultural use or Williamson Act contracts.

c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. As discussed in Item (a), the proposed project would occur within existing ROW. Land uses immediately adjacent to the project area are zoned for residential, commercial, recreation, and open space uses; therefore, no impacts would occur on forest land, timberland, or timberland production.

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

No Impact. The proposed project would not result in the loss or conversion of forest land because there is no forest land within the project area.

e. Involve other changes in the existing environment that, 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. The proposed project would widen Hamner Avenue from four lanes to six lanes from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street/Norco Drive and would not involve changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Mitigation Measures

No measures are required.

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?				X
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?			X	
c. Expose sensitive receptors to substantial pollutant concentrations?			X	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Regulatory Setting

Federal

The Clean Air Act (CAA) was first enacted in 1963, but has been amended numerous times in subsequent years (1967, 1970, 1977, and 1990). The CAA establishes the National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards will be met. The project area is within a basin that is designated as a nonattainment area for certain pollutants that are regulated under the CAA.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect development of the proposed project include Title I (Nonattainment Provisions) and Title II (Mobile-Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. The Riverside County portion of the South Coast Air Basin (Basin), in which the project is located, fails to meet national standards for ozone (O_3) and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$) and therefore is considered a federal nonattainment area for those pollutants.

State

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state. In general, the California standards are more health-protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in attainment with these California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride, but is a nonattainment area for O_3, particulate matter 10 microns or less in diameter (PM_{10}), and $PM_{2.5}$.

Local

The project lies within the Riverside County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County; Los Angeles County, except for the Antelope Valley; the non-desert portion of western San Bernardino County; and the western and Coachella Valley portions of Riverside County. The Basin is a sub-region of the SCAQMD jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, an SCAQMD permitting system designed to allow no net increase in emissions from any new or modified (i.e., previously permitted) emission sources, and transportation control measures. The 2016 AQMP is the most recent plan to be adopted by the SCAQMD Governing Board (adopted on March 3, 2017). The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates future attainment of the 1-hour and 8-hour O_3 NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

In addition to the air quality efforts of SCAQMD, the Southern California Association of Governments (SCAG), which serves as the Metropolitan Planning Organization (MPO) for the six-county southern California region, is mandated to comply with federal and state transportation and air quality regulations. Federal transportation law requires that SCAG develop a Regional Transportation Plan (RTP) for a 20-year minimum period, the most recent of which is the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). SCAG must also develop a Federal Transportation Improvement Program (FTIP) that allocates monies over a 4-year period to implement the RTP. The FTIP must be consistent with the RTP (e.g., projects, scope, implementation schedules). In addition, in the federal nonattainment or maintenance areas, the RTP and FTIP must comply with the transportation conformity requirements of the U.S. Environmental Protection Agency's (EPA) Transportation Conformity Regulations.

To comply with the CAA in achieving the NAAQS, SIPs are required to be developed for federal nonattainment and maintenance areas. In California, SIP development is a joint effort of the local air agencies and the California Air Resources Board (ARB) working with federal, state, and local agencies (including the MPOs). Local AQMPs are prepared in response to federal and state requirements.

The SIP may include two important components relative to transportation conformity requirements—emissions budgets (for all criteria pollutant SIPs) and Transportation Control Measures (TCMs) (for O_3 and CO SIPs only). Emissions budgets set an upper limit, which transportation activities (for SIP purposes motor vehicles are also known as "on-road mobile sources") are permitted to emit. TCMs, required for serious and above O_3 nonattainment areas and serious CO nonattainment areas, are strategies to reduce emissions from on-road mobile sources. The 2016 RTP/SCS must conform to the applicable SIPs (i.e., emissions budgets and TCMs) in the SCAG region.

Environmental Setting

Table 2-1 lists air quality trends in data collected at the Mira Loma monitoring station (ARB ID 33165/EPA AQS 060658005) for the past 3 years. Located approximately 5 miles northeast of the project site, the Mira Loma monitoring station is representative of the project site due to the similar climate, topography, and urban setting. During the 2016 to 2018 monitoring period, exceedances were recorded at the Mira Loma monitoring station for the state 1-hour O_3 standard, state and federal 8-hour O_3 standards, state PM_{10} standards, and state and federal $PM_{2.5}$ standards.

Table 2-1. Air Quality Concentrations for the Past 3 Years Measured at the Mira Loma Monitoring Station (ARB ID 33165/EPA AQS 060658005)

Pollutant	Standard	2016	2017	2018
Ozone				
Max 1-hr concentration		0.140	0.144	0.129
No. days exceeded: State	0.09 ppm	34	41	21
Max 8-hr concentration		0.106	0.111	0.107
No. days exceeded: State	0.070 ppm	70	72	57
Federal	0.070 ppm	65	64	57
Carbon Monoxide				
Max 1-hr concentration		1.9	2.2	2.6
No. days exceeded: State	20 ppm	0	0	0
Federal	35 ppm	0	0	0
Max 8-hr concentration		1.4	2	2.4
No. days exceeded: State	9.0 ppm	0	0	0
Federal	9 ppm	0	0	0
PM_{10}				
Max 24-hr concentration		116.3	111.6	98.9
No. days exceeded: State	50 µg/m^3	25	28	22
Federal	150 µg/m^3	0	0	0
Max annual concentration		45.6	42.8	44.6
Exceeded: State	20 µg/m^3	Yes	Yes	Yes
$PM_{2.5}$				
Max 24-hr concentration		50.9	63.9	89.1
No. days exceeded: Federal	35 µg/m^3	7	10	6
Max annual concentration		14.1	13.6	15.1

Pollutant	Standard	2016	2017	2018
Exceeded: State	12 µg/m^3	Yes	Yes	Yes
Federal	12.0 µg/m^3	Yes	Yes	Yes
Nitrogen Dioxide				
Max 1-hr concentration		0.0649	0.0651	0.0545
No. days exceeded: State	0.18 ppm	0	0	0
Federal	100 ppb	0	0	0
Max annual concentration		0.013	0.013	0.013
Exceeded: State	0.030 ppm	No	No	No
Federal	53 ppb	No	No	No

N/A: Not available due to insufficient data
Sources: CARB 2020; U.S. EPA Air Data 2020.

Sensitive Receptors

On the basis of research showing that the zone of greatest concern near roadways is within 500 feet (50 meters), sensitive receptors within 500 feet (150 meters) have been identified in Table 2-2.

Table 2-2. Sensitive Receptors Located within 500 Feet of the Project Site

Receptor	Location	Distance Between Receptor and Project (feet)
Northern Project Segment		
Single-family residences	West of alignment	Adjacent
SilverLakes Sports and Equestrian Complex	East of alignment	100
Eastvale Community Park	West of northern staging area	100
Southern Project Segment		
Clark Field	East of alignment	Adjacent
Single-family residences	North of staging area	Adjacent
Single-family residences	West of alignment	100
Norco Community Center and Park	West of alignment	200

Source: Google Maps aerial imagery.

Discussion

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

No Impact. A project is considered to conflict with or obstruct implementation of a regional air quality plan if it would be inconsistent with the growth assumptions of the plan. The proposed project is not listed in either the SCAG 2016–2040 RTP/SCS or the 2019 FTIP, as the project would be funded through the Transportation Uniform Mitigation Fee (TUMF) Program administered by the Western Riverside Council of Governments. The project is not required to be programmed in either the FTIP or RTP/SCS because the project is not federally funded nor considered a regionally significant project pursuant to EPA transportation conformity regulations. Although the project is not programmed in either the FTIP or RTP/SCS, the southern project segment is locally identified as an urban arterial in the Circulation Element of the *City of Norco General Plan*, which allows for three travel lanes in each direction. In addition, the northern project segment is identified as a Major

Collector in the Circulation and Infrastructure chapter of the *City of Eastvale General Plan* (City of Eastvale 2012:4-4). Although Collectors are generally defined as having 1 to 3 travel lanes in total (City of Eastvale 2012:4-2), the northern project segment has sufficient roadway width to provide six travel lanes (three in each direction) within the 118-foot maximum ROW designated for a Major Collector. Because the project would not change land uses surrounding the project site and would therefore not increase the development potential of areas surrounding the project site, no new vehicular trips would be generated by the project. During the construction period, all applicable SCAQMD rules will be followed, including Rule 403 (fugitive dust control), Rule 1108 (cutback asphalt), and Rule 1113 (traffic coatings). By complying with SCAQMD rules, the project would be consistent with the AQMP and the SIP, and would therefore not obstruct implementation of applicable air quality plans. As such, no impact would occur.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?

Less-than-Significant Impact.

Construction

Site preparation and construction of the proposed project would involve clearing, cut-and-fill activities, grading, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (i.e., airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include carbon monoxide (CO), nitrogen oxides (NO_X), volatile organic compounds (VOCs), directly emitted PM_{10} and $PM_{2.5}$, and toxic air contaminants, such as diesel exhaust particulate matter. Construction activities may temporarily cause delays that could result in temporary increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated using the latest version of the California Emissions Estimator Model (CalEEMod), version 2016.3.2, which was developed by the California Air Pollution Control Officers Association for the purposes of estimating air pollutant emissions. CalEEMod is specifically recommended by the SCAQMD for modeling emissions in its CEQA guidance and is used for that purpose in this project analysis (SCAQMD 2019).

Construction emissions were estimated for the proposed project using detailed equipment inventories, project construction scheduling information, and other parameters such as material import and export provided by the project design team. Emissions factors in CalEEMod are from the EMFAC2014 and OFFROAD models. Construction-related emissions for the proposed project are presented in Table 2-3. The emissions presented are based on the best information available at the time of analysis. The emissions represent the peak daily construction emissions that would be generated during each phase of construction. As shown therein, no exceedance of SCAQMD's regional significance thresholds would occur during any phase of project construction. Compliance with all applicable SCAQMD rules, including Rule 403 fugitive dust control requirements, would be implemented. As such, impacts would be less than significant.

Table 2-3. Construction-Period Emissions Estimates

	VOC (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Site Preparation	1	11	9	1	< 1
Grading	6	63	46	5	3
Drainage/Utilities/Sub-Grade	3	32	27	1	1
Paving	1	16	17	1	1
Maximum daily	6	63	46	5	3
SCAQMD Regional Significance Threshold	75	550	100	150	55

Emissions of SO_X would be less than one pound per day for each phase of construction.
Source: Calculations by ICF using CalEEMod, version 2016.3.2. See Appendix A.

Operation

Operational emissions take into account long-term changes in emissions due to the project (excluding the construction phase). The operational emissions analysis compares forecasted emissions for existing/baseline (2017) and the project and no project conditions for Opening Year (2023).

Operational emissions of criteria pollutants and their precursors would occur as a result of the changes in roadway operations resulting from project implementation. In addition, operational emissions are affected over time by changes in circulation patterns, population growth, and reductions in per-vehicle emissions as older, less efficient vehicles are retired and replaced by cleaner vehicles. Estimates of emissions are based on data developed using an approved traffic microsimulation model, and vehicle volumes were converted to a project area measure of vehicle miles traveled (VMT). The VMT data were then used as the input into the CT-EMFAC2017 model, which provides an estimate of emissions (Table 2-4).

As shown in Table 2-4, emissions of criteria pollutants and their precursors would be marginally higher under the Build Alternative (i.e., the proposed project) relative to no-build or no-project conditions at Opening Year 2023. Although there would be marginal increases in emissions under the Build Alternative relative to the No-Build Alternative at the 2023 Opening Year, these differences in emissions would not be substantial and would not exceed SCAQMD's regional significance thresholds. Therefore, operational impacts related to the potential of the project to violate any air quality standard or contribute substantially to an existing or projected air quality violation would be less than significant. No mitigation for long-term operations is required.

Table 2-4. Operational Emissions Estimates

	VOC (lbs/day)	CO (lbs/day)	NOX (lbs/day)	PM_{10} (lbs/day)*	$PM_{2.5}$ (lbs/day)*
2017 Baseline (Existing Conditions)	19	240	44	45	9
2023 Opening Year No-Build Alternative	13	142	24	46	9
2023 Opening Year Build Alternative	13	143	24	46	9
2023 Opening Year Net Emissions (Build – No Build)	< 1	2	< 1	< 1	< 1
SCAQMD Regional Significance Thresholds	55	550	55	150	55

Source: Emissions estimates by ICF 2020 using CT-EMFAC2017. See Appendix A.

* Includes re-entrained road dust.

Emissions of SO_X would be negligible based on the use of ultra-low sulfur diesel and gasoline.

VMT data used for the purposes of estimating operational emissions are based on vehicle volumes projected in the traffic analysis conducted for the bridge replacement project (ADVANTEC Consulting Engineers 2017). Although VMT is greater under the Build Alternative than under the No-Build Alternative, the increase in VMT reflects the increased travel in the project corridor alone, and does not account for reductions in volumes elsewhere resulting from traffic redistribution. The increase in VMT and emissions does not signify new trip generation would result from the project implementation. The proposed project would not change land uses in the project vicinity, and would therefore not generate new trips. Emissions were estimated using project-specific VMT with projected average vehicle speed data input into CT-EMFAC2017.

c. Expose sensitive receptors to substantial pollutant concentrations?

Construction

During the construction period, localized emissions of air pollutants would be generated from construction equipment use, on-site material movement, and other construction activities. Table 2-5 shows estimated maximum on-site pollutant emissions during each phase of construction. As shown, no exceedances of any localized significance thresholds would occur during any phase of construction.

Table 2-5. On-Site Construction Emissions

	NO_X (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Site Preparation	11	9	< 1	< 1
Grading	62	44	4	3
Drainage/Utilities/Sub-Grade	32	27	1	1
Paving	14	16	1	1
Maximum Daily On-Site Emissions	62	44	4	3
SCAQMD Localized Significance Threshold [a]	216.8	1,335.9	9.0	6.3
Exceed Significance Threshold?	No	No	No	No

Source: Emissions estimates by ICF 2020 using CalEEMod, version 2016.3.2. See Appendix A.

[a] Localized significance threshold based on linear interpolation for a 3.5-acre site with 25-meter receptor distance in Source Receptor Area 22 (Norco/Corona).

As discussed in Item (a) above, construction of the proposed project would result in the short-term generation of pollutants, and these pollutants would be generated in the vicinity of sensitive receptors identified in Table 2-2. However, given the linear nature of the project, construction activities would proceed in a linear manner and would not be localized at any given location near sensitive receptors for a substantial period of time. Thus, construction activities would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

Operation

Criteria and Ozone Precursor Pollutants

As shown in Table 2-4, the proposed project would result in marginal increases in emissions of criteria and ozone precursor pollutants associated with increased traffic volumes along Hamner Avenue. However, this increase in emissions would occur over the entire project alignment and would not be concentrated at any individual location along the alignment. The potential for CO and PM hotspots are discussed below.

Carbon Monoxide Hotspot Analysis

The CO Protocol was developed for project-level conformity (i.e., hot-spot) analysis and was approved for use by the U.S. EPA in 1997. It provides qualitative and quantitative screening procedures, as well as quantitative (i.e., modeling) analysis methods to assess project-level CO impacts. The qualitative screening step is designed to avoid the use of detailed modeling for projects that clearly cannot cause a violation, or worsen an existing violation, of the CO standards. Although the protocol was designed to address federal standards, it has been recommended for use by several air pollution control districts in their CEQA analysis guidance documents and should also be valid for California standards because the key criterion (i.e., 8-hour concentration) is similar: 9 parts per million (ppm) for the federal standard, and 9.0 ppm for the state standard. As such, the CO Protocol qualitative screening analysis approach has been used herein.

Total intersection approach volumes under the Build Alternative would not exceed the maximum total intersection approach volume for peak periods identified for the regional intersections used in SCAQMD's CO attainment demonstration in 2003. In addition, the project area has had an 8-hour CO background concentration of no greater than 2.4 ppm in the last 3 years, compared to an 8-hour background concentration of 7.8 ppm used for the 2003 attainment demonstration analysis. In addition, the aggregated CO emission factor for vehicles operating in Riverside County at opening year 2023 is projected to be 0.78 grams/mile. This compares to CO emission factor of up to 7.98 grams/mile used for the 2003 AQMP attainment demonstration. Relative to the 2003 attainment demonstration intersections, the project area would have lower vehicle volumes, lower background CO concentrations, and lower CO emissions under the project scenario. As such, the proposed project is not expected to result in a new or more severe exceedance of either the NAAQS or CAAQS.

Particulate Matter Hotspot Analysis

In November 2015, the U.S. EPA released an updated version of Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas (Guidance) for quantifying the local air quality impacts of transportation projects and comparing them to the PM NAAQS (75 *Federal Register* [FR] 79370). The Guidance requires a hot-

spot analysis to be completed for a project of air quality concern (POAQC). The final rule in 40 CFR 93.123(b)(1) defines a POAQC as:

(i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;

The proposed project involves a change in the capacity of Hamner Avenue to the north and south of the Santa Ana River, but would not involve a new or expanded highway. Hamner Avenue is a local roadway adjacent to I-15. The project would not change surrounding land uses such that a significant increase in diesel vehicles would result.

(ii) Projects affecting intersections that are at Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

Several intersections in the project vicinity would operate at LOS D, E, or F under the Build and No-Build Alternatives at both Opening Year 2023. However, all intersections would operate at the same LOS or better under the Build Alternative relative to the No-Build Alternative. At these intersections and other study area intersections, volume increases would not be substantial and the increases in volumes are not expected to include significant increases in diesel truck traffic, as land uses in the project vicinity are almost entirely residential or small-scale commercial.

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

The proposed project has no bus or rail terminal component, nor does it affect any bus terminals or transfer points.

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

The proposed project would not expand any bus terminal, rail terminal, or related transfer point that would increase the number of diesel vehicles congregating at any single location.

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the $PM_{2.5}$ and PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project site is not in and would not affect locations, areas, or categories of sites that are identified in a PM_{10} or $PM_{2.5}$ implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

Although project operation would involve emissions of pollutants in the project vicinity, the project would not create PM hotspots that would result in exposure of sensitive receptors to substantial pollutant concentrations.

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

Less-than-Significant Impact. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site. Such odors would be quickly dispersed below detectable thresholds as distance from the site increases. Project operation would

not create objectionable odors. Therefore, impacts from objectionable odors during construction would be less than significant.

Mitigation Measures

No measures are required. Compliance with standard requirements, such as SCAQMD Rule 403, would be implemented.

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?		X		
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?				X
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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?		X		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
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?		X		

Information in this section is based on the April 2020 *Biological Technical Report* prepared for the project (see Appendix B).

Regulatory Setting

Federal

The federal laws listed below were considered during evaluation of the biological resources in the biological study area (BSA). Note that this is not an exhaustive list of all federal laws that may be applicable to the project.

Clean Water Act Section 404

The discharge (temporary or permanent) of dredged or fill material into waters of the U.S. (WoUS), including wetlands, typically requires authorization from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA).

USACE-regulated activities under Section 404 of the CWA involve the discharge of dredged or fill material. These include, but are not limited to, grading, placing riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material in WoUS. Activities that generally do not involve a regulated discharge—if performed specifically in a manner to avoid discharges—include driving pilings, some drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

Clean Water Act Section 401

Under Section 401 of the CWA, any project activities that involve a discharge to WoUS will comply with the applicable provisions of the CWA. The Regional Water Quality Control Board (RWQCB) regulates, at the state level, all activities that are regulated at the federal level by USACE. Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), the RWQCB regulates all such activities as well as dredging, filling, or discharging materials into waters of the state (WoS) that are not regulated by USACE because of a lack of connectivity with a traditional navigable water and/or the lack of an ordinary high water mark (OHWM).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests and the abandonment of nests occupied by migratory birds during the breeding season.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) provides guidance for the conservation of endangered and threatened species and the ecosystems on which they depend. Section 7 of the FESA requires federal agencies, in consultation with and with assistance from the Secretary of the Interior, to ensure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modifications of critical habitat for these species.

If it is determined that the project would affect listed species, compliance with Section 7 of the FESA will be necessary. In addition, the project must be consistent with the terms and conditions of the MSHCP (Dudek 2003) and its Implementation Agreement. Any reasonable and prudent measures included under the terms and conditions of a FESA Biological Opinion would be consistent with the implementation measures of the MSHCP and its Implementation Agreement.

State Laws and Regulations

The state laws and regulations listed below were considered during evaluation of the biological resources in the BSA. Note that this is not an exhaustive list of all state laws and regulations that may be considered.

California Fish and Game Code, Sections 1600–1616

Under the current California Fish and Game Code (FGC), Sections 1600–1616, the CDFW has authority to regulate work that would substantially divert or obstruct the natural flow—or substantially change or use any material from the bed, channel, or bank—of any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement (LSAA) and is applicable to all projects involving state or local government discretionary approvals.

Porter-Cologne Water Quality Control Act

Under Porter-Cologne, the State Water Resources Control Board and RWQCBs assert jurisdiction over many discharges into WoS. Where resources are subject to both state and federal regulations, Porter-Cologne compliance is coordinated with CWA Section 401 certification. Jurisdiction includes those water features having an OHWM, as well as features not regulated by USACE because of a lack of connectivity with a traditional navigable water and/or lack of an OHWM.

California Endangered Species Act

The California Endangered Species Act (CESA) established the state's policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies do not approve projects that would jeopardize the continued existences of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under CESA. For projects that affect both a state and federally listed species, compliance with FESA would satisfy CESA if CDFW determines that the federal incidental take authorization is consistent with CESA under CFG Code Section 2080.1. For projects that would result in take of a state-only listed species, the lead agency must apply for a take permit under Section 2081(b). In addition, the proposed project must be consistent with the terms and conditions of the MSHCP and its Implementation Agreement. Any reasonable and prudent measures included under the terms and conditions of a CESA permit would be consistent with the implementation measures of the MSHCP and its Implementation Agreement.

California Fish and Game Code, Sections 3503, 3503.5, 3505, 3800, 3801.6

CFG Code Sections 3503, 3503.5, 3505, 3800, and 3801.6 protect native birds, birds of prey, and nongame birds, including eggs and nests, that occur naturally in the state and are not already listed as fully protected.

Local Regulations

The local regulations listed below were considered during evaluation of the biological resources in the BSA. Note that this is not an exhaustive list of all local regulations that may be considered.

County of Riverside Oak Tree Management

Riverside County's oak tree management guidelines are intended to provide long-term protection and conservation of oak trees and oak woodlands and provide guidance on establishing baseline oak tree data to develop adequate avoidance, minimization, and/or compensation for impacts on this natural resource.

Western Riverside County Multiple Species Habitat Conservation Plan

The project involves an existing facility and therefore is a Covered Activity within the MSHCP boundaries of the Eastvale Area Plan (Subunit 1: Santa Ana River – Central) and the Cities of Riverside/Norco Area Plan (Subunit 1: Santa Ana River – South) (Dudek 2003). Portions of the BSA overlap with the following MSHCP resources (Figures 7a and 7b, Appendix A of the *Biological Technical Report*):

- Criteria Cells 786 and 876
- Public/Quasi-Public (PQP) conserved lands (Object ID 605 and 553) (within the study area buffer only; does not overlap with the project limits of disturbance)
- Existing Core A (within the study area buffer only; does not overlap with the project limits of disturbance)
- MSHCP Narrow Endemic Survey Area 7: San Diego ambrosia, San Miguel savory, Brand's phacelia
- MSHCP Burrowing Owl Survey Area

Environmental Setting

The BSA lies within an existing developed area. The Eastvale Community Park, SilverLakes Sports Complex, and residential development occur within the Schleisman Road to Citrus Street Segment of the BSA and residential development, commercial development, and public facilities (e.g., Norco Public Library) occur within the Detroit Street to Sixth Street/Norco Drive Segment of the BSA. The Santa Ana River, an open area with native riparian habitat, occurs between the two segments. Land uses within the area include dense residential and commercial development, disturbed open areas, community parks, conservation lands, and public infrastructure. Public lands include the roadways, existing state ROW, community parks, and the Santa Ana River and adjacent open space, with the remainder of the BSA composed of private lands associated with residential development and open space.

The BSA is located within the Corona North USGS 7.5-minute topographic quadrangle at an approximate elevation range between 580 and 680 feet. The topography within the BSA is relatively flat, with graded developed areas and disturbed open areas surrounding the floodplains of the Santa Ana River. The BSA bisects the Santa Ana River, a part of the Santa Ana River Watershed that covers 2,800 square miles and drains through San Bernardino, Riverside, and Orange counties before emptying into the Pacific Ocean. The portion of the Santa Ana River within the BSA is unconfined with an active floodplain and historical floodplain. It has earthen banks and channel bottom with the exception of the western portion of the north bank, where rock riprap armoring is present. The banks and terraces of the river are composed of sand, loamy sand, and sand clay loam and appear easily erodible. Soils in the BSA are all generally sandy and associated with the alluvial fan geology that extends from the San Bernardino Mountains to the north, down to the project site.

Vegetation Communities/Land Use Types

The BSA is composed primarily of developed and disturbed areas adjacent to Hamner Avenue. Four vegetation communities that are grouped as riparian/riverine resources occur within the BSA outside of the project limits of disturbance; three of which are classified as depleted natural communities and habitats of concern by CDFW (Fremont Cottonwood Forest/Black Willow Thickets,

Mulefat Thickets, California Bulrush Marsh; CDFW 2019b). Each community is listed in Table 2-6, along with its acreage in the BSA (refer to Figure 4 in Appendix A of the *Biological Technical Report* for an illustration of the vegetation community locations in the BSA and Appendix C of the *Biological Technical Report* for representative photos of vegetation communities).

Table 2-6. Vegetation Communities/Land Use Types within the BSA

Vegetation Community/Land Use	Acres
Developed	157.92
Ruderal	10.36
Annual Brome Grasslands	0.91
Fremont Cottonwood Forest/Black Willow Thickets	11.43
Mulefat Thickets	0.06
California Bulrush Marsh	0.52
Open Water	0.77
Total	181.97

Common Plants and Wildlife

A total of 16 plant species were identified within the BSA during the 2019 field surveys. Most of these plant species are nonnative forbs and grasses and are common within the BSA vicinity. Appendix D of the *Biological Technical Report* provides a list of all plant species observed within the BSA during the habitat assessment.

Ten species of wildlife were detected within the BSA, the majority of which were birds (8), followed in species richness by reptiles (1) and mammals (1). Most of the wildlife observed are common species that have adapted to and thrive in areas with human-made habitats or disturbances. Appendix E of the *Biological Technical Report* provides a list of all wildlife species observed within the BSA during field surveys.

Special-Status Plants

A literature review determined that 10 special-status plant species may potentially occur within the BSA. Three of these species are listed as federally and/or state threatened and/or endangered: San Diego ambrosia, thread-leaved brodiaea (*Brodiaea filifolia*), and Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*). The BSA supports marginally suitable habitat for one special-status plant species. Nine of the ten special-status plants identified in the literature review were determined to be absent due to a lack of suitable habitat, range constraints, or absence during focused rare plant surveys conducted during the appropriate blooming period. No special-status plant species were observed within the BSA during biological reconnaissance and focused rare plant surveys. Special-status plant species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed in Table 5 of the *Biological Technical Report*.

Special-Status Wildlife

A literature review determined that 25 special-status wildlife species may potentially occur within the BSA. Eleven of these species are federally and/or state-listed candidate, endangered, or threatened: Crotch bumble bee (*Bombus crotchii*), Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), Santa Ana sucker (*Catostomus santaanae*), steelhead trout (*Oncorhynchus*

mykiss irideus), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), California black rail (*Laterallus jamaicensis coturniculus*), coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), and Stephens' kangaroo rat (*Dipodomys stephensi*). The BSA supports suitable to marginally suitable habitat for several special-status wildlife species. Twelve of the 25 special-status wildlife species identified in the literature review were determined to be absent due to a lack of suitable habitat or absence of sign during surveys. Four were determined to have potential to occur within the BSA. The remaining nine special-status wildlife species were determined to have potential habitat present within the Santa Ana River portion of the BSA outside of the project footprint, including the federally listed threatened Santa Ana sucker and the federally and state-listed endangered least Bell's vireo and southwestern willow flycatcher. Special-status wildlife species and their habitat requirements, regulatory status, and potential for occurrence within the BSA are detailed in Table 5 of the *Biological Technical Report*.

Burrowing Owl

All potentially suitable habitat to support burrowing owl within the BSA was examined during the habitat assessment in August 2019. Following the habitat assessment and burrow survey, four subsequent protocol burrowing owl surveys were conducted in August and September 2019 in areas throughout the BSA that contained suitable burrows and the potential to support burrowing owl (Figure 6, Appendix A of the *Biological Technical Report*). Potential suitability of burrows ranged from collapsed, too small, and covered with debris (e.g., leaves, trash, rocks) to high quality, open and clear burrows (Photos 9–11, Appendix C of the *Biological Technical Report*). The majority of the burrows were located on slopes between Hamner Avenue and the surrounding public parks, within the parks themselves, and within the vacant lot along Taft Street between Hamner Avenue and Old Hamner Avenue. Most of the burrows were either lacking vegetation or surrounded with maintained weedy vegetation, although some were surrounded by unmaintained, tall, weedy vegetation. California ground squirrel activity was high at the time of the habitat assessment and protocol surveys. Foraging habitat in the form of public maintained parks surrounds the burrow locations, except for the Santa Ana River floodplain, which has very tall riparian habitat. No burrowing owls or their sign were observed during the 2019 field surveys. The closest documented burrowing owls are located approximately 3 to 6 miles to the north, west, south, and east within agricultural lands, dairy farms, ruderal areas along flood control channels, and the Riverside Municipal Airport. The closest record of occurrence is approximately 2.5 miles to the west, but it has recently been extirpated by residential development (CDFW 2019a). Because neither burrowing owl nor its sign was observed during protocol surveys, it is considered absent from the BSA.

Riparian Birds

Three listed riparian bird species are reported to occur within the USGS Corona North 7.5-minute topographic quadrangle, which includes the BSA: least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo (Appendix B of the *Biological Technical Report*; CDFW 2019a, USFWS 2020).

The habitat assessment for these species was conducted on April 26, 2019, and concluded that there is no suitable riparian habitat to support these species within the project footprint. However, there is suitable habitat for least Bell's vireo within the adjacent Fremont Cottonwood Forest/Black Willow Thickets located along the Santa Ana River within the BSA buffer for the north staging area outside of the project footprint, and this species is known to nest in the area. Protocol surveys

performed for the Bridge Replacement Project, portions of which overlap with the BSA for this project, documented one nesting territory within the 500-foot buffer for this project in the southern boundary in the strip of riparian habitat to the east of Hamner Avenue between the street and dirt lot (ICF 2018). Surveys found that least Bell's vireo attempted nesting in that location, but the territory was ultimately abandoned. Seven other territories were documented in the surrounding area, all of which were assumed or confirmed to be nesting in 2017. As such, least Bell's vireo is assumed to be present within the riparian habitat portions of the BSA for the north staging area outside of the project limits of disturbance.

Southwestern willow flycatcher and western yellow-billed cuckoo were determined to have an "absent" potential for occurrence within the BSA. Potential habitat to support southwestern willow flycatcher occurs within the riparian portions of the BSA outside the project footprint, but this species was determined to be absent based on 2017 protocol surveys performed for the Bridge Replacement Project. The closest records of occurrence within the area are approximately 4.5 miles downstream of the BSA within the Prado Reservoir from the late 1980s and early 1990s. No nearby records of occurrences have been reported within the last 20 years (CNDDB 2019). Suitable nesting habitat for western yellow-billed cuckoo does not exist within the BSA. The portion of the Santa Ana River within the BSA is too narrow and lacks large enough stands of riparian habitat to support this species, which requires large nesting territories. The closest suitable riparian habitat for this species exists within the Prado Reservoir, approximately 3.5 miles downstream of the BSA, where the species has not been known to nest for the last several years (CNDDB 2019). As such, no further surveys are necessary to determine presence or absence of southwestern willow flycatcher or western yellow-billed cuckoo.

In addition, two nonlisted special-status riparian birds (i.e., yellow warbler [*Setophaga petechia*] and yellow-breasted chat [*Icteria virens*]) were observed during 2017 field surveys for the Bridge Replacement Project. Both species were presumed nesting within the riparian habitat along the Santa Ana River, based on their continued presence throughout the 3 months of the 2017 least Bell's vireo surveys (ICF 2018).

Federal and State Jurisdictional Resources

No potentially jurisdictional aquatic resources occur within the aquatic resources study area (i.e., project limits of disturbance plus 100-foot buffer). As such, a jurisdictional delineation was not performed for the project.

Conservation Lands

Critical Habitat

Based on a review of the USFWS Critical Habitat mapper (USFWS 2019), the BSA occurs within USFWS designated critical habitat for least Bell's vireo and Santa Ana sucker (Figure 9, Appendix A of the *Biological Technical Report*). However, the project site is composed entirely of developed and ruderal land cover types, and no critical habitat containing physical and biological features (PBFs) is present within the project limits of disturbance. The only critical habitat containing PBFs for either species within the BSA is located along the Santa Ana River floodplain, outside of the project footprint.

Western Riverside County Multiple Species Habitat Conservation Plan

The project involves an existing facility and therefore is a Covered Activity within the MSHCP boundaries of the Eastvale Area Plan (Subunit 1: Santa Ana River – Central) and the Cities of Riverside/Norco Area Plan (Subunit 1: Santa Ana River – South) (Dudek 2003). The Schleisman Road to Citrus Street Segment occurs within portions of Criteria Cell 786 and the Detroit Street to Sixth Street/Norco Drive Segment occurs within portions of Criteria Cell 876. PQP conserved lands (Object ID 605 and 553) and Existing Core A is present within the BSA outside of the project limits of disturbance along the Santa Ana River (Figures 7a and 7b, Appendix A of the *Biological Technical Report*).

Portions of the project also occur in the following MSHCP survey areas (Figure 7a, Appendix A):

- Narrow Endemic Survey Area 7: San Diego ambrosia, San Miguel savory, Brand's phacelia
- Burrowing Owl Survey Area

Although survey areas for least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo are not required by the MSHCP, if potential habitat is present and potential direct and/or indirect effects could occur, then focused surveys would be necessary. Because no riparian habitat is present within the project limits of disturbance or adjacent areas, focused surveys were not performed for this project. However, riparian bird habitat assessments and focused surveys for least Bell's vireo and southwestern willow flycatcher were performed for the Bridge Replacement Project.

A full review of potential riparian/riverine and vernal pool resources was also performed for the project, as required by the MSHCP. No vernal pool resources or suitable habitat to support fairy shrimp are present within the BSA. Approximately 12.78 acres of riparian/riverine resources (i.e., Fremont Cottonwood Forest/Black Willow Thickets, Mulefat Thickets, California Bulrush Marsh, and Open Water) are present outside of the project limits of disturbance within the buffer of the northern staging area within the Santa Ana River floodplain and earthen flood-control channel on the west side of Hamner Avenue (Figure 7b, Appendix A of the *Biological Technical Report*).

National Marine Fisheries Service

The proposed project is located in the Corona North quadrangle, which is within the National Marine Fisheries Service (NMFS) jurisdictional boundary. A query of the California NMFS Species List Tool for this project indicates that the Corona North quadrangle possibly contains NMFS resources for steelhead, Southern California Coast Distinct Population Segment (federally listed as endangered; NMFS-WCRC 2019). However, none of the species under the jurisdiction of NMFS are listed on the USFWS Official Species List generated for the project, including steelhead (Appendix B of the *Biological Technical Report*; USFWS 2020). The USFWS Official Species List will generally include anadromous fish and sea turtles, both of which are under the jurisdiction of NMFS, if potential NMFS resources are present. For this reason, a NMFS species list was not obtained from NMFS for the project, and NMFS species would not be affected.

Discussion

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 Impact with Mitigation Incorporated. The following sections discuss the potential for impact on special-status plans and wildlife.

Special-Status Plants

Ruderal and Annual Brome Grasslands habitat are the only vegetation community/land cover type within the rare plant study area (i.e., project limits of disturbance plus 100-foot buffer) that have a potential to support special-status plant species (the riparian habitat within the project BSA occurs outside of the rare plant survey area). No federally and/or state threatened and/or endangered plant species have a potential to occur within the BSA. One non-listed special-status plant species (i.e., paniculate tarplant [*Deinandra paniculata*]) has a potential to occur within the rare plant study area. However, the habitat is of marginal quality due to a dominance of nonnative, invasive plant species; no quality scrub or grassland habitats exist within the rare plant study area. In addition, the majority of the patches of Ruderal and Annual Brome Grasslands habitat occur along Hamner Avenue and are disked regularly for roadside maintenance, so potential to occur is low. Furthermore, no special-status plant species were detected within the rare plant study area during the focused rare plant survey. Consequently, special-status plant species are considered absent from the rare plant study area, and no further surveys are necessary (see Table 5 of the *Biological Technical Report*; CDFW 2019a; CNPS 2019).

Special-Status Wildlife

One federally and state-listed endangered wildlife species, least Bell's vireo, and six non-listed special-status wildlife species (i.e., burrowing owl, yellow warbler, yellow-breasted chat, California western mastiff bat [*Eumops perotis californicus*], western yellow bat [*Lasiurus xanthinus*], and pocketed free-tailed bat [*Nyctinomops femorosaccus*]) have a potential to occur within the BSA and could potentially be affected by the project; these species are discussed in the subsections below. Two federally and state-listed riparian bird species, southwestern willow flycatcher and western yellow-billed cuckoo, were determined to be absent during the habitat assessment and field surveys; these species are discussed below. In addition, four special-status wildlife species (i.e., Santa Ana sucker, arroyo chub [*Gila orcuttii*], southern California legless lizard [*Anniella stebbinsi*], and tricolored blackbird [*Agelaius tricolor*]) have a potential to occur within the 500-foot BSA buffer for the northern staging area, which is currently regularly utilized. However, suitable habitat to support these species only exists outside of the project limits of disturbance within the Santa Ana River floodplain (see Figure 4, Appendix A of the *Biological Technical Report*). They do not have any potential to occur within or near the project limits of disturbance where construction activities would occur. The staging area would only be used for parking construction equipment and vehicles when not in use, and the area is already used as a parking lot for the SilverLakes Sports Complex, so project use of the area would not be substantially different from existing conditions. As such, neither these species nor their suitable habitat would be affected by the staging area, and thus, they are not discussed further. The remaining 12 special-status wildlife species were found to have no potential to occur or to be absent within the BSA at the time of field surveys; no further studies are recommended, and these species are not discussed further (see Table 5 of the *Biological Technical Report*; CDFW 2019a; USFWS 2020).

Burrowing Owl

Burrowing owl was not observed during protocol surveys within the BSA. As a result, the project would have no impacts on burrowing owl. However, although no burrowing owls were observed within the BSA, they could subsequently inhabit the BSA in areas that were previously determined to be unoccupied. Mitigation Measure (MM) BIO-1, below, would ensure there is no direct mortality of any burrowing owls and minimize potential impacts during construction should this species be present.

Riparian Birds

The habitat assessment concluded that suitable habitat for least Bell's vireo was present in the riparian habitat within the BSA and that the species is known to nest in the area (ICF 2018). In addition, other riparian bird species have a potential to nest in the portions of the BSA containing riparian habitat outside of the project limits of disturbance (e.g., yellow warbler, yellow-breasted chat).

No riparian habitat occurs within the project limits of disturbance. As such, no clearing of riparian vegetation would occur and no injury or mortality of individual least Bell's vireo or other riparian birds are expected as a result of construction activities. Because the only riparian habitat within the BSA is located adjacent to the northern staging area, which is a parking lot buffered by an access road along the eastern edge, and no ground disturbance would occur, no edge effects or degradation of riparian habitat and/or water quality are anticipated. However, should any individuals be nesting within the riparian habitat adjacent to the staging area, then temporary direct impacts from noise disturbances and increased human presence could occur. If nighttime construction occurs, and equipment is being moved in and out of the staging area during nighttime hours, then least Bell's vireo nesting in the area could be disturbed by night lighting. The direct effects from increased noise levels and night lighting could result in habitat avoidance and nest abandonment. However, implementation of MM BIO-2 through BIO-4 would minimize potential impacts on least Bell's vireo or other riparian birds occurring adjacent to the project limits.

Nesting Birds

All developed and undeveloped portions of the BSA contain suitable nesting habitat (e.g., mature trees, shrubs) for a variety of avian species including, but not limited to, those species observed during the habitat assessment (Appendix E of the *Biological Technical Report*). Nesting bird surveys should be conducted prior to the start of any project construction during the nesting bird season (February 1–September 1), as specified in MM BIO-5.

Special-Status Bats

Potential roosting habitat for special-status bats occurs within the mature trees located along Hamner Avenue and within the Santa Ana River floodplain. If trimming or removal of trees is required as a part of the project, and should any bats be present at the time, then they could be injured or killed. In addition, construction activities could deter bats from foraging within the BSA due to construction-related disturbances, including noise from heavy equipment. However, these temporary impacts would be short term in nature. MMs BIO-6 and BIO-7 below would ensure that no direct take of bat species would occur.

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?

No Impact. No riparian habitat occurs within the project limits of disturbance. As such, no clearing of riparian vegetation would occur. The project would result in permanent and temporary impacts to land use types within the study area through disturbance and/or removal of existing vegetation (see Table 2-7). The project would permanently remove and temporarily disturb Developed, Ruderal, and Annual Brome Grasslands vegetation communities and land use types from the BSA; no native vegetation communities would be affected. Permanent impacts may include the removal of existing vegetation and encroachment into the vegetation communities that may have permanent effects. Temporary impacts may include incidental disturbances within construction areas, equipment staging, and temporary construction access routes.

Table 2-7. Impacts to Vegetation Communities/Land Use Types within the BSA

Vegetation Community/Land Use	Temporary (acres)	Permanent (acres)
Developed	6.38	6.96
Ruderal	3.58	--
Annual Brome Grasslands	0.02	0.04
Fremont Cottonwood Forest/Black Willow Thickets	--	--
Mulefat Thickets	--	--
California Bulrush Marsh	--	--
Open Water	--	--
Total	9.98	7.00

-- = no impact

Three sensitive vegetation communities as defined by CDFW occur within the project vicinity: Fremont Cottonwood Forest/Black Willow Thickets, Mulefat Thickets, and California Bulrush Marsh (CDFW 2019b; Holland 1986). None of these sensitive vegetation communities exist within the project footprint; as such, no direct impacts would occur (see Table 2-7). In addition, because the only sensitive vegetation communities within the BSA are located adjacent to the northern staging area, which is a gravel parking lot, and no ground disturbance would occur, no indirect edge effects or degradation of these communities are anticipated. Additionally, avoidance and minimization measures that are non-specific to biological resources, such as Best Management Practices (BMPs), Hazardous Business Materials Plan, and a Stormwater Pollution Prevention Plan (SWPPP), will be included in the construction contract documents. These additional measures, although not specific to biological resources, would help reduce any potential indirect impacts on vegetation communities and land cover types within the BSA, including dust control, measures to reduce fire risk, erosion, and runoff control, pollution prevention, and containment of trash and litter.

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

No Impact. No potentially jurisdictional aquatic resources occur within the project area (i.e., project limits of disturbance plus 100-foot buffer). Therefore, no effects on state or federally protected wetlands would occur.

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 Impact with Mitigation Incorporated. The Santa Ana River, located to the north and south of the project segments, functions as a wildlife movement corridor that provides year-round water, cover, and connections to open space in the surrounding region. However, given that the Santa Ana River is more than one-quarter mile from each of the project segments and that no construction or operational activities associated with the project would affect the function of the Santa Ana River as a wildlife corridor, no effects on wildlife movement are anticipated. As discussed in Item (b), above, all developed and undeveloped portions of the BSA contain suitable nesting habitat (e.g., mature trees, shrubs) for a variety of avian species including, but not limited to, those species observed during the habitat assessment (Appendix E of the *Biological Technical Report*). With nesting bird surveys conducted prior to the start of any project construction during the nesting bird season (February 1–September 1), as specified in MM BIO-5, impacts would be less than significant related to migratory birds.

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

No Impact. The proposed project would not conflict with any local policies or ordinances protecting biological resources. Because no oak trees were observed within the BSA, the County of Riverside Oak Tree Management Guidelines is not applicable to the project.

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 Impact with Mitigation Incorporated. In compliance with the MSHCP, habitat assessments were performed for riparian/riverine resources, vernal pools and fairy shrimp habitat, Narrow Endemic plant species, and burrowing owl. Based on survey results, suitable habitat was found to be present for Narrow Endemic plant species, least Bell's vireo, southwestern willow flycatcher, and burrowing owl, and focused surveys for these species were conducted; surveys were consistent with MSHCP requirements.

No MSHCP conservation lands occur within the project limits of disturbance, and none would be affected by the project (Figures 7a and 7b, Appendix A of the *Biological Technical Report*). No construction activities would be performed within or near PQP lands, Existing Core A, riparian/riverine resources, or portions of Criteria Cells containing lands intended for preservation. The only project activity located adjacent to MSHCP conservation lands is the proposed staging area for the Schleisman Road to Citrus Street Segment (Figures 7a and 7b, Appendix A of the *Biological Technical Report*). Because this staging area is a gravel parking lot and would only be used for storing construction equipment and vehicles when not in use, no direct or additional indirect impacts would occur because this area is already used to park vehicles. Thus, project activities

would not conflict with MSHCP conservation goals. The project site does not provide long-term conservation value for any MSHCP plant or wildlife species, including Covered Species or Criteria Area species, and none were detected within the BSA during field surveys, with the exception of least Bell's vireo, during 2017 surveys for the Bridge Replacement Project, which would not be affected by the project with the implementation of avoidance and minimization measures. No vernal pools or suitable habitat for fairy shrimp occur within the BSA. With the implementation of avoidance and minimization measures, the project would avoid impacts on all MSHCP resources and conservation lands and would be fully consistent with MSHCP requirements (Volume I, Sections 3.2.3, 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.1, 7.5.2, and 7.5.3, and Appendix C of the MSHCP document [Dudek 2003]). A Public Projects Joint Project Review Form documenting project consistency with the MSHCP will be prepared and submitted to RCA, USFWS, and CDFW to provide concurrence that the project is fully consistent with MSHCP requirements.

Mitigation Measures

The following measures would be implemented as part of the project.

BIO-1: A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities to ensure that no owls have colonized the site in the days or weeks preceding construction. If burrowing owls have colonized the project site prior to the initiation of construction, the project proponent will immediately inform the Western Riverside RCA and the wildlife agencies and coordinate further with RCA and the wildlife agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan. That plan would be subject to the review and approval of the RCA and wildlife agencies prior to initiating ground disturbance. Potential measures may include establishing an avoidance buffer around active burrows, eliminating potential unoccupied burrows, and/or passive relocation.

BIO-2: Prior to any construction activities occurring adjacent to least Bell's vireo foraging and breeding habitat areas during the breeding season (March 15–September 15), a qualified biologist will conduct preconstruction nesting surveys within three days prior to construction activities to identify the locations of any individual least Bell's vireo. If nesting activities or active nests are discovered within the riparian habitat directly adjacent to the northern staging area, a buffer zone will be clearly marked in the field by construction personnel under the guidance of the biologist and no activities will occur within the buffer zone until the young have fledged or the nest is no longer active. If the designated biologist determines that activities within the staging area are disturbing or disrupting nesting activities, then they will notify the Resident Engineer, who has the authority to halt activity to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, preventing idling of vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, minimizing activities in the immediate vicinity, or working in other areas until the young have fledged.

BIO-3: Between March 15 and September 15, a biological monitor will monitor at the edge of the northern staging area along riparian habitats to ensure noise levels do not result in a disruption to least Bell's vireo or other riparian birds. If construction noise is negatively affecting nesting birds (e.g., a discernable negative change in behavior is observed, such as nest flushing or adults not immediately returning to the nest with prey), then activity will cease in the immediate area (unless authorized by the wildlife agencies) until adequate noise barriers can be established to reduce noise levels at the edge of the riparian corridor. Noise barriers may

include temporary noise blankets, noise shrouds, and/or sound walls. It may be most effective to construct noise barriers well prior to March 15 to ensure construction delays do not occur. All noise barriers will be constructed within the staging area boundaries.

BIO-4: To the extent feasible, no nighttime work will be conducted in areas adjacent to least Bell's vireo suitable habitat. If the work must be performed during nighttime, then the lights will be shielded and/or directed away from the habitat to prevent light intrusion into the habitat area.

BIO-5: If vegetation clearing is to occur during the breeding season for passerine birds (i.e., February 1–September 1) or raptors (i.e., January 1–September 1), the designated biologist will conduct a preconstruction survey of construction areas and an appropriate buffer no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, a qualified biologist will establish an appropriate buffer around each nest site. To the extent feasible, no construction will take place within this buffer until the nest is no longer active. In the event that construction must occur within the buffer areas, the designated biologist will ensure construction activities do not disturb or disrupt nesting activities. If the designated biologist determines that construction activities are disturbing or disrupting nesting activities, then they will notify the Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, preventing idling of vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, minimizing activities in the immediate vicinity, or working in other areas until the young have fledged. Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days.

BIO-6: A qualified bat biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and tree inspection, sampling, exit counts, and acoustic surveys.

BIO-7: If trimming or removal of mature trees and snags is necessary for project construction, trimming/removal activities should be performed outside of the general bat maternity season, which occurs from March 1 through October 1, to avoid direct effects to nonvolant (i.e., flightless) young that may roost in trees within the study area. If trimming or removal of trees during the general bat maternity season cannot be avoided, a qualified biologist will monitor tree removal unless nighttime surveys conducted within 1 week of removal indicates no tree-roosting bat activity within the study area. Frond removal will follow a two-step process:

- DAY 1: Contractor must only trim the outermost fronds (i.e., no more than 50 percent of the palm fronds) using chainsaws only (i.e., no dozers, backhoes, cranes, or other heavy equipment, other than to provide access for tree cutters using chainsaws).
- DAY 2: The palm tree must be felled. Day 2 activities must occur the day immediately following the Day 1 activities.

To accomplish this, work may need to be phased and Day 1/Day 2 steps can be repeated. Should bats emerge during the tree trimming, trimming activities must temporarily cease at the individual tree until bats are no longer actively emerging from the tree.

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?				x
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				x
c. Disturb any human remains, including those interred outside of dedicated cemeteries?				x

Regulatory Setting

The applicable local and state regulations listed below were considered during evaluation of the cultural resources in the project area limits (PAL). A cultural resource can be considered any property valued (e.g., monetarily, aesthetically, or religiously) by a group of people. Valued properties can be historical in character or date to the pre-contact past (i.e., the time prior to contact with European Americans). Under CEQA, "historical resources" are considered part of the environment and therefore protected. Historical resources (Section 15064.5a) are defined as follows:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] Section 5024.1; California Code of Regulations [CCR] Title 14, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g).
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1; 14 CCR 4852), which parallel the criteria of the National Register of Historic Places (NRHP), but consider state and local significance.

CEQA also contains provisions regarding the protection of Native American remains, which are discussed in Section XVIII, *Tribal Cultural Resources*. Record search data, survey results, and background research from the Bridge Replacement Project were used for this study because the project areas overlap.

Environmental Setting

The PAL is just north and south of the Santa Ana River and its associated floodplain, as well as upland areas that are relatively flat, within the cities of Norco and Eastvale in Riverside County. The banks and terraces of the river are composed of sand, loamy sand, and sand clay loam and appear easily erodible. Elevations in the PAL range from approximately 570 to 660 feet average mean sea level. Eastvale Community Park and the SilverLakes Sports Complex are adjacent to the northern portion of the PAL; residential and commercial development occur adjacent to the southern portion.

Land uses in the area include dense residential and commercial developments, disturbed open areas, community parks, and public infrastructure. Vegetation associated with the Santa Ana River consists of black willow (*Salix goodingii*), arroyo willow (*Salix lasiolepis*), and Fremont's cottonwood (*Populus fremontii*), along with California blackberry (*Rubus ursinus*), wild grape (*Vitis girdiana*), and stinging nettle (*Urtica dioica*). Non-native grasses and scrub can be found in areas located away from the banks of the river and the disturbed portions of the PAL.

A cultural resources records search, a Native American Sacred Lands File search, Native American consultation, and a cultural resources field survey were conducted. The literature review revealed that 12 cultural resources have been documented within one mile of the PAL. No previously recorded cultural resources were identified within the PAL. Two prehistoric artifact scatters have been recorded within the one-mile buffer around the PAL. The proposed project would be more than 0.50 mile away from the edge of the closet of these two prehistoric sites and would not be affected by the proposed project. The remaining 10 resources that were identified as a result of the records search include eight building or building complexes, one historic-period power line, and an isolate. Appendix C presents a brief summary of each resource within 1 mile the PAL.

ICF archaeologists Karolina Chmiel and Nara Cox performed a pedestrian survey of the project's PAL on August 28, 2017; Andrew Belcourt conducted an additional site visit on May 5, 2020. During the surveys, ICF archaeologists carefully inspected the ground surface and road cuts to identify artifacts, features, and infrastructure. Pedestrian survey transects were spaced at 10-meter intervals as vegetation and topography permitted. The archaeologists photographed and visually inspected any unpaved areas for the presence of cultural resources. Paved and gravel areas were noted, but not surveyed, because of the lack of original ground surface. An iPad with Collector software, which allowed for submeter accuracy, was used to track the survey transects and coverage, as well as record potential cultural resources identified within the PAL.

Discussion

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. As discussed in the Cultural Resources Technical Report (ICF 2020), a records search was conducted at the Eastern Information Center at the University of California, Riverside, on August 24, 2017. The records search included a review of all available cultural resources surveys and excavation reports, as well as site records, within a 1-mile radius of the project PAL. The NRHP, CRHR, California Inventory of Historic Resources, California Historical Landmarks, California Points of Historical Interest, State Historic Resources Commission, and Caltrans Historic Highway Bridge Inventory were also consulted. The record search revealed that five previous studies encompass all or parts of the PAL, with an additional 23 studies having taken place within a 1-mile radius. No previously recorded cultural resources were identified within the PAL. Twelve cultural resources

(two prehistoric artifact scatters and 10 built environment) were previously recorded within 1 mile of the project. Due to the distance of project activities from historical resources, no historical resources would be affected by construction and operation of the proposed project.

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

No Impact. No previously recorded archaeological resources were identified as occurring in the PAL, but two prehistoric sites were identified within a 1-mile buffer around the PAL. The proposed project would be more than 0.50 mile away from the edge of the closet of these two prehistoric sites and would not be affected by the proposed project.

The NAHC conducts its Sacred Lands File search by section, not by project area. Although the Sacred Lands File search came back positive for the submitted request, it is unclear if sacred lands are present within the PAL or the surrounding areas. Consultation with the tribes has been completed, and no tribal cultural resources were identified.

During the survey, the archaeologists noted that majority of the PAL has undergone extensive ground disturbance during the course of urban development in the area. Hamner Bridge was constructed in 1939. The earliest available historic aerials show Hamner Avenue with its present alignment back in 1948 (Nationwide Environmental Title Research 2020). Over the following decades, the area was subjected to extensive earthmoving associated with urban development (e.g., housing tract construction, business development, road widening). Areas that have been disturbed by previous road construction are unlikely to contain preserved, intact archaeological deposits because of the required earthmoving that took place. In general, areas that have been disturbed by construction associated with urban development have been extensively graded and compacted and, therefore, are unlikely to contain preserved, intact buried archaeological deposits.

No archaeological resources would be affected by construction of the project. As a result, no direct, indirect, or cumulative impacts on significant cultural resources are anticipated at this time, and no impact would occur.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact. Based on the results of the cultural resource record searches, surveys, and Native American consultation detailed in the Cultural Resources Technical Report, there is no evidence of human remains within the project vicinity that would be affected by the proposed project. Measures TCR-1 through TCR-4 would be implemented if human remains are unexpectedly encountered during construction.

Mitigation Measures

See Section XVIII, Tribal *Cultural Resources*, for measures to ensure compliance with existing statutes and regulations related to tribal cultural resources.

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

Regulatory Setting

As required by the Appendix G of the CEQA Guidelines, the analysis of environmental impacts to energy resources must be evaluated. As discussed in detail in Section VIII), *Greenhouse Gas Emissions*, the cities of Eastvale and Norco are participants in the Western Riverside Council of Governments' Subregional Climate Action Plan (CAP) (WRCOG 2014), which includes measures related to the reduction of emissions and energy use from transportation sources. In addition, *California's 2017 Climate Change Scoping Plan* identifies a number of statewide polices focused on reduction of emissions and energy use from the transportation sector.

Environmental Setting

Within the project limits, the primary energy consumer is the vehicles using Hamner Avenue, which are primarily powered using gasoline and diesel fuels. To estimate existing and opening year operational automobile energy consumption, local VMT data were used as inputs in CT-EMFAC2017, which is Caltrans's tool for estimating pollutant emissions from on-road vehicles. The outputs for fuel use were converted to million British thermal units (MMBTU) using conversion factors. As shown in Table 2-8, an estimated 2,800 gallons of gasoline and 215 gallons of diesel fuel are consumed within the project limits, which is the equivalent of 133,000 MMBTU annually. In addition to vehicle-related energy consumption, a small amount of energy within the project limits is consumed by street lighting and traffic signals, which are powered by electricity.

Table 2-8. Estimated Transportation Energy Use (Existing 2017)

Existing (2017)	Daily Fuel Consumption (gallons)	Annual Fuel Consumption (gallons)	MMBTU/Year
Gasoline (gallons)	2,829	981,649	122,706
Diesel (gallons)	215	74,537	10,338
Total			133,044

Source: ICF 2020 using CT-EMFAC2017. See Appendix A.

Discussion

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

No Impact. The proposed project would widen the existing Hamner Avenue roadway from four lanes (two lanes in each direction) to six lanes (three lanes in each direction) from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street/Norco Drive. Construction-period energy requirements were estimated using CalEEMod based on construction equipment and activity assumptions. The resulting emissions outputs were then converted to MMBTU using energy unit conversion factors. Project construction would require a temporary increase in energy consumption associated with construction equipment use, material movement, worker commute trips. As shown in Table 2-9, during construction, an estimated 24,100 gallons of diesel, or 3,300 MMBTU of energy would be used. Although there would be an increase in energy consumption during the construction period, such increases would be temporary and limited to no longer than 4 months.

Table 2-9. Project Construction Transportation Energy Use

	Daily Fuel Consumption (gallons)	MMBTU/Year
Diesel (gallons)	24,086	3,341

Source: ICF 2020 using CalEEMod version 2016.3.2. See Appendix A.

As shown in Table 2-10, below, the proposed project would result in a 1.1 percent increase in fuel use by vehicles in the project area when compared to the No-Build Alternative. This increase would result from the increased travel in the project corridor alone, as improved operations would redistribute traffic to Hamner Avenue. Although there would be increases in fuel use in the project corridor under the Build Alternative relative to the No-Build Alternative at the 2023 Opening Year, these differences in emissions would be marginal, and would therefore not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, no impacts are expected, and no mitigation measures are required.

Table 2-10. Operation Energy Use (Opening Year 2023)

	Daily Fuel Consumption (gallons)	Annual Fuel Consumption (gallons)	MMBTU/Year
No-Build Alternative (2023)			
Gasoline (gallons)	2,469	856,732	107,091
Diesel (gallons)	209	72,491	10,055
Total			117,146
Build Alternative (2023)			
Gasoline (gallons)	2,496	865,998	108,250
Diesel (gallons)	211	73,275	10,163
Total			118,413

Source: ICF 2020 using CT-EMFAC2017. See Appendix A.

VMT data used for the purposes of estimating operational energy use are based on vehicle volumes projected in the traffic analysis conducted for the Bridge Replacement Project (ADVANTEC Consulting Engineers 2017). Although VMT is greater under the Build Alternative than under the No-Build Alternative, the increase in VMT reflects the

increased travel in the project corridor alone, and does not account for reductions in volumes elsewhere resulting from traffic redistribution. The increase in VMT and fuel use does not signify new trip generation that would result from the project implementation. The proposed project would not change land uses in the project vicinity, and would therefore not generate new trips. Energy use was estimated using project-specific VMT with projected average vehicle speed data input into CT-EMFAC2017.

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

No Impact. Both the Subregional CAP and *California's 2017 Climate Change Scoping Plan* address emissions and energy use from transportation sources. The project would implement Measure E-2 from the Subregional CAP through its use of high-efficiency bulbs for all new and replaced lighting. Most of the policies, measures, and strategies identified in the Subregional CAP and Scoping Plan are not implemented at a project level, and would therefore not be addressed by the proposed project. However, these policies, measures, and strategies would proceed independently of the project, and the project would not conflict or obstruct with their implementation. Therefore, the project would result in no impacts, and no mitigation measures are required.

Mitigation Measures

No measures are required.

VII. Geology, Soils, and Paleontological Resources

	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:				
1. 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.				X
2. Strong seismic ground shaking?			X	
3. Seismic-related ground failure, including liquefaction?			X	
4. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?			X	
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 an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
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?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Regulatory Setting

For geologic and topographic features, the applicable federal law is the Historic Sites Act of 1935, which establishes a national registry of national landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under CEQA. The 1972 Alquist-Priolo Earthquake Fault Zoning Act (California PRC § 2621 et seq.) regulates

development near active faults in order to mitigate the hazard of surface fault rupture. The 1990 Seismic Hazards Mapping Act (California PRC §§ 2690–2699.6) addresses issues related to earthquake hazards from non-surface fault rupture, including hazards related to liquefaction and seismically induced landslides or other ground failure. The California Geological Survey (CGS) has responsibility for developing the hazard maps and has incrementally focused their efforts on the highest risk areas and areas undergoing significant development. Such information is used by cities and counties when preparing the safety elements of their general plans and encourages land use management policies and regulations that reduce seismic hazards.

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. CEQA requires the analysis of project effects on paleontological resources.

Environmental Setting

The project area lies within the Peninsular Ranges Geomorphic Province of California. The project area is not within or adjacent to an earthquake fault zone, and the nearest known active faults to the project area are the C Prado Dam and Corona South fault zones, which are approximately 6 miles southwest of the project site (California Department of Conservation 2018; USGS 2017). A portion of the project site is located within a liquefaction zone and 100-Year Flood Zone along the Santa Ana River. Moderate soil instability exists within the project area. Sediments that traverse the project area include Quaternary alluvium, late-to-middle Pleistocene-aged old alluvial-fan deposits (Qof_{3a}**Error! Bookmark not defined.**), as well as Cretaceous-aged La Sierra Tonalite (Klst).

Discussion

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. As discussed above, the proposed project area is not within or adjacent to an earthquake fault zone (California Department of Conservation 2018). In addition, the project area is not located on any known active earthquake fault trace. Therefore, the potential for ground rupture due to onsite active faulting is low, and no impacts are anticipated.

a.2. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Less-than-Significant Impact. The project area is within a seismically active region of southern California and would therefore experience the effects of seismic ground shaking. As stated above, the nearest known active faults to the project area are the Prado Dam and Corona South fault zones, which are approximately 6 miles southwest of the project site (USGS 2017). Construction of the proposed project improvements in compliance with the current seismic design would avoid any significant impacts related to seismic ground shaking. Therefore, through adherence to standard seismic design practices, the proposed project would result in a less-than-significant impact.

a.3. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. According to the Safety Element of the *City of Eastvale General Plan*, a portion of the project area is located within an area identified as having potential for liquefaction (City of Eastvale 2012; California Governor's Office of Emergency Services 2015). In addition, the City of Norco's *Local Hazard Mitigation Plan* states that there is a moderately high potential for liquefaction along the Santa Ana River (City of Norco 2017) near the project site. Although there is potential for liquefaction and seismic-related ground failure in the area, the project would be designed according to all city and county standards that would minimize such risks. Furthermore, the project would widen an existing roadway that is currently in use and would therefore not increase risks of liquefaction relative to existing conditions. As such, impacts would be less than significant.

a.4. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

No Impact. According to the Safety Element of the *City of Norco General Plan*, the project area in the northern and southern roadway segments is identified as having moderate soil instability (City of Norco 2013). As such, landslides in this area are possible. The proposed project would involve the installation of a retaining wall in the potentially affected area along the southern roadway segment, which would be designed to current seismic standards. During the installation of the retaining wall, minor sloughing of the slope could occur, but this would not be considered a landslide. There is sufficient slope stability in the general vicinity, which would be improved through the implementation of the retaining wall in the southern project segment. The proposed project would be designed so that it would not expose people or structures to potential substantial adverse effects from landslides. No impacts are expected, and no mitigation measures are required.

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

Less-than-Significant Impact. The project would be implemented within an existing paved transportation ROW—and therefore involves mostly paved surfaces—but would require work on shoulders with landscaping or vacant land. Temporary construction BMPs, which are standard practices for erosion and water quality control, would be implemented to minimize the potential increase in sediment loading and would be included in the project SWPPP. Federal and state jurisdictions require that an approved SWPPP be prepared for projects that involve greater than 1 acre of disturbance. A SWPPP specifies BMPs that would minimize erosion and keep all products of erosion from moving offsite into receiving waters. Earthwork in the project area would be performed in accordance with the project SWPPP; therefore, the proposed project would result in a less-than-significant impact related to soil erosion and topsoil loss. The project would not change the long-term risk of soil erosion or loss of topsoil, as most of the project area is paved, and all non-paved areas would be replaced in kind following the completion of construction activities.

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 an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less-than-Significant Impact. The proposed project would travel over a portion of soil that is considered susceptible to liquefaction. Although there is potential for liquefaction and seismic-related ground failure in the area, the project would be designed according to all city and County

standards that would minimize such risks. Furthermore, the project would widen an existing roadway currently in use and therefore would not increase risks of liquefaction relative to existing conditions. As such, impacts would be 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. Soils within the project area consist mostly of Natural Resources Conservation Service hydrologic soil groups "A/D," with the A representing sand, loamy sand, or sandy loam soils, and the D representing clay loam, silty clay loam, sandy clay, silty clay, or clay (NRCS 2018). Expansive soils are primarily composed of clay or clayey textures and have a high shrink-swell potential; therefore, it is anticipated that the proposed project would be constructed on soils that have expansive properties. The project would be designed according to all city and county standards that would minimize such risks. Furthermore, the project would widen an existing roadway that is currently in use and would therefore not increase risks of expansive soils relative to existing conditions. As such, impacts would be less than significant.

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

No Impact. The proposed project is a roadway widening project and would not require septic tanks or water disposal systems.

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

Less-than-Significant Impact. Geologic mapping conducted for the Hamner Avenue Bridge Replacement Project indicated that construction of the proposed project would occur in Quaternary alluvium including late Holocene-aged very young wash deposits (Qyw_a), as well as Cretaceous-aged La Sierra Tonalite (Klst), and middle-to-early Pleistocene-aged very old axial-channel deposits ($Qvoa_a$). Both the Cretaceous-aged Tonalite and Holocene-aged sediments have low potential to contain significant nonrenewable paleontological resources, but the Pleistocene-aged alluvial deposits ($Qvoa_a$) located in the northern project segment may have high paleontological sensitivity, depending on their lithology.

Although soils containing paleontological resources may be present in the area, the risk of encountering such resources is low, as the entire project area has been previously disturbed by previous development. Furthermore, the limited depth of excavation required for the proposed project (no greater than 5 feet) would occur almost entirely in previous fill, which would further reduce the likelihood of encountering paleontological resources. Given that the roadway and surrounding areas have been previously disturbed, there is low potential the project site would contain any significant nonrenewable paleontological resource. Impacts would be less than significant.

Mitigation Measures

No measures are required.

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

Regulatory Setting

The term *greenhouse gas* (GHG) is used to describe atmospheric gases that absorb solar radiation and subsequently emit radiation in the thermal infrared region of the energy spectrum, trapping heat in the Earth's atmosphere. These gases include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and water vapor, among others. A growing body of research attributes long-term changes in temperature, precipitation, and other elements of Earth's climate to large increases in GHG emissions since the mid-nineteenth century, particularly from human activity related to fossil fuel combustion. Anthropogenic GHG emissions of particular interest include CO_2, CH_4, N_2O, and fluorinated gases.

GHGs differ in how much heat each traps in the atmosphere (i.e., global warming potential [GWP]). CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the warming potential of other gases is assessed as multiples of CO_2. For example, the *2007 International Panel on Climate Change Fourth Assessment Report* calculates the GWP of CH_4 as 25 and the GWP of N_2O as 298, over a 100-year time horizon. Generally, estimates of all GHGs are summed to obtain total emissions for a project or given time period, usually expressed in metric tons ($MTCO_2e$), or million metric tons ($MMTCO_2e$).

As evidence has mounted for the relationship of climate changes to rising GHGs, federal and state governments have established numerous policies and goals targeted to improving energy efficiency and fuel economy and reducing GHG emissions. Nationally, electricity generation is the largest source of GHG emissions, followed by transportation. In California, however, transportation is the largest contributor to GHGs.

California has enacted aggressive GHG reduction targets, starting with Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 is California's signature climate change legislation. It set the goal of reducing statewide GHG emissions to 1990 levels by 2020 and required the ARB to develop a Scoping Plan that describes the approach California will take to achieve that goal and to update it every 5 years. In 2015, Governor Jerry Brown enhanced the overall adaptation planning effort with EO B-30-15, establishing an interim GHG reduction goal of 40 percent below 1990 levels by 2030 and requiring state agencies to factor climate change into all planning and

investment decisions. In 2016, the state legislature passed and the governor signed Senate Bill 32, which set the statewide goal of achieving GHG reductions of 40 percent below 1990 levels by 2030.

Senate Bill (SB) 375, the Sustainable Communities and Climate Protection Act of 2008, furthered state climate action goals by mandating coordinated transportation and land use planning through preparation of an SCS. The ARB sets GHG emissions reduction targets for passenger vehicles for each region. Each regional metropolitan planning organization must include in its regional transportation plan an SCS that proposes actions toward achieving the regional emissions reduction targets.

Neither the City of Eastvale nor the City of Norco has a locally adopted climate action plan, but both cities are participants in the *2014 Western Riverside Council of Governments Subregional Climate Action Plan* (2014 Subregional CAP) (WRCOG 2014). The Subregional CAP was developed to help the 12 cities covered by the CAP achieve the GHG reduction goals identified under AB 32. Given that the 2014 Subregional CAP addressed the 2020 statewide GHG reduction targets and the project would not be open to traffic until 2023, the 2014 Subregional CAP does not constitute a CAP suitable for tiering and streamlining the analysis of GHG emissions per Section 15183.5 of the CEQA Guidelines. An update to the 2014 Subregional CAP is currently being developed and expected to be approved by the end of 2020.

Environmental Setting

The 12 participating cities in the 2014 Subregional CAP were responsible for annual emissions in 2010 of 5.834 million $MTCO_2e$. Emissions from the transportation sector accounted for 57 percent of the total emissions in the subregion, followed by the commercial/industrial energy sector, which generated 21 percent of the total. The residential energy sector produced approximately 20 percent of the subregional GHG emissions.

For the City of Norco, the 2010 GHG emissions breakdown was 65 percent transportation sources, 18 percent residential energy, 13 percent commercial/industrial energy, 3 percent wastewater, and less than 1 percent wastewater emissions sources (City of Norco 2014). Corresponding data for the City of Eastvale were not available, but the breakdown of emissions sources was similar to that of the City of Norco according to Figure 2-4 of the 2014 Subregional CAP.

Based on calculations using project area VMT and EMFAC2017 emission factors, existing (2017) annual GHG emissions from vehicles operating in the project corridor were estimated to be 9,425 $MTCO_2e$.

Discussion

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

Less-than-Significant Impact.

Construction

Construction-period GHG emissions would result from material processing, onsite construction equipment use, paving, and traffic delays due to construction. These emissions would be generated at different levels throughout the construction phase; their frequency of occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved

traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Table 2-11 shows construction-period emissions, which are estimated to be 246 metric tons CO_2e over the 4-month construction duration. Due to the short-term duration of construction activities, impacts related to the generation of GHGs would be less than significant.

Table 2-11. Modeled Annual CO_2e Emissions and Vehicle Miles Traveled

Alternative	CO_2e Emissions (Metric Tons)	Annual Vehicle Miles Traveled[1]
Total Construction Emissions	246	N/A
2017 Existing/Baseline	9,425	25,438,631
2023 Opening Year		
No-Build Alternative	8,316	26,730,045
Build Alternative	8,406	27,015,110
Net Change (2023 Build – 2023 No Build)	90	285,065
Net Change (2023 Build – 2017 Existing)	(1,019)	1,576,479

Source: Emissions estimates by ICF 2020 using CalEEMod version 2016.3..2 (construction) and CT-EMFAC2017 (operations_. See Appendix A.

N/A = Not applicable

[1] VMT data used for the purposes of estimating operational emissions are based on vehicle volumes projected in the traffic analysis conducted for the bridge replacement project (ADVANTEC Consulting Engineers 2017). Although VMT is greater under the Build Alternative than under the No-Build Alternative, the increase in VMT reflects the increased travel in the project corridor alone and does not account for reductions in volumes elsewhere resulting from traffic redistribution. The increase in VMT and emissions does not signify new trip generation would result from the project implementation. The proposed project would not change land uses in the project vicinity and would therefore not generate new trips. Emissions were estimated using project-specific VMT with projected average vehicle speed data input into CT-EMFAC2017.

Operation

As identified in Table 2-11, estimated annual operational emissions along the project corridor would be 8,406 $MTCO_2e$ at the 2023 Opening Year under the Build Alternative, which represents an annual increase of 90 $MTCO_2e$ relative to the No-Build Alternative. Although there would be an increase in GHG emissions of approximately 1.1 percent under the Build Alternative relative to the No-Build Alternative at Opening Year 2023, there would be overall reductions in GHG emissions relative to Existing (2017) conditions resulting from improvements in vehicle technologies and the retirement of older vehicles. When comparing the 2023 Build Alternative to 2017 conditions, an annual net decrease of approximately 1,000 metric tons (10.8 percent) is expected. Furthermore, although VMT would be greater under the Build Alternative than under the No-Build Alternative, the increase in VMT reflects the increased travel along Hamner Avenue and does not account for reduced volumes elsewhere in the project area associated with redistribution effects. Because the project would not modify or otherwise alter the development potential of surrounding land uses, no new trip generation is anticipated from project implementation. Consequently, impacts related to generation of GHGs during long-term operations would be less than significant.

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

Less-than-Significant Impact. At the local level, the 2014 Subregional CAP is the most relevant plan developed for the purpose of reducing the emissions of GHGs. The CAP demonstrates how the participating cities, including the cities of Norco and Eastvale, would achieve GHG emissions reductions in line with state legislation. However, the proposed project represents a project type not specifically contemplated in the CAP's implementation actions. Thus, the CAP has limited applicability to the proposed project. Nevertheless, the proposed project's consistency with the CAP is discussed in Table 2-12. As shown therein, the proposed project would not conflict with the local measure identified in the CAP.

Table 2-12. Consistency of proposed project with the Western Riverside Council of Governments' Subregional Climate Action Plan Local Measures

Local Measures	proposed project Consistency Analysis
Measure E-1: Energy Action Plans. Improve municipal and community-wide energy efficiency and reduce energy consumption through the adoption of local Energy Action Plans (EAP).	This policy is a municipal program that requires no action at the project level. Minimal energy use is associated with the project implementation, and therefore the proposed project would not conflict with this measure.
Measure E-2: Traffic and Street Lights. Replace traffic and streetlights with high-efficiency bulbs.	The project would involve relocation of existing streetlights and new lighting on the entry monument. All replaced lighting would have high-efficiency bulbs. Therefore, the proposed project would not conflict with this measure.
Measure E-3: Shade Trees. Strategically plant trees to reduce the urban heat island effect.	The project would remove and replace trees as part of the project landscaping, but would neither add nor permanently remove shade trees. Therefore, the proposed project would not conflict with this measure.
Measure T-1: Bicycle Infrastructure Improvements. Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	No bicycle infrastructure improvements would be provided as part of the project. However, implementation of bicycle infrastructure elsewhere in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-2: Bicycle Parking. Provide additional options for bicycle parking.	No bicycle parking would be provided as part of the project. However, implementation of bicycle parking elsewhere in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-3: End of Trip Facilities. Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	No end of trip facilities for non-motorized transportation modes would be provided as part of the project. However, implementation of facilities elsewhere in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.

Local Measures	proposed project Consistency Analysis
Measure T-4: Promotional Transportation Demand Management. Encourage Transportation Demand Management strategies.	The proposed project would add vehicular capacity on Hamner Avenue, but would not generate new vehicle trips, as the project would not modify surrounding land uses such that an increase in trip generation would occur. The project would not preclude (TDM) strategies from being implemented in the project area nor have any permanent effects on the park-and-ride lot in the southern project segment. Therefore, the proposed project would not conflict with this measure.
Measure T-5: Transit Service Expansion. Collaborate with local and regional transit providers to increase transit service provided in the subregion.	No transit service expansion would be provided as part of the project. However, increased transit service in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-6: Transit Frequency Expansion. Collaborate with local and regional transit providers to provide more frequent transit in the subregion.	No transit service expansion would be provided as part of the project. However, increased transit service in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-7: Traffic Signal Coordination. Incorporate technology to synchronize and coordinate traffic signals along local arterials.	Traffic signal synchronization efforts on Hamner Avenue have been implemented in both the cities of Eastvale and Norco. The project would not conflict with such efforts.
Measure T-8: Density. Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	No change to the density in the project area would occur as a result of project implementation. However, increased density in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-9: Mixed-Use Development. Provide for a variety of development types and uses.	No mixed-use development would be implemented as part of the proposed project. However, mixed-use development in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-10: Design/Site Planning. Design neighborhoods and sites to reduce VMT.	The proposed project would widen an existing roadway and would not involve neighborhood design or site planning. The proposed project would increase VMT along the project corridor, but design of neighborhoods and sites to reduce VMT would not be precluded by the project. Therefore, the proposed project would not conflict with this measure.
Measure T-11: Pedestrian-Only Areas. Encourage walking by providing pedestrian-only community areas.	The proposed project would widen an existing roadway and would not involve pedestrian-only areas. The project would include the replacement of existing sidewalks with 6-foot-wide sidewalks, and therefore would provide pedestrian facilities. Therefore, the proposed project would not conflict with this measure.

Local Measures	proposed project Consistency Analysis
Measure T-12: Limit Parking Requirements for New Development. Reduce requirements for vehicle parking in new development projects.	The proposed project would widen an existing roadway and would not involve new development. However, the proposed project would not preclude reduced parking requirements for new developments from being implemented. Therefore, the proposed project would not conflict with this measure.
Measure T-13: High Frequency Transit Service. Implement high frequency transit service in the subregion to provide alternative transportation options.	The proposed project would widen an existing roadway and would not involve transit service. However, the proposed project would not preclude high frequency transit service from being implemented in the project area, and the increased vehicular capacity would benefit any increased transit service. Therefore, the proposed project would not conflict with this measure.
Measure T-14: Voluntary Transportation Demand Management. Reduce demand for roadway travel through incentives for alternative modes of transportation and disincentives for driving.	The proposed project would add vehicular capacity on Hamner Avenue, but would not generate new vehicle trips, as the project would not modify surrounding land uses such that an increase in trip generation would occur. The project would not preclude TDM strategies from being implemented in the project area and would also not have any permanent effects on the park-and-ride lot in the southern project segment. Therefore, the proposed project would not conflict with this measure.
Measure T-15: Accelerated Bike Plan Implementation. Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	No bicycle infrastructure improvements would be provided as part of the project. However, implementation of bicycle infrastructure elsewhere in the project vicinity would not be precluded. Therefore, the proposed project would not conflict with this measure.
Measure T-16: Fixed Guideway Transit. Introduce a fixed-route transit service in the jurisdiction.	The proposed project would widen an existing roadway and would not involve transit service. However, the proposed project would not preclude fixed guideway transit service from being implemented in the project area, and the increased vehicular capacity would benefit any increased transit service. Therefore, the proposed project would not conflict with this measure.
Measure T-17: Neighborhood Electric Vehicle Programs. Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	The proposed project would widen an existing roadway and would not involve electric vehicle programs. However, the proposed project would not preclude fixed guideway transit service from being implemented in the project area, and the increased vehicular capacity would benefit any increased transit service. Therefore, the proposed project would not conflict with this measure.

Local Measures	proposed project Consistency Analysis
Measure T-18: Subsidized Transit. Increase access to transit by providing free or reduced passes.	The proposed project would widen an existing roadway and would not involve transit service. However, the proposed project would not preclude fixed guideway transit service from being implemented in the project area, and the increased vehicular capacity would benefit any increased transit service. Therefore, the proposed project would not conflict with this measure.
Measure SW-1: Yard Waste Collection. Provide green waste collection bins community-wide.	The proposed project would widen an existing roadway and would not involve yard waste generation beyond a minimal amount associated with landscaping maintenance. However, the proposed project would not preclude such programs from being implemented. Therefore, the proposed project would not conflict with this measure.
Measure SW-2: Food Scrap and Compostable Paper Diversion. Divert food and paper waste from landfills by implementing collection systems.	The proposed project would widen an existing roadway and would not involve food scrap and compostable paper generation. However, the proposed project would not preclude such programs from being implemented. Therefore, the proposed project would not conflict with this measure.

Source: Western Riverside Council of Governments 2014.

At the state level, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is the California Air Resources Board (CARB)'s *2017 Climate Change Scoping Plan* (Scoping Plan), which outlines the framework and strategies the state will take to achieve its emission-reduction targets. Table 2-13 provides a discussion of the proposed project's consistency with the Scoping Plan. As shown therein, nearly all policies are state programs that require no action at the local or project level. Thus, the proposed project would not conflict with implementation of the Scoping Plan.

Table 2-13. Consistency of proposed project with Climate Change Scoping Plan[a] Policies

Policy	Primary Objective	proposed project Consistency Analysis
SB 350	Reduce GHG emissions in the electricity sector through the implementation of the 50 percent Renewable Portfolio Standard, doubling of energy savings, and other actions as appropriate to achieve GHG emissions reductions planning targets in the Integrated Resource Plan process.	This policy is a state program that requires no action at the local or project level. Minimal electricity use is proposed associated with project area lighting, and therefore the proposed project would not conflict with this statewide policy.
Low Carbon Fuel Standard	Transition to cleaner/less-polluting fuels that have a lower carbon footprint.	This policy is a state program that requires no action at the local or project level. Project construction and maintenance vehicle and equipment, and vehicles during long-term operations would use fuels that are commercially available as a result of this policy. Thus, the proposed project would not conflict with this policy.

Policy	Primary Objective	proposed project Consistency Analysis
Mobile Source Strategy (Cleaner Technology and Fuels [CTF] Scenario)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled.	This policy is a state program that requires no action at the local or project level. No new trip generation would result from the proposed project, as the project would not modify land uses surrounding the project site. Thus, the proposed project would not conflict with this policy.
SB 1383	Approve and implement Short-Lived Climate Pollutant strategy to reduce highly potent GHGs.	This policy is a state program that requires no action at the local or project level and thus does not apply to the proposed project.
California Sustainable Freight Action Plan	Improve freight efficiency, transition to zero-emission technologies, and increase competitiveness of California's freight system.	This policy is a state program that requires no action at the local or project level and thus does not apply to the proposed project.
Post-2020 Cap-and-Trade Program	Reduce GHGs across largest GHG emissions sources.	This policy is a state program that requires no action at the local or project level. The proposed project does not include any facilities that would be regulated under the Post-2020 Cap-and-Trade Program. As such, the proposed project would not conflict with this program.

[a] The Scoping Plan policies included in this table are those representing the state strategy for meeting the 2030 GHG target of SB 32.

Source: CARB 2017.

The proposed project would directly implement the RTP/SCS initiative to improve highway and arterial capacity by adding capacity in the form of the widened roadway, which is specifically identified as part of the initiative (SCAG 2016:6). As discussed in the 2016–2040 RTP/SCS, the target reduction for GHGs at 2035 with RTP/SCS implementation is 18 percent per capita relative to a 2005 baseline.

Because the proposed project would not conflict with the Subregional CAP, CARB's Scoping Plan, or the SCAG RTP/SCS, impacts related to the potential for the proposed project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would be less than significant.

Mitigation Measures

No measures are required.

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?			X	
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?			X	
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d.	Be located on a site that 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?				X
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?				X
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

Information in this section is based on the February 2020 Initial Site Assessment prepared for the project (Group Delta 2020; see Appendix D).

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is also authorized by the federal government to implement the Resource Conservation and Recovery Act (RCRA) in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. Porter-Cologne also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations, but could affect ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Environmental Setting

For the Initial Site Assessment Report, a review of reasonably ascertainable environmental regulatory agency databases was conducted to identify known or suspected environmental concerns or Recognized Environmental Conditions (RECs) that may be associated with the proposed project. The project site was not identified on any databases in the Environmental Data Resources (EDR) regulatory database report. Within the larger project vicinity, 104 sites were listed in the EDR database radius searches. The radius search area included the project limits and a 1-mile radius from the project limits. One hundred of these properties within these search areas were not found to pose a hazardous waste impact. Table 2-14 provides a summary of properties within approximately 1,200 feet of the project footprint that were further evaluated due to the potential to pose a hazardous waste impact to the project. These properties were identified on high-hazardous risk databases and visited during site reconnaissance Tomo Demers of Group Delta performed on December 31, 2019. Based on the documentation of the sites and the reconnaissance, there are no RECs present in the project area.

Table 2-14. Potential for Recognized Environmental Conditions in the Project Area

Site Name	Address	Description
Norco Mobil Station/Norco Ultramar/Raouf's Mobile Service - Current Valero Gas Norco	3840 Hamner Ave, Norco, CA 91760	An adjacent property located immediately west of the project footprint, was listed on the databases of concern indicated above. According to available documents reviewed via GeoTracker, a leak was discovered during removal of underground storage tanks (USTs) at the adjacent facility in September 1986. The underlying soil was reportedly affected by total petroleum hydrocarbons from gasoline (TPH-g). Between 1986 and 2013, soil investigation, groundwater monitoring, and remediation actions were performed to address soil and groundwater contamination due to leaking of the former USTs onsite. From February 2004 through September 2005, a soil vapor extraction (SVE) remediation system operated at the adjacent facility to address VOC-affected soils. The facility was reportedly granted closure in March 2014. **Conclusion**: The extent of contamination outlined above in groundwater does not extend onto the project area. As such, groundwater contaminated by TPH-g and benzene existing in plumes at the adjacent facility are not expected to impact the project area. Considering the adjacent facility's respective case closure, this adjacent facility is not considered to be an environmental concern to the project.
Excelsior Farms	7401 Hamner Ave, Eastvale, CA 91720	An adjacent property located immediately west of the project, was listed on the databases of concern indicated above. According to available documents reviewed via GeoTracker, a leak was discovered during a removal of USTs at the adjacent facility in March 1994. The underlying soil was reportedly affected with TPH and benzene, and approximately 384 tons of soil was excavated. Between 1998 and 1999, ongoing remediation efforts were made to remove free product in underlying soil and groundwater. The facility was reportedly granted closure by the Riverside County Department of Environmental Health in February 2003. A well abandonment report was submitted in February 2014. **Conclusion**: The extent of contamination outlined above in groundwater does not extend onto the project area. As such, groundwater contaminated by TPH-g and benzene existing in plumes at the adjacent facility are not expected to affect the project and not considered an environmental concern. Also, considering the adjacent facility's respective case closure, this adjacent facility is not considered to be an environmental concern to the project.

Site Name	Address	Description
ARCO #5556/NIMEH, Inc.	3700 Hamner Avenue, Norco, CA 92860	A neighboring facility, located approximately 132 feet southwest of the project footprint, was listed on the databases of concern indicated above. According to available documents reviewed via GeoTracker, a gasoline leak affecting soil and groundwater at the surrounding facility was reportedly discovered during piping upgrades in November 2002. Between October 2010 and October 2012, groundwater monitoring was performed, and remediation efforts were made during 2012 to remove free product in underlying soil and groundwater. The facility was reportedly granted closure on March 27, 2014, and a well abandonment report was submitted on January 16, 2014. **Conclusion**: Based on the case closure status, this listing is not considered an environmental concern.
APRO #31/Norco Arco/Norco Mart	1488 Sixth St, Norco, CA 92860	A neighboring facility, located approximately 0.20 mile east of the project site, was listed on the databases of concern indicated above. According to available documents reviewed via GeoTracker, a gasoline leak affecting soil and groundwater at the neighboring facility was reportedly discovered during the removal of three USTs and associated piping on December 18, 1998. On March 3, 1999, an abandoned UST was removed from the adjacent facility and witnessed by a Riverside County Department of Environmental Health (RCDEH) Inspector. From December 1998 through February 2002, soil/groundwater sampling and analyses were conducted at the facility in order to delineate contaminated soil and groundwater. SVE remediation was subsequently initiated to remediate contaminated soil and groundwater at the adjacent facility in December 2002 and was shut down in December of 2011. The facility was reportedly granted closure on May 20, 2015. **Conclusion**: Based on the case closure status of this property, this listing is not considered an environmental concern.

Discussion

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. Three potential hazard issues warrant discussion. Yellow striping that exists along Hamner Avenue between the northern and southern roadway segment may contain lead and chromium. The disposal of yellow striping could potentially create a significant hazard to the public or the environment. Elevated concentrations of lead, likely meeting the criteria for Federal RCRA Hazardous Waste, were detected in yellow striping along the Hamner Avenue Bridge over the Santa Ana River Project. Yellow striping/thermoplastic striping will need to be appropriately managed. It is assumed the striping is hazardous, similar to the Hamner Avenue

Bridge over the Santa Ana River Project, and the striping can be managed using Caltrans Standard Special Provisions.

Aerially Deposited Lead (ADL) is also a common contaminant along unpaved shoulders of highways and arterial roadways. Based on the results of an ADL Site Investigation conducted for the Hamner Avenue Bridge Project, ADL was not present at regulated concentrations in unpaved soil on the adjacent project. These results indicate it is unlikely ADL would be present at regulated concentrations along the project alignment. Lastly, neighboring gas stations are not considered RECs to the project. Although it is impossible to definitively determine without supplemental site investigation that contamination would not be encountered, there is no evidence that contaminated soil may be encountered during project construction activities based on the documents review. Supplemental site investigation does not appear warranted.

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. Proposed project construction activities includes the use of chemicals, solvents, and fuels. However, these hazardous materials would be used in non-hazardous quantities. Upset and accident conditions are anticipated, and if encountered, contaminated soils would be disposed of consistent with applicable laws and regulations. Therefore, the project would result in a less-than-significant impact.

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

No Impact. No existing or proposed schools are located within one-quarter mile of the proposed project. No impact would occur.

d. Be located on a site that 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. According to the California Department of Toxic Substances Control's EnviroStor database, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The closest listed site is the California Rehabilitation Center, which is approximately 0.5 mile from the project site. Based on the distance from the project site, implementation of the proposed project would not create a significant hazard to the public or the environment.

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

No Impact. The proposed project is not located within the vicinity of a public airport or public use airport; 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. The proposed project would improve the ability of emergency service providers to serve the community, as it would reduce congestion and improve the

operational efficiency of Hamner Avenue in the project area. Therefore, the proposed project would not interfere with an emergency response or evacuation plan. During the construction period, emergency response times could increase temporarily due to increased traffic congestion caused by temporary lane closures, speed reductions, and the presence of construction personnel and equipment, etc., in the area. During project construction, a Traffic Management Plan (TMP) would be implemented to minimize these obstructions, which would help to ensure continued emergency access to the proposed project area and nearby properties. Impacts would be less than significant with the implementation of a TMP.

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

No Impact. The proposed project would improve an existing roadway and would not expose people to a greater risk of loss, injury, or death due to wildland fires than presently exists. According to the Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a Very High Fire Hazard Severity Zones (Department of Forestry and Fire Protection 2007), as it traverses almost completely developed portions of Norco, with the exception of the open space areas in and around the Santa Ana River.

Mitigation Measures

No measures are required.

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 groundwater quality?			x	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				x
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 impervious surfaces, in a manner that would:			x	
1. Result in substantial erosion or siltation on or off site;			x	
2. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;				x
3. 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				x
4. Impede or redirect flood flows?				x
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				x
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			x	

Regulatory Setting

Federal

Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to WoUS from any point source unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Known today as the CWA, the act

has been amended by Congress several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

- Sections 303 and 304, which require states to promulgate water quality standards, criteria, and guidelines.
- Section 401, which requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the act (most frequently required in tandem with a Section 404 permit request [see below]).
- Section 402, which establishes NPDES, a permitting system for the discharge of any pollutant (except dredged or fill material) into WoUS. RWQCBs administer this permitting program in California. Section 402(p) requires permits for discharges of stormwater from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404, which establishes a permit program for the discharge of dredged or fill material into WoUS. This permit program is administered by USACE.

The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters."

USACE issues two types of 404 Permits: Standard and General permits. For General permits, there are two types: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and have a minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects. There are also two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide permit may be permitted under one of USACE's Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 CFR 230) and whether permit approval is in the public interest. The 404(b)(1) Guidelines, which were developed by U.S. EPA in conjunction with USACE, allow the discharge of dredged or fill material into the aquatic system (WoUS) only if there is no practicable alternative that would have less adverse effects. The guidelines state that USACE may not issue a permit if there is a Least Environmentally Damaging Practicable Alternative to the proposed discharge that would have less adverse effects on WoUS and not have any other significant adverse environmental consequences. Per the guidelines, documentation is needed to verify that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to WoUS. In addition, every permit from USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements (see 33 CFR 320.4).

State

Porter-Cologne Water Quality Control Act

Porter-Cologne, established in 1969 under Division 7 (Water Quality) of the California Water Code, complements the CWA. It established the SWRCB and divided the state into nine regions, each overseen by a RWQCB. The SWRCB is the primary state agency with responsibility for protecting the

quality of the state's surface and groundwater supplies, although much of its daily implementation authority is delegated to the RWQCBs, which are responsible for implementing CWA Sections 401, 402 and 303(d). In general, the SWRCB manages both water rights and statewide regulation of water quality; the RWQCBs focus exclusively on water quality within their regions.

The Porter-Cologne Act provides for development and periodic review of Water Quality Control Plans (basin plans) for each region. Basin plans identify beneficial uses of water bodies and their tributaries as well as water quality objectives to protect those uses. Basin plans are implemented primarily by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met. Basin plans are updated every three years and provide the technical basis for determining WDRs and taking enforcement actions.

Beneficial uses represent the services and qualities of a water body (i.e., the reasons the water body is considered valuable). Water quality objectives represent the standards necessary to protect and support designated beneficial uses.

Environmental Setting

Hamner Avenue is a crowned roadway: rainfall landing on the eastern side of the road drains to the easterly curb and gutter, and rainfall landing on the western side of the road drains to the westerly curb and gutter. The profile of the street between Taft Street and Detroit Street is downward from south to north so that runoff flows from Taft Street toward Detroit Street. Runoff in the eastern half of Hamner Avenue rounds the corner at Detroit Street and continues easterly. Runoff in the western half of Hamner Avenue continues north in the curb and gutter beyond the project boundary until it eventually reaches the Santa Ana River.

The profile of Hamner Avenue from Citrus Street to Schleisman Road is downward from north to south. At approximately 250 feet north of the Citrus Street/Hamner Avenue intersection, there is a low point where existing catch basins collect runoff and carry it to the existing storm drain system. The existing catch basins are in the outer flow lines of the existing curb and gutter. The existing storm drains carry the runoff to the detention basins west of Hamner Avenue and south of Citrus Street. These detention basins were constructed as part of the Hamner Avenue widening south of Citrus Street as part of the Streambed Alteration Agreement (SAA 1600-2012-0003-R6) for the existing unnamed drainage west of Hamner Avenue that flows to the Santa Ana River. Overflow from the detention basins discharges to the Santa Ana River, Reach 3.

Discussion

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less-than-Significant Impact. The project site is in Riverside County, within the Middle Santa Ana River (MSAR) watershed (Hydrologic Area). The project site is primarily in the Chino Split Hydrologic Sub Area. The southern portion of the project site is located in the Temescal Hydrologic Sub Area (Caltrans 2012). The Santa Ana River Reach 3 crosses the project alignment. Major tributaries to the Santa Ana River Reaches 3 and 4 include Temescal Creek, Day Creek, San Sevaine Channel, Box Springs Channel, and Anza Channel (Riverside County Flood Control and Water Conservation District 2015).

Currently, there is one bacteria Total Maximum Daily Load (TMDL) adopted for freshwaters in the Santa Ana River Watershed: MSAR Bacteria TMDL, which became effective on May 16, 2007. The Santa Ana Water Board adopted the MSAR Bacteria TMDL in 2005; it was subsequently approved by the EPA on May 16, 2007. The TMDL established compliance targets for both fecal coliform and E. coli. TMDLs have not yet been developed and approved for the copper and lead impairments in Santa Ana River Reach 3.

Potential impacts of the proposed project on existing water quality include temporary increases in sediments, oil, grease, and chemical pollutants during construction, as well as potential long-term discharges of sediments and other pollutants that collect in stormwater runoff. Short-term or temporary construction impacts on water quality have the potential to occur during demolition, minor land-disturbance activities, material and equipment use and storage at staging areas, and other construction activities. The proposed project would disturb approximately 6 acres, almost all of which is currently paved. However, water quality impacts would be avoided or minimized because construction would comply with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (SWRCB 2013). The construction activities of the proposed project would also be required to comply with the California Construction General Permit, NPDES Number CAS000002, Order No. 2009-0009-DWQ.

Long-term impacts on water quality could occur from the minor increase in impervious area and operational and maintenance activities. However, impacts from these operational and maintenance activities would be avoided or minimized because design of the project would comply with the Riverside County Municipal Stormwater Permit (Order No. R8-2010-0033, NPDES Permit No. CAS618033). No existing treatment BMPs would be removed as part of the project. Given the fact that the retention basins west of Hamner and south of Citrus were constructed as part of a Streambed Alteration Agreement, a Treatment Control BMP would be installed for runoff that would discharge to the retention basins located west of Hamner Avenue and south of Citrus Street, as specified in MM WQ-1. Installing treatment devices in two locations along Hamner Avenue near the intersection of Citrus Street to treat runoff prior to their discharge into the retention basins is recommended. The devices can accept runoff collected by the nearby catch basins that are connected to the existing storm drain line. Devices that are listed under the General Use Level Designation by the State of Washington Department of Ecology Technology Assessment Protocol – Ecology (TAPE) Program for Basic Treatment (minimum) and full-trash-capture certified are recommended. The BMPs would be included in the project-specific SWPPP and would provide adequate protection against water quality degradation during construction.

Implementation of MMs WQ-1 and WQ-2 would ensure that potential water quality impacts are minimized or avoided. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements.

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

No Impact. The project site is currently a transportation ROW, and would not require the use of groundwater and is not within an area that is used to recharge surface water. As such, no impact related to the depletion of groundwater supplies or substantial interference with groundwater recharge would occur.

c.1. 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 impervious surfaces, in a manner that would: Result in substantial erosion or siltation on or off site?

Less-than-Significant Impact. The project site is currently a transportation ROW and would function as such following construction activities. Although a minor increase in the area of impervious surfaces would occur as a result of project implementation, the project would not remove existing BMPs in the project area and would implement a Treatment Control BMP consistent with MM WQ-1. During the construction period, implementation of a SWPPP would ensure that substantial erosion or siltation on or offsite would not occur, as specified in MM WQ-2.

c.2. 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 impervious surfaces, in a manner that would: Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

No Impact. There would be a minor increase in the area of impervious surfaces, but existing drainage patterns would be retained following the completion of construction activities. As such, the project would not substantially increase the rate or amount of surface runoff.

c.3. 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 impervious surfaces, in a manner that would: 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?

No Impact. There would be a minor increase in the area of impervious surfaces, but existing drainage patterns and stormwater drainage systems would be retained following the completion of construction activities. The project would not remove existing BMPs in the project area and would implement a Treatment Control BMP consistent with MM WQ-1. As such, the project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

c.4. 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 impervious surfaces, in a manner that would: Impede or redirect flood flows?

No Impact. There would be a minor increase in the area of impervious surfaces, but existing drainage patterns and stormwater drainage systems would be retained following the completion of construction activities. As such, the project would not impede or redirect flood flows.

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

No Impact. The proposed project is located in an area where there is no risk of tsunami or seiche.

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

Less-than-Significant Impact. Retention basins west of Hamner and south of Citrus were constructed as part of a Streambed Alteration Agreement for previous projects in the area. The implementation of a SWPPP during the construction period and treatment BMPs during project operation in accordance with measures WQ-1 and WQ-2 would ensure that the project would not

conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures

The following measures would be implemented to minimize potential impacts:

WQ-1: Treatment control BMPs will be implemented to the maximum extent practicable, consistent with the requirements of the NPDES permit and Waste Discharge Requirements for Riverside County Municipal Stormwater Permit Order No. R8-2010-0033, NPDES Permit No. CAS618033. The project design will incorporate post-construction measures and other permanent erosion control elements to ensure that stormwater runoff would not cause channel erosion or hydromodification within the Santa Ana River. The proposed project will incorporate stormwater treatment BMPs that preserve the existing hydrology to the maximum extent practical at two locations along Hamner Avenue near the intersection of Citrus Street to treat runoff prior to discharge into the retention basins.

WQ-2: The proposed project will comply with the provisions of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Order No. 2009-0009-DWQ, NPDES No. CAS000002, and any subsequent permits in effect at the time of construction. The proposed project will comply with the Construction General Permit by preparing and implementing a SWPPP to address issues related to construction-related activities, equipment, and materials that have the potential to affect water quality. The SWPPP is a project-specific document that calculates the site's risk level during construction, includes guidelines for monitoring and reporting, and provides Erosion Control Plan and BMP details for the construction site. The SWPPP also includes construction site BMPs, which are implemented to minimize sediment and erosion during construction. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants, such as sediment control measures, catch basin inlet protection, construction materials management, and non-stormwater BMPs.

Permit Registration Documents, which include a Notice of Intent, Risk Assessment, Site Map, SWPPP, and other compliance-related documents required by the Construction General Permit, would be electronically filed through the SWRCB's Storm Water Multiple Application and Report Tracking System (SMARTS) prior to the start of construction. Additionally, within 90 days of when construction is complete and the site is stabilized, a Notice of Termination will be electronically filed through the SWRCB's SMARTS.

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?				x
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?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities." As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to land use resources must be evaluated. The California State Planning and Zoning Law (California Government Code §§ 65000–66037) delegates most of the state's local land use and development decisions to cities and counties and describes law pertaining to the regulation of land uses by local governments including the general plan requirement, specific plans, subdivisions, and zoning. Regional and local plans relevant to state planning, land use, and development include the *City of Norco General Plan*, the *City of Eastvale General Plan*, and the *Gateway Specific Plan*.

Environmental Setting

Hamner Avenue is the major north-south roadway that connects the cities of Norco and Eastvale. Currently, four lanes of traffic (i.e., two northbound lanes and two southbound lanes) are provided on Hamner Avenue, which is primarily served by commercial development along both sides of the road. Hamner Avenue is the only road in the city of Norco classified as urban arterial where anticipated traffic volumes exceed four-lane capacity. Land use in the project vicinity is governed by the *City of Norco General Plan* and the *City of Eastvale General Plan*. Within .25 mile of the project vicinity, the surrounding land uses include recreational uses and churches.

Discussion

a. Physically divide an established community?

No Impact. The proposed improvements would be primarily within existing ROW or temporary construction easements. Because Hamner Avenue is an existing roadway, no physical division would be created. Roadways are considered an integral part of development and land use patterns because they are required to facilitate travel and connectivity between areas. Implementation of the proposed project would not diminish access to or the ability to use project-adjacent vacant land and open spaces, nor would it 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?

No Impact. The *City of Norco General Plan* and the *City of Eastvale General Plan* include policies that support circulation system improvements. Policy 1.3 of the *City of Norco General Plan* Circulation Element states that the City of Norco will "develop a circulation system of City streets excluding freeways, capable of serving existing and future increases in traffic" and Policy 1.7 states that the City of Norco will "establish a signalized arterial street system that provides an acceptable level of service during peak hours under build out conditions" (City of Norco 2000). Goal C-1 of the *City of Eastvale General Plan* states that the City of Eastvale will "provide a transportation system with sufficient flexibility in design and operation to respond to changes in concentrations of population and employment activities over time," and Goal C-4 states that the City of Eastvale will "work with local, regional, state, and federal agencies to establish and maintain effective transportation and infrastructure systems" (City of Eastvale 2012). The proposed project would help to fulfill the aforementioned policies.

Hamner Avenue is a major north-south roadway and the only road in Norco with urban arterial classification. (City of Norco 2000) The urban arterial classification is applied to roadways that at buildout will have six to eight lanes of travel (i.e., three to four lanes in each direction) within a ROW of 110 feet and a curb to curb pavement width of 86 feet. It is designed to accommodate regional through traffic with a limited number of accesses and driveways.

Mitigation Measures

No measures are required.

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?				x
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?				x

Regulatory Setting

The State Mining and Reclamation Act of 1975 classifies Mineral Resources that are of statewide or regional importance. The State Mining and Geology Board established Mineral Resource Zones (MRZ) to designate lands that contain mineral deposits. The Surface Mining and Reclamation Act (California PRC § 2710 et seq.) addresses the need for a continuing supply of mineral resources and is intended to prevent or minimize the adverse effects of surface mining on public health, property, and the environment. The act also assigns specific responsibilities to local jurisdictions in permitting and oversight of mineral resources extraction activities. The project site and surrounding areas are not identified as sources of important mineral resources, and there are no known existing mineral resource of value to the region or state.

Environmental Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities." As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to mineral resources must be evaluated. Riverside County has extensive deposits of mineral resources. The area in and surrounding the project corridor is not located within a mineral producing area, and no known locally important mineral resources are present.

Discussion

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?

No Impact. Mineral extraction activities are not present on the project site on or adjacent or nearby properties in the developed cities of Eastvale and Norco. As discussed above, the project site and surrounding areas are not identified as sources of important mineral resources. However, a portion of the southern tip of the project site is located in an area where land is designated as MRZ-3a, which is an area "containing known mineral deposits that may qualify as mineral resources" (City of Norco 2014). The resource in this case is crushed rock for construction-related purposes. As such, the

potential for mineral resources to occur onsite is low. Furthermore, the project site is not located within a mineral-producing area as classified by the California Geologic Survey. Therefore, project development and operation would not result in loss of availability of a known mineral resource that would be of value to the region and or state. No impact would result.

The proposed project would occur primarily within the existing transportation ROW. No new permanent ROW would be acquired for the project. Temporary construction easements would be needed during the construction period. However, because these areas would be used temporarily for construction access; there would be no loss of availability of a known mineral resource of value to the region or state. No impacts are anticipated.

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?

No Impact. As discussed above under Item (a), because the proposed project would occur primarily within the existing transportation ROW, and only minor amounts of land outside of the ROW would be utilized for temporary construction easements, there would be no loss of availability of a locally important mineral resource recovery site. Therefore, there would be no impact.

Mitigation Measures

No measures are required.

XIII. Noise

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?			X	
b.	Generate excessive groundborne vibration or groundborne noise levels?			X	
c.	Be located within the vicinity of a private airstrip 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 and expose people residing or working in the project area to excessive noise levels?				X

Regulatory Setting

The project alignment is located within the cities of Norco and Eastvale. The cities of Norco (2014) and Eastvale (2012) and the County of Riverside (2006) all exempt noise from facilities owned and operated by a governmental agency or capital improvement projects of a governmental agency from the requirements of the noise regulations. Therefore, the project would be exempted from the Cities' and County's municipal code.

The cities of Norco (2014) and Eastvale (2012) general plans both use a version of the State of California Land Use Compatibility Guidelines and are incorporated by reference. The City of Eastvale General Plan includes Policies N-3 and N-6, which designate a vibration threshold of 0.0787 PPV for vibration sensitive locations and require mitigation of noise levels in excess thresholds in Table N-3 (Land Use Compatibility Matrix).

Environmental Setting

Fundamentals of Environmental Noise

Noise is commonly defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a proposed project.

Sound is mechanical energy (i.e., vibration) transmitted by pressure waves over a medium such as air or water, and noise is generally defined as unwanted sound that annoys or disturbs people. Sound is characterized by various parameters that include the rate of oscillation of sound waves (i.e., frequency), the speed of propagation, and the pressure level or energy content (i.e., amplitude). In

particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (i.e., existing) sound level. Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called "A-weighting," written as "dBA" and referred to as "A-weighted decibels." Table 2-15 provides definitions of sound measurements and other terminology used in this chapter, and Table 2-16 summarizes typical A-weighted sound levels for different noise sources.

In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (L_{eq}), the minimum and maximum sound levels (L_{min} and L_{max}), percentile-exceeded sound levels (such as L_{10}, L_{20}), the day-night sound level (L_{dn}), and the community noise equivalent level (CNEL). L_{dn} and CNEL values differ by less than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

For a point source, sound attenuates based on geometry at rate of 6 dB per doubling of distance. For a line source such as free flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface such as grass attenuates at a greater rate than sound that travels over a hard surface such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers such as buildings and topography that block the line of sight between a source and receptor also increase the attenuation of sound over distance.

Table 2-15. Definition of Sound Measurements

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Maximum Sound Level (L_{max})	The maximum sound level measured during the measurement period.
Minimum Sound Level (L_{min})	The minimum sound level measured during the measurement period.
Equivalent Sound Level (L_{eq})	The equivalent steady state sound level that in a stated period of time would contain the same acoustical energy.
Percentile-Exceeded Sound Level (L_{xx})	The sound level exceeded "x" percent of a specific time period. L_{10} is the sound level exceeded 10 percent of the time.
Day-Night Level (L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

Sound Measurements	Definition
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/sec.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Table 2-16. Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: Caltrans 2013.

Fundamentals of Environmental Vibration

Operation of heavy construction equipment, particularly pile driving and other impact devices such as pavement breakers create seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance.

Perceptible ground-borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the peak particle velocity (PPV).

Table 2-17. Typical Vibration Levels Generated by Construction Equipment

Equipment	PPV at 25 feet
Pile driver (impact)	0.644 to 1.518
Pile drive (sonic/vibratory)	0.170 to 0.734
Vibratory roller	0.210
Hoe ram	0.089
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003

Source: FTA 2018.

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (FTA 2018). PPV_{ref} is the reference PPV from Table 2-17:

$$PPV = PPV_{ref} \times (25/Distance)^{1.5}$$

Table 2-18 and Table 2-19, below, summarize guidelines developed by Caltrans for damage and annoyance potential from transient and continuous vibration that is usually associated with construction activity. Equipment or activities typical of continuous vibration include excavation equipment, static compaction equipment, tracked vehicles, traffic on a highway, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment (Caltrans 2013b).

Table 2-18. Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 2-19. Guideline Vibration Annoyance Potential Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Transient sources create a single isolate vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Existing Conditions at Project Site

Land uses surrounding the two portions of the project alignment consist of single-family residences, parks, and undeveloped land. The SilverLakes Equestrian and Sports Park is located at the northern extent of the project alignment, near the intersection of Hamner Avenue and Citrus Street. Clark Field is located near the southern extent of the project alignment, near the intersection of Hamner Avenue and Detroit Street.

Land uses, including single-family residences and a park located along the east side of the southern portion of the project, from Norco drive to Detroit street, front onto Hamner avenue, while land uses on the west side are set back from Hamner by a parking lot. Land uses on the northern portion of the alignment, extending north of Citrus street, are generally set back from the roadway alignment. The residences on the west side of the alignment are protected by a 9-foot developer's wall. The topography along the project alignment is generally flat with some of the land uses along the west side (on the northern portion of the alignment) being slightly above grade of the roadway.

In order to document the existing ambient noise conditions, noise monitoring was conducted at seven locations along the project alignment between Tuesday, January 21 and Thursday, January 23, 2020. Short-term noise measurements (i.e., 20 minutes in duration) were conducted at five locations, designated ST-1 through ST-5, and long-term noise measurements (24-hour or more) were conducted at two locations, designated LT-1 and LT-2. All measurement locations are shown in

Figure 2-1. Field photos, field sheets, and calibration records for the Sound Level Meters (SLMs) used during field measurements are included in Appendix E of this document.

The predominant noise source during the noise measurements was traffic along Hamner Avenue and other surrounding roadways. The results of the short-term noise measurements are summarized in Table 2-20. As indicated in the table, measured short-term noise levels range from approximately 54 dBA L_{eq} (ST-5) to 68 dBA L_{eq} (ST-4) (when rounded to the nearest whole

Table 2-20. Short-term Noise Measurement Data

		Measurement Period			Distance to Centerline of Hamner Ave (feet)	Noise Measurement Results (dBA)								
Site ID	Location	Date	Start Time	Duration (mm:ss)		L_{eq}	L_{max}	L_{min}	L_{99}	L_{90}	L_{50}	L_{25}	$L_{8.3}$	$L_{1.67}$
ST-1	Clark Field	1-21-20	12:31	20:00	100	61.5	74.5	49.2	52.1	54.8	60.1	62.4	64.9	66.7
ST-2	Parking lot near 4142 Acacia Avenue	1-21-20	11:59	20:00	100	65.7	78.9	50.5	51.2	56.4	63.5	66.2	68.2	74.5
ST-3	SilverLakes Sports Park - 5555 Hamner Ave	1-21-20	10:38	20:00	100	59.8	69.4	51.6	52.3	54.5	58.8	60.9	62.8	65.2
ST-4	Open space near 4708 Shady Tree St	1-21-20	9:50	20:00	70	68.0	77.6	43.4	45.3	53.4	66.0	69.5	72.4	74.5
ST-5	Between 7212 and 7222 Excelsior Dr	1-21-20	11:23	20:00	190	54.1	67.7	41.9	42.8	44.5	48.7	51.6	59.1	64.3

Source: Calculations by ICF 2020. See Appendix E.

The results of the long-term noise measurements are shown graphically in Figure 2-2 and Figure 2-3. Based on the long-term measurements, the existing CNELs are 79 dBA[1] at both LT-1 and LT-2.

[1] The CNELs were calculated for the 24 hour period staring at 12:00 a.m. through 11:59 p.m. on 1/22/2020.

This page intentionally left blank.

Figure 2-2. LT-1 – Long-term Noise Measurement Data

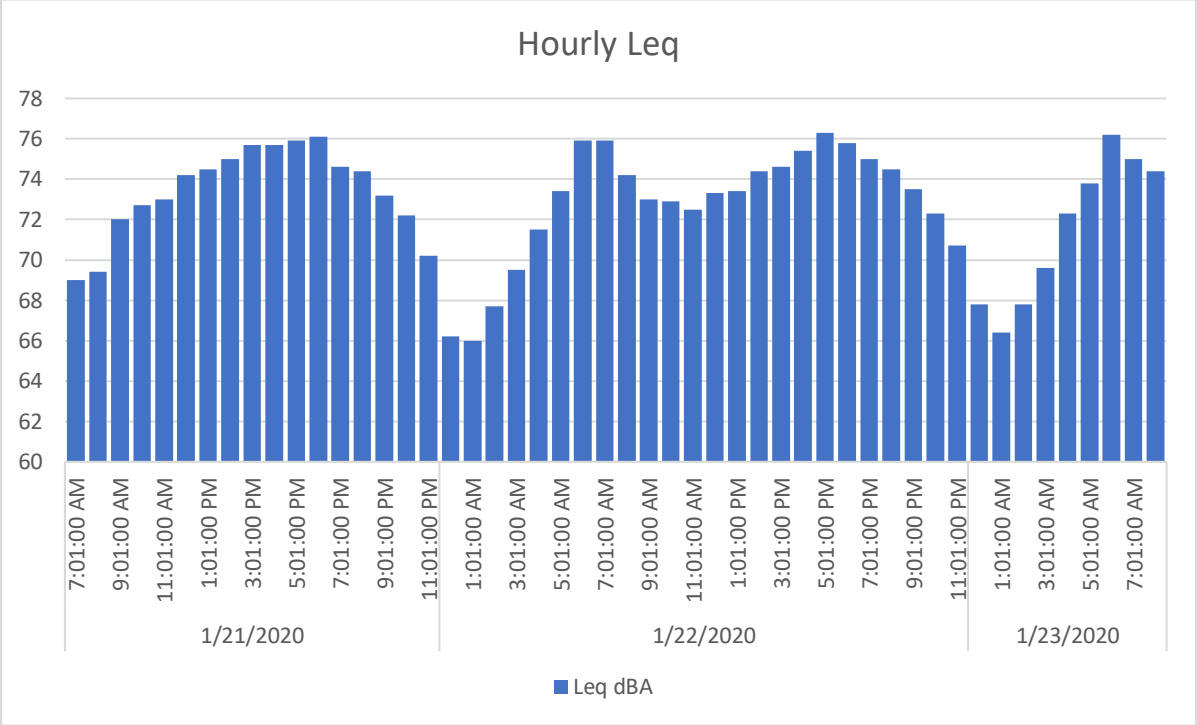
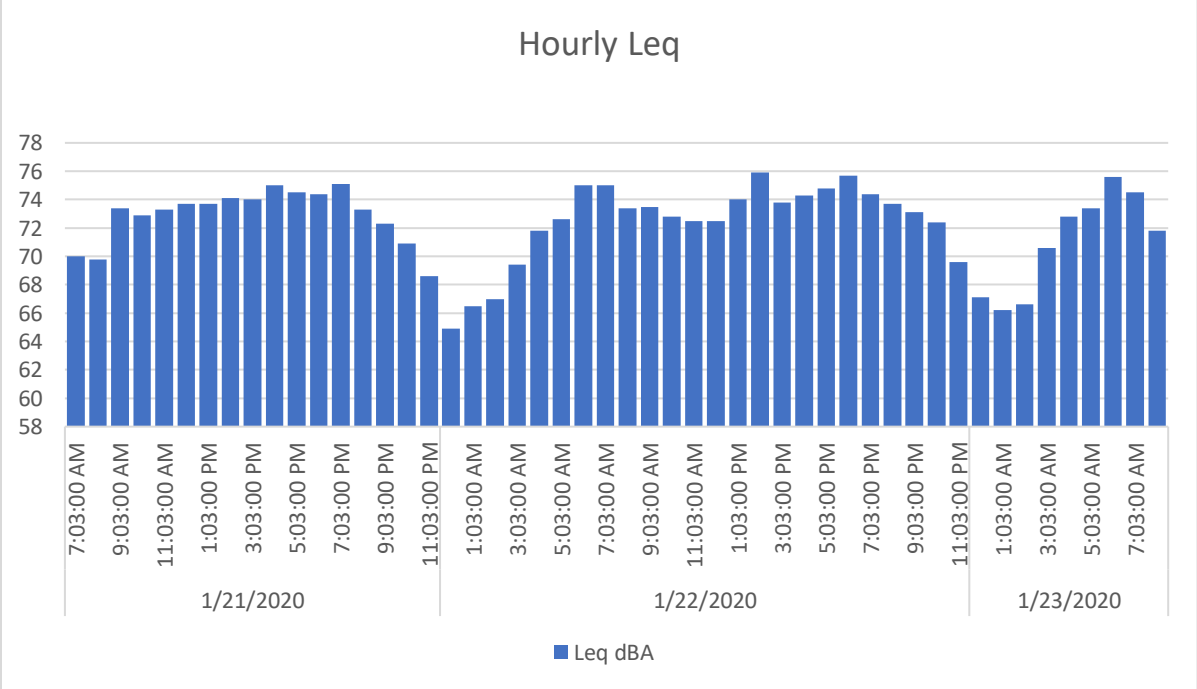


Figure 2-3. LT-2 – Long-term Noise Measurement Data



Changes in traffic noise levels resulting from the project were predicted by the use of the FHWA's Traffic Noise Model (TNM®). The TNM® traffic model is FHWA's computer program for highway

traffic noise prediction and analysis. The parameters used to estimate vehicular traffic noise were peak-hour traffic volumes provided by the traffic engineer, vehicle mix (percentages of automobiles, medium trucks, and heavy trucks), roadway, receptor, and barrier locations, and posted speed limits. The project alignment was modeled using Google Earth. The Hamner alignment was assumed to be at zero elevation and at grade surrounding land uses were modeled at the same or similar elevation. Any locations of major topographic relief were included in the model by using the relative difference in elevations from Google Earth between the Hamner roadway and the land use in question. The vehicle traffic mix used for the project alignment was autos 97 percent, medium trucks 2 percent, and heavy trucks 1 percent.

TNM results under the Existing and Opening Year conditions were converted to CNEL values using a 24-hour diurnal traffic pattern derived from the long-term noise measurements. The 24-hour hourly noise levels were incorporated into an Excel spreadsheet and the modeled peak hour noise level was included in the relevant (AM or PM peak hour) to scale the hourly noise levels to derive the location specific CNEL at the receptors sight. Operational traffic noise for the proposed project was analyzed by comparing the Design-Year CNEL noise levels to the Existing CNEL levels with project to the Design-Year and Existing no project CNEL.

Regulatory Background, Noise Standards and Thresholds of Significance

For the purposes of this analysis, a significant impact would occur if noise levels from operations would increase by 3 dB or more over the without project conditions. As construction is exempt, no threshold of significance is warranted.

Discussion

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

Construction

Construction activities related to development of the project would occur over several months. Construction activities would cause short-term increases in noise levels at nearby land uses. A complete list of the anticipated construction equipment to be used for the project, broken down into each construction phase, is provided in Table 2-21. As only a limited number of pieces of construction equipment could be present at one time, the number of pieces of equipment has been adjusted to reflect a single piece of equipment of each type. Additionally, usage factors have been included to represent the amount of time each piece of equipment is expected to be used in any given day. The RCNM output tables are included in Appendix E of this document.

Table 2-21. Typical Construction Noise Levels

Phase	Equipment	Usage Factor *	Noise Levels 50 feet (dBA Leq)
Site Prep	Crawler Tractor	0.43	80
	Excavator	0.38	77
	Cumulative phase noise level		82
Grading	Excavator	0.38	77
	Grader	0.41	81
	Tractor/Loader/Backhoe	0.37	73
	Scraper	0.48	80
	Crawler Tractor	0.43	80
	Roller	0.38	76
	Rubber Tired Loader	0.36	75
	Cumulative phase noise level		87
Drainage/Utilities/Sub-Grade	Air Compressor	0.48	75
	Grader	0.41	81
	Plate Compactor	0.43	80
	Pump	0.74	80
	Rough Terrain Forklift	0.4	80*
	Scraper	0.48	80
	Generator Set	0.74	78
	Tractor/Loader/Backhoe	0.37	73
	Cumulative phase noise level		88
Paving	Paver	0.42	73
	Roller	0.38	76
	Paving Equipment	0.36	83
	Tractor/Loader/Backhoe	0.37	73
	Cumulative phase noise level		84

Source: FHWA 2008.

* - The usage factors for construction equipment was provided as by the project engineer.

Based on the data provided in Table 2-21, noise levels at 50 feet from the center of construction activities would generally range from 82 to 88 dBA during peak periods. Because not all of the equipment would be operating at the same time or for the entire day, the noise level from project construction would be substantially lower. In addition, any increase in the ambient noise level due to project construction would be temporary. As discussed above, construction noise from capital improvement projects is exempt from the requirements of the municipal code. Therefore, any substantial temporary increase in the ambient noise level would be considered less than significant. However, to reduce noise levels from construction to the greatest extent practical, MM NOI-1, which requires implementation of noise control measures, is provided to reduce construction noise levels.

Operation

Project-Related Traffic Noise

The traffic volumes provided by Adventec Consulting Engineers (2017) were used to determine potential traffic noise impacts from the proposed project. Existing and Opening Year 2023 peak-hour volumes and the vehicle mix discussed above were used to model traffic noise levels from the proposed project at noise-sensitive receptors surrounding the project alignment. Operational traffic noise for the proposed project was analyzed using the TNM and analyzing 15 different modeled receptor under Existing Traffic Conditions, Existing Traffic Conditions Plus Project, Opening Year Traffic Conditions, and Opening Year Traffic Conditions Plus Project. Table 2-22 shows modeled receptors and the representative noise levels (converted to their CNEL equivalents) under each of these conditions for the proposed project.

The existing CNEL along the project alignment ranges from 44 dBA up to 69 dBA. Noise levels under the Existing with Project condition would increase by 0 dB (i.e., no change) to 1 dB relative to the Existing condition. It should be noted that these values are rounded to the nearest whole number, and increases are generally smaller than 1 dB. The Opening Year condition CNEL noise levels would range from 45 dBA to 70 dBA. Noise levels under the Opening Year Plus Project condition would increase by 0 dB (i.e., no change) to 1 dB relative to the Opening Year condition.

The City of Norco uses a 60 dBA CNEL threshold for Normally Acceptable and 70 dBA CNEL threshold for Conditionally Acceptable noise levels at residential land uses and a 75 dBA threshold for Conditionally Acceptable. Under Existing conditions, results at three modeled receptors (MR-10, MR-11, and MR-15) indicate that the project would meet or exceed the 60 dBA CNEL threshold (65, 65, and 69 dBA CNEL, respectively). Under the Existing with Project condition, results indicate that noise levels at MR-10, MR-11, and MR-15 would increase by 1 dB. This noise increase would be negligible, as a 3 dB increase in noise levels is considered a just noticeable increase.

Under the Opening Year condition, results at two modeled receptors (MR-10 and MR-11) would meet or exceed the 60 dBA CNEL threshold (66 and 65, respectively) and results at one modeled receptor (MR-15) would meet the 70 dBA CNEL threshold. Under the Opening Year Plus Project condition, results indicate the noise levels at MR-10 and MR-11 would increase by 1 dB, and MR-15 would not change. As discussed above, this noise increase would be negligible.

The City of Eastvale uses a less than 60-dBA CNEL threshold for Completely Compatible and 60–70-dBA CNEL threshold for Tentatively Compatible noise levels at residential land uses and a less than 65-dBA CNEL thresholds for Completely Compatible and 65–70-dBA CNEL threshold for Tentatively Compatible noise levels at recreational land uses. Under Existing conditions, results at five modeled receptors (MR-1, MR-2, MR-4, MR-5, and MR-6) indicate that the project would meet or exceed the 60-dBA CNEL threshold (61, 60, 60, 61, and 61 dBA CNEL, respectively). Under the Existing with Project condition, results indicate that the noises levels at MR-1, MR-2, MR-5, and MR-6 would not change and the noise level at MR-4 would increase by 1 dB. As discussed above, this noise increase would be negligible.

Under the Opening Year condition, results at the same five modeled receptors (MR-1, MR-2, MR-4, MR-5 and MR-6) would meet or exceed the 60 dBA CNEL threshold (62, 60, 61, 61, and 61, respectively). Under the Opening Year with Project condition, results indicate the noise levels at MR-4 and MR-5 would increase by 1 dB, and MR-1, MR-2, and MR-6 would not change. As discussed above, a 3-dB increase in noise levels is considered a just noticeable increase. Because traffic would

not increase noise levels by 3-dB or more at any of these locations under any of the analyzed project scenarios, the traffic noise impact would be less than significant at all existing receptors.

Table 2-22. Modeled Exterior Traffic Noise Levels (CNEL)

		dBA CNEL					
Receptor	Land Use/Jurisdiction	Existing Modeled	Existing Plus Project Modeled	Change	Opening Year Modeled	Opening Year Plus Project Modeled	Change
MR-1	Residential/ Eastvale	61	61	0	62	62	0
MR-2	Residential/ Eastvale	60	60	0	60	60	0
MR-3	Residential/ Eastvale	57	57	0	57	57	0
MR-4	Residential/ Eastvale	60	61	1	61	62	1
MR-5	Residential/ Eastvale	61	61	0	61	62	1
MR-6	Residential/ Eastvale	61	61	0	61	61	0
MR-7	Sports Park/Corona	58	58	0	59	59	0
MR-8	Sports Park/Corona	57	57	0	58	58	0
MR-9	Sports Park/Corona	57	57	0	58	58	0
MR-10	Residential/ Corona	65	66	1	66	67	1
MR-11	Residential/ Corona	65	66	1	65	66	1
MR-12	Residential/ Corona	44	45	1	45	46	1
MR-13	Residential/ Corona	48	48	0	48	49	1
MR-14	Residential/ Corona	50	51	1	51	51	0
MR-15	Residential/ Corona	69	70	1	70	70	0

Source: Calculations by ICF 2020. See Appendix E.

b. Generate excessive groundborne vibration or groundborne noise levels?

During construction activities, heavy construction equipment, such as rollers, excavators, and backhoes, would generate groundborne vibration that could affect nearby structures or residents. Typical vibration velocities from heavy construction equipment operation that would be used

during project construction range from 0.076 (loaded trucks) to 0.089 (large bulldozers[2]) inches per second peak particle velocity (PPV) at 25 feet from the source of activity (see Table 2-23).

The City of Norco does not have a threshold for vibration; however, the City of Eastvale has established a vibration threshold of 0.0787 PPV at vibration-sensitive locations. For consistency, the City of Eastvale vibration threshold is being used for the City of Norco. The closest vibration-sensitive receptor would be residences located no closer than 50 feet from construction activity. At 50 feet, PPV values would range from 0.027 to 0.032 inch per second. Because the predicted vibration levels from project construction would be well below applicable vibration thresholds, impacts from groundborne vibration would be less than significant.

Table 2-23. Typical Vibration Levels for Construction Equipment

	Inches/Second	
Equipment	Approximate peak particle velocity at 25 feet	Approximate peak particle velocity at 50 feet
Large bulldozer	0.089	0.032
Loaded trucks	0.076	0.027

Source: FTA 2018.

The proposed project does not involve changes that would result in noticeable increases in groundborne vibration levels from use or maintenance of the roadway when compared to the No-Build Alternative. Once the project is completed, long-term increases in noise and vibration levels from use or maintenance of the roadway would be less than significant.

c. Be located within the vicinity of a private airstrip 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 and expose people residing or working in the project area to excessive noise levels?

The closest airports are the Chino Airport and the Corona Municipal Airport, which are located approximately 4.5 and 4.0 miles away from the project alignment, respectively. Therefore, no impacts would occur as the project associated with airport noise.

Mitigation Measures

No measures are required. Although project construction is exempt from local noise regulations, the following measure will be implemented to minimize potential construction noise impacts.

NOI-1: Although construction noise would be temporary and limited to the duration of the construction, the following noise control measures will be incorporated into the project contract specifications in order to minimize construction noise effects:

- Require the construction contractor to maintain all noise-producing project equipment and vehicles using internal combustion engines to be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed

[2] Large bulldozers are used as a conservative equivalent piece of construction equipment for listed pieces of construction equipment included in Table 2-21.

"package" equipment (e.g., arc-welders, air compressors) will be equipped with shrouds and noise-control features readily available for that type of equipment.

- All mobile or fixed noise-producing equipment used on the project that is regulated for noise output by a local, state, or federal agency will comply with such regulations while in the course of project activity.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas will be located as far as practicable from noise-sensitive receptors.
- Construction site access road speed limits will be established and enforced during the construction period.
- The hours of construction, including noisy maintenance activities and spoils and material transport, will be restricted to the periods and days permitted by the local noise or other applicable ordinance. Noise-producing project activity will comply with local noise control regulations affecting construction activity or obtain exemptions there from.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.
- No project-related public address or music system will be audible at any adjacent receptor.

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 (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				x
b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities." CEQA establishes that economic, social, and particularly housing factors will be considered by public agencies, together with technological and environmental factors, in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR (CCR Chapter 3, Article 9 § 15131). As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to land-use resources must be evaluated. County and community plans, including general plans, area plans, and specific plans, address population and housing issues. Policies and regulations include guidelines for community design, housing, transportation and circulation, economic development, and land use.

Environmental Setting

The proposed project corridor is primarily developed with single-family residences. The northern segment has single-family residences to the north and west of Hamner Avenue and the southern segment to the north and east. Some residences are as close as 30 feet from the project corridor.

Discussion

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

No Impact. The proposed project does not propose development of residential units and would widen the existing Hamner Avenue from four lanes (i.e., two lanes in each direction) to six lanes (i.e., three lanes in each direction) from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street/Norco Drive. Within the project limits, the proposed project is needed to reduce congestion and improve operational efficiency along Hamner Avenue. The proposed project is not expected to induce growth beyond that already anticipated by the local general and regional plans. Roadway improvements are designed to increase capacity to meet the demands of existing and future traffic.

No substantial population growth in the area would be induced as a result of implementing the proposed project, directly or indirectly. The pattern and rate of population and housing growth would be consistent with those contemplated in existing plans for the area. The proposed project is consistent with the housing projections and goals set forth in the regional transportation plan RTP/SCS for Riverside County which identifies priorities to "reduce traffic bottlenecks, improve the efficiency of the region's network" (RTPSCS 2016). No developable land areas would be made more accessible by the proposed project and the proposed project would not open new areas to development or lead to change in land use and density.

Because the proposed project is anticipated to accommodate existing and future travel demand in the corridor related to existing and planned growth approved by local jurisdictions and not contribute to unplanned growth in the area, the proposed project is not considered growth-inducing. Therefore, no direct or indirect long-term impacts related to population growth are anticipated with the implementation of the proposed project.

b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. As no residential units currently exist on the project site, project development would not cause displacement of any persons or require construction of housing elsewhere. The proposed project would add one traffic lane in each direction to the existing Hamner Avenue and be constructed within the existing transportation ROW or temporary construction easements. The proposed project would not result in any partial or full acquisitions of properties adjacent to the project area; as such, the proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impacts would occur and no mitigation is required.

Mitigation Measures

No measures are required.

XV. Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:				x
1. Fire protection?			x	
2. Police protection?			x	
3. Schools?				x
4. Parks?				x
5. Other public facilities?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities." As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to public service resources must be evaluated.

The following identified the various codes, regulations, and policies applicable to public service agency operations and the project.

The State Fire Marshal (SFM) is responsible for coordination of the state's fire and life safety codes. The SFM Code Development and Analysis Program staff regularly reviews Title 19 of the CCR, Public Safety (which discusses fire safety standards), for relevancy, necessity, conflict, duplication, and overlap. Government Code 51175-89 directs CAL FIRE to identify areas of fire hazard severity zones within State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs). These zones provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires (CAL FIRE 2007).

The Riverside County General Plan provides the policy framework for managing development growth throughout the County. The Riverside County General Plan Safety Element sets forth specific policies and objectives that emphasize hazard mitigation, emergency response, and disaster recovery. The *Riverside County General Plan* Multipurpose Open Space Element defines the land use and various park types and sets for guidelines for developing and locating public facilities to provide the greatest benefit to the greatest number of people with the least cost and environmental impact.

The Riverside County Fire Code (ordinance no. 787) prescribes laws that may be enforced by the Riverside Fire Department to help safeguard life and property from fire, explosion, panic, or other hazardous conditions that may arise.

The *City of Norco General Plan* includes a Safety Element providing the "goals and policies for responding to potential natural hazards from earthquakes, flooding and fire to providing community protection services" (City of Norco 2016). The City of Norco Municipal Code, last amended 2019, contains 19 chapters, including Chapter 9, *Peace, Safety, and Morals*, which focuses on fire and police protection.

The *City of Eastvale General Plan* includes Chapter 12, *Safety*, which provides the safety goals and policies for responding to potential natural hazards from earthquakes, flooding, and fire to providing community protection services (City of Eastvale 2012). The City of Eastvale Municipal Code, last amended in 2019, contains 22 chapters, including Chapter 8, *Public Morals and Safety*, which focuses on fire and police protection.

Environmental Setting

Public services for the proposed project site and the surrounding areas are provided by the Riverside County Fire Department, Riverside County Sheriff's Department, City of Norco Sheriff's Department, City of Eastvale Sheriff's Department, Corona-Norco Unified School District, Riverside County Library System, and Riverside County Regional Parks. Public services have been actively developing in tandem with growth in the community and region. A discussion of the current provisions to deliver public services within the proposed project corridor and surrounding areas is provided below, along with any planning efforts to accommodate increases in demand due to future growth. Table 2-24 provides the location of the fire stations and police stations in vicinity of the proposed project. The closest fire stations to the project vicinity are Eastvale Fire Station 27, Norco Fire Station 47, and the closest police station is the Norco Sherriff Station. Table 2-25 provides the locations of all public schools within the vicinity of the proposed project. The closest schools to the project vicinity are the Highland Elementary School, Eastvale Elementary School, and River Heights Intermediate School. Table 2-26 provides the locations of parks in vicinity of the proposed project. The closest parks to the project vicinity are the Community Center Park, Neil Snipes Park, Clark Field, and Eastvale Community Park.

Discussion

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:

Fire protection?

Less-than-Significant Impact. Fire protection and emergency medical services in the study area are provided by the Riverside County Fire Department, which provides fire protection and emergency medical services to the City of Norco and the City of Eastvale through a cooperative agreement between the City and the County. The closest stations to the study area are Station 27 at 7067 Hamner Avenue in the City of Eastvale and Station 47 at 3902 Hillside Avenue in the City of

Norco. Table 2-24 shows the locations of the nearest fire stations serving the project study area and the distance of these facilities to the project site.

Construction activities have the potential to result in temporary, localized, site-specific disruptions in the proposed project area involving partial and/or complete roadway and lane closures and detours. This could lead to an increase in delay times for emergency response vehicles during construction. These detours and traffic lane closures would be included in the TMP that is prepared and coordinated with a public information program during construction.

The proposed project involves improvements to an existing roadway. The proposed project would not result in an increase in population, and therefore would not increase demand for community services. No fire stations would be acquired or displaced; therefore, there would be no effect on the delivery of fire services. The proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. The proposed project would improve the ability of fire service providers to serve the community, as it would reduce congestion and improve operational efficiency by providing lane continuity with the existing segments of the roadway to the west and east of the project limits, which would likely reduce response times for these services. Impacts would be less than significant.

Table 2-24. Fire, Police, and Emergency Medical Services

Facilities	Location	Nearest Distance to the Project Corridor (miles)
Fire		
Eastvale Fire Station 27	7067 Hamner Avenue, Eastvale 92880	0.10
Norco Fire Station 47	3902 Hillside Avenue, Norco 92860	1.17
Police		
Norco Sheriff's Station	2870 Clark Avenue, Norco 92860	1.02

Police protection?

Less-than-Significant Impact. Law enforcement and police protection services in the study area are provided by the Riverside County Sheriff's Department. As shown in Table 2-24, the nearest station is at 2870 Clark Avenue in the City of Norco, approximately 1.02 miles south of the project footprint. As mentioned previously in Item (a)(1), the temporary lane closure or detours could affect the response times for police service providers; however, there are enough alternative access routes that police service providers would still have ample access to all parts of the study area and neighboring communities. In addition, implementation of a construction-period TMP would ensure that access is maintained to and from the project area and that the police service providers are notified prior to the start of construction activities. Impacts would be less than significant.

As mentioned previously, the proposed project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional police protection. No impacts from operation of the proposed project would occur. The improved roadway would likely improve emergency access through the project area, which would be a beneficial impact.

Schools?

No Impact. Schools within 0.5 mile of the project site are shown in Table 2-25. The Corona-Norco Unified School District is in the school district in the study area. As shown in Table 2-25, there are three schools within 0.5 mile of the project site that could potentially be temporarily affected due to the additional traffic delay that could occur due to proposed project construction activities. Implementation of the TMP would help ensure that disruptions are minimized. No traffic-generating development would occur in conjunction with implementation of the proposed project.

Table 2-25. Schools within 0.5 Mile of the Project Site

Schools	Location	Nearest Distance to the Project Corridor
Highland Elementary School	2301 Alhambra Street, Norco 92860	.40
Eastvale Elementary School	2000 Norco Drive, Norco 92860	.57
River Heights Intermediate School	7447 Scholar Way, Eastvale 92880	.50

Parks?

No Impact. Recreational resources within 0.5 mile of the project footprint are shown in Table 2-26. No parks are located within the project limits of disturbance, and none are anticipated to be directly or indirectly affected by the proposed project. As mentioned previously, the proposed project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional parks or recreational facilities.

Table 2-26. Recreational Resources within 0.5 Mile of the Project Footprint

Schools	Location	Nearest Distance to the Project Corridor
Community Center Park	3900 Acacia Avenue, Norco	0.12
Neil Snipes Park	Intersection of Fifth Street and Hamner Avenue	0.43
Clark Field	1740 Detroit, Norco	0.05
Eastvale Community Park	12750 Citrus Street	0.26

Other public facilities?

No Impact. The Norco Public Library is 0.5 mile from the project site, and the Eastvale Library is 0.53 mile from the project site. Riverside Transit Agency (RTA) operates its Route 3 buses along Hamner Avenue. Bus stops and routes would not be removed as a result of the proposed project, but may experience temporary delays during construction, which would be addressed through the implementation of the TMP.

Mitigation Measures

No measures are required; however, a TMP would be implemented to minimize potential construction-period impacts.

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?				x
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California PRC § 21001 (b)). As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to recreation resources must be evaluated.

Regional parks and recreational facilities are protected by the California Public Park Preservation Act (California PRC §§ 5400–5409) and the California Department of Fish and Wildlife Ecological Reserves (California Fish and Game Code § 1580 et seq. and California Code of Regulations, Title 14 § 630).

Environmental Setting

The project alignment passes through the cities of Norco and Eastvale in the County of Riverside. The project location traverses residential, commercial, and recreational settings. Type and character of the parks, recreational facilities, open space, and school district play areas within the study vary with the landscape, resulting in a diverse range of resources and associated use experiences. The Santa Ana River is a body of surface water used primarily for aesthetic and recreational purposes.

Discussion

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. As detailed in Chapter 1, *Introduction and Project Description*, the proposed project would widen the existing Hamner Avenue roadway from Schleisman Road to Citrus Street and from Detroit Street to Sixth Street/Norco Drive. Because all project improvements are expected to occur within the existing transportation ROW and the proposed project does not include new development, implementation of the proposed project would not require property from or result in the increased use of existing parks or recreational facilities. General plans for the counties and cities within the study area and the municipal codes for these counties and cities within the study area are

consistent with the proposed project. Therefore, project development and operation would not result in a substantial increase in population nor result in an increase in use of existing neighborhood and regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated. Therefore, no impacts would occur.

b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The proposed project does not include development of recreational facilities or require expansion of recreational facilities. Therefore, no impact would occur, and no mitigation measures are required. The proposed project would not result in an adverse physical effect on the environment.

Mitigation Measures

No measures are required.

XVII. Transportation

		Potentially Significant Impact	Less than Significant 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?			x	
b.	Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?			x	
c.	Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x
d.	Result in inadequate emergency access?			x	

Regulatory Setting

Local transportation policy in the project area is established by the circulation elements of the general plans of the cities of Norco and Eastvale. The City of Norco has adopted the use of the Highway Capacity Manual method in the evaluation of intersection LOS. The City of Norco has established LOS D as the minimum standard for intersections during peak hours. Based on the Riverside County definition of LOS D Average Daily Traffic volumes, the City has adopted the minimum standard of LOS D for the planning of roadway segments. LOS E is considered the minimum standard for the Riverside County Congestion Management Program.

The City of Eastvale Circulation Element recognizes LOS as a metric for evaluating traffic operations, and identifies LOS D as a roadway used to its design capacity. The City of Eastvale Circulation Element also states that the LOS standard favors the automobile, which may improve the quality of the drive, but does not recognize other forms of transportation, such as bus, rail, bicycle, and walking.

SB 743 (Steinberg 2013), made effective in January 2014, requires the Governor's Office of Planning and Research to change CEQA guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis will shift from driver delay to VMT reduction of GHGs and creation of multimodal networks and promotion of mixed-use developments. Although originally scheduled to be fully implemented in CEQA guidelines by January 1, 2016, an extension has allowed cities more time to establish an analysis methodology. After July 1, 2020, VMT will be the means by which transportation impacts are evaluated under CEQA. Neither the City of Norco nor the City of Eastvale has published guidance for local implementation of SB 743; however, VMT information is provided herein for informational purposes.

Environmental Setting

The two project segments currently feature two lanes in each direction. Hamner Avenue is locally identified as an urban arterial in the Circulation Element of the *City of Norco General Plan*, which allows for three travel lanes in each direction. In addition, the northern project segment is identified as a Major Collector in the Circulation and Infrastructure chapter of the *City of Eastvale General Plan* (City of Eastvale 2012:4-4). Although Collectors are generally defined as having one to three travel lanes in total (City of Eastvale 2012:4-2), the northern project segment has sufficient roadway width to provide six travel lanes (three in each direction) within the 118-foot maximum ROW designated for a Major Collector. Table 2-27 shows the existing (2017) roadway segment LOS and Table 2-28 shows the existing intersection LOS.

Table 2-27. Roadway Segment LOS Analysis – Existing Conditions (2017)

Segment	Roadway Classification	ADT	LOS E Capacity	LOS
South of Limonite Avenue	6-Lane Arterial	27,485	53,900	C
Between Schleisman Road and Citrus Street	4-Lane Arterial	22,499	35,900	C
Over Santa Ana River	2-Lane Arterial	29,782	18,000	F
North of Norco Drive/Sixth Street	4-Lane Arterial	25,958	35,900	C

Source: ADVANTEC Consulting Engineers 2017.

Table 2-28. Intersection LOS Analysis – Existing Conditions (2017)

		No Build	
Signalized Intersection	Peak Hour	Delay	LOS
Hamner Avenue/Limonite Avenue	AM	43.0	D
	PM	42.7	D
Hamner Avenue/Schleisman Road	AM	35.0	D
	PM	12.6	B
Hamner Avenue/Citrus Street	AM	65.0	E
	PM	33.9	C
Hamner Avenue/Detroit Street	AM	43.8	D
	PM	79.7	E
Hamner Avenue/Norco Drive/Sixth Street	AM	41.6	D
	PM	87.4	D

Source: ADVANTEC Consulting Engineers 2017.

Table 2-29 shows estimated VMT along the project corridor in 2017, which is approximately 25.4 million miles annually.

RTA operates its Route 3 buses along Hamner Avenue within the southern project segment and has stops near the Hamner Avenue/Taft Street intersection and adjacent to the northern project segment on Citrus Street. Paved sidewalks are provided on both sides of Hamner Avenue in the northern and southern project segments, with the exception of the eastern side of Hamner, between Detroit Street and Taft Street, which has a dirt path. No bicycle lanes or paths are present within

either the northern or southern project segments; however, bicycle travel is not prohibited within the project limits.

Table 2-29. Estimated Vehicle Miles Traveled (2017)

Segment	Daily Volume	Annual Volume [a]
South of Limonite	27,485	25,438,631
Schleisman to Citrus	22,499	
Over Santa Ana River	29,782	
North of Sixth	25,958	

Source: ADVANTEC Consulting Engineers 2017.

[1] VMT was estimated using daily vehicle volume data reported in the 2017 traffic analysis conducted for the bridge replacement project, which was then multiplied by segment length.

Discussion

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

Less-than-Significant Impact. During the construction period, temporary delays to drivers and RTA Route 3 riders could occur as a result of the presence of construction personnel and equipment, lane closures, and speed reductions in the area. In addition, pedestrians may be detoured to sidewalks on the opposite side of the street or temporary sidewalks when sidewalks are being reconstructed. Although there may be delays or inconvenience associated with construction activities, impacts would be minimized through implementation of a TMP, which would involve communication of any temporary lane closures to emergency responders and members of the public. Given the temporary nature of construction activities and that such impacts would be minimized through implementation of a TMP, construction-period impacts would be less than significant.

With respect to long-term operations of passenger vehicles in the project area, the Build Alternative would reduce congestion and improve operational efficiency by providing lane continuity with the existing segments of Hamner Avenue. As shown in Table 2-30, in the 2023 Opening Year, all roadway segments of Hamner Avenue would operate at LOS C or better after implementation of the proposed project.

Table 2-30. Roadway Segment LOS Analysis – Opening Year 2023 Conditions

Segment	Roadway Classification	ADT	LOS E Capacity	LOS
No Build Conditions				
South of Limonite Avenue	6-Lane Arterial	28,800	53,900	C
Between Schleisman Road and Citrus Street	4-Lane Arterial	23,700	35,900	C
Over Santa Ana River	2-Lane Arterial	31,300	18,000	F
North of Norco Drive/Sixth Street	4-Lane Arterial	27,400	35,900	C
Build Alternative				
South of Limonite Avenue	6-Lane Arterial	28,900	53,900	C
Between Schleisman Road and Citrus Street	6-Lane Arterial	24,000	53,900	C

Segment	Roadway Classification	ADT	LOS E Capacity	LOS
No Build Conditions				
South of Limonite Avenue	6-Lane Arterial	28,800	53,900	C
Between Schleisman Road and Citrus Street	4-Lane Arterial	23,700	35,900	C
Over Santa Ana River	2-Lane Arterial	31,300	18,000	F
North of Norco Drive/Sixth Street	4-Lane Arterial	27,400	35,900	C
Build Alternative				
Over Santa Ana River	6-Lane Arterial	31,800	53,900	C
North of Norco Drive/Sixth Street [a]	6-Lane Arterial	27,900	53,900	B

Source: Adapted from ADVANTEC Consulting Engineers 2017.

[a] Revised from Traffic Operations Analysis to account for 6-lane configuration north of Norco Drive/Sixth Street intersection (ADVANTEC Consulting Engineers 2017).

As shown in Table 2-31, under the proposed project, all intersections would perform at LOS D or better at Opening Year 2023, with the exception of the following intersections:

- Hamner Avenue/Schleisman Road – LOS F during AM peak hour
- Hamner Avenue/Citrus Street – LOS F during AM peak hour
- Hamner Avenue/Norco Drive/Sixth Street – LOS E during AM peak hour, and LOS F during the PM peak hour

Although these intersections would operate at LOS E or F under the Build Alternative and, in some cases, there would be additional delay under the Build Alternative, the LOS would not deteriorate at any intersection in the project vicinity when compared to conditions under the No-Build Alternative.

Table 2-31. Intersection LOS Analysis – Opening Year 2023

Signalized Intersection	Peak Hour	No Build		Build	
		Delay	LOS	Delay	LOS
Hamner Avenue/Limonite Avenue	AM	43.6	D	43.6	D
	PM	45.2	D	45.7	D
Hamner Avenue/Schleisman Road	AM	87.6	F	92.8	F
	PM	37.9	D	45.5	D
Hamner Avenue/Citrus Street	AM	65.8	E	70.8	E
	PM	41.2	D	42.5	D
Hamner Avenue/Detroit Street	AM	49.7	D	27.4	C
	PM	104.0	F	34.9	C
Hamner Avenue/Norco Drive/Sixth Street [a]	AM	60.4	E	58.7	E
	PM	103.3	F	107.3	F

Source: ADVANTEC Consulting Engineers 2017.

Both roadway and intersection LOS measure in the project area indicate that operations under the Build Alternative would be either more efficient, or roadway users would experience minor delays, which would also occur with operation on the RTA Route 3 bus line. Following the completion of construction activities, there would be no long-term change to bicycle and pedestrian travel, as all

sidewalks that would be demolished to accommodate the wider roadway would be replaced, and bicycle travel would continue to be allowed on Hamner Avenue.

b. Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?

Less-than-Significant Impact. CEQA Guidelines Section 15064.3(b) identifies that for roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. Given that there would be an increase in capacity on Hamner Avenue as a result implementation of the Build Alternative, an increase in VMT is anticipated to occur. As shown in Table 2-32, annual VMT in the project corridor at Opening Year 2023 is expected to be just over 27 million under the Build Alternative relative to the 26.7 million estimated under the No-Build Alternative (a 1.1 percent increase). Because the VMT estimate is based on vehicle volumes on Hamner Avenue only, it does not account for reductions in volumes elsewhere resulting from traffic redistribution. Thus, the increase in VMT does not signify new trip generation would result from the project implementation, and the 1.1 percent increase in VMT in the project corridor likely overstates the VMT effects of the proposed project. The proposed project would directly implement the RTP/SCS initiative to improve highway and arterial capacity by adding capacity in the form of the widened roadway, which is specifically identified as part of the initiative (SCAG 2016:6).

Table 2-32. Estimated Vehicle Miles Traveled (2023)

	No Build		Build	
Segment	Daily Volume	Annual Volume [a]	Daily Volume	Annual Volume [a]
South of Limonite	28,800	26,730,045	28,900	27,015,110
Schleisman to Citrus	23,700		24,000	
Over Santa Ana River	31,300		31,800	
North of Sixth	27,400		27,900	

Source: ADVANTEC Consulting Engineers 2017.

[a] VMT was estimated using daily vehicle volume data reported in the 2017 traffic analysis conducted for the bridge replacement project, which was then multiplied by segment length. Because VMT estimate is based on vehicle volumes on Hamner Avenue only, it does not account for reductions in volumes elsewhere resulting from traffic redistribution. The increase in VMT and emissions does not signify new trip generation would result from the project implementation. Thus, estimates identified above likely overstate the VMT effects of the proposed project.

Although Table 2-32 indicates that the widened roadway would increase VMT in the project area, such increases are likely an overestimate. VMT is not anticipated to change appreciably because the Build Alternative would not change land uses surrounding the project site and would therefore not increase the development potential of areas surrounding the project site. Increases in VMT that would occur as a result of implementation of the Build Alternative would be less than significant.

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

No Impact. The proposed project would not substantially increase hazards because of a design feature or incompatible uses. In general, it is anticipated that the proposed project would improve traffic safety along Hamner Avenue between Schleisman Road and Citrus Street and between Detroit Street and Sixth Street/Norco Drive, as it would eliminate the existing bottleneck and improve future traffic congestion.

d. Result in inadequate emergency access?

Less-than-Significant Impact. The Build Alternative would improve emergency access along this portion of Hamner Avenue, as it would reduce congestion in the area, which would likely reduce response times for emergency services along Hamner Avenue. Construction activities have the potential to result in temporary, localized, site-specific disruptions in the proposed project area involving partial and/or complete roadway and lane closures and detours, which could lead to an increase in delay times for emergency response vehicles during construction; however, the proposed project would include the preparation and implementation of a TMP, as specified in TMP-1. Impacts would be less than significant during the construction period.

Mitigation Measures

Although the proposed project would not result in significant construction transportation impacts, the following measure will be implemented to reduce or minimize any adverse construction transportation impacts.

TMP-1: A Traffic Management Plan (TMP) will be prepared during final project design in order to minimize delays associated with project construction activities. The TMP will include provisions related to work zones and staging, signage, pedestrian and bicyclist detours, and advance notification of lane closures to residents, businesses, and drivers.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project 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:				
a. 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				x
b. 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 Resource Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe.				x

Regulatory Setting

CEQA contains provisions regarding the protection of Native American remains (Section 15064.5[d] and [e]). In the event that a study identifies the existence of, or likelihood of, Native American remains, the lead agency must work with the appropriate Native Americans, as identified by the NAHC and provided in PRC Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans, as identified by the NAHC.

Environmental Setting

The PAL lies in an area that was traditionally occupied by several Native American groups, including the Gabrielino, Luiseño, and Serrano Indians (Bean and Smith 1978; Kroeber 1976). Ethnographic sources identify the Santa Ana River as the natural topographical boundary between the Gabrielino, on the northwest and west sides of the river; the Luiseño, to the east and southeast; and the Serrano, to the north and northeast (Harrington 1986, Volume 3, Reel 101).

Discussion

a. Would the project 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: 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)?

No Impact. A request review of Sacred Lands File was submitted to the NAHC on April 1, 2020. The NAHC responded on April 3, 2020, stating that the Sacred Lands File was positive for the presence of Native American cultural resources in the four sections that intersect the PAL (i.e., Township 3 South, Range 7 West, Section 1; Township 2 South, Range 7 West, Sections 31 and 36; Township 3 South, Range 6 West, Section 6). The NAHC conducts its Sacred Lands File search by section, not by project area. Although the Sacred Lands File search came back positive for the submitted request, it is unclear if sacred lands are present within the PAL or the surrounding areas. In addition to the Sacred Lands File search, a literature review was conducted, and no previously recorded cultural resources are located within the PAL. During the survey, the archaeologists noted that majority of the PAL has undergone extensive ground disturbance during the course of urban development in the area. In general, areas that have been disturbed by construction associated with urban development have been extensively graded and compacted and, therefore, are unlikely to contain preserved, intact buried tribal cultural resources. Thus, impacts are not anticipated. Standard measures TCR-1 through TCR-4 will be implemented to ensure compliance with existing statutes and regulations related to tribal cultural resources.

b. Would the project 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: 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?

No Impact. A request review of Sacred Lands File was submitted to the NAHC on April 1, 2020. The NAHC responded on April 3, 2020, stating that the Sacred Lands File was positive for the presence of Native American cultural resources in the four sections that intersect the PAL (i.e., Township 3 South, Range 7 West, Section 1; Township 2 South, Range 7 West, Sections 31 and 36; Township 3 South, Range 6 West, Section 6). The NAHC recommended contacting 31 Native American individuals and organizations that may have knowledge of cultural resources in the study area. Outreach letters that described the proposed project were sent.

On April 14, 2020, ICF sent Assembly Bill 52 (AB 52) outreach letters to all 31 individuals and organizations identified by the NAHC. The letters described the proposed project and requested that each tribe respond if it would like to be a consulting party on the project. The following responses have been received:

- A response was received from the Quechan Tribe of the Fort Yuma Reservation on April 27, 2020. The tribe had no comments on the project.
- A response was received from Agua Caliente Band of Cahuilla Indians on May 12, 2020. The tribe defers consultation to other tribes located closer to the project.
- A response from Joseph Ontiveros, Tribal Historic Preservation Officer, for Soboba Band of Luiseño Indians, requesting AB 52 consultation for the project was received on May 18, 2020. Mr. Ontiveros requested the record search, a copy of the draft report and project

information, which were sent to him on June 12, 2020. Representatives from the City of Norco and Riverside County Transportation Department had meetings with Mr. Ontiveros to discuss the project on June 10, 2020, and June 25, 2020. During the consultation, the Tribe discussed historic context regarding its tradition in the region and the potential for unknown discovery of Tribal Cultural Resources during construction. On June 26, 2020, the City sent the Cultural Study for the project to the Tribe. The Tribe responded with edits to measures included in the document. The edits suggest that the Tribe wishes a monitor to be present onsite during construction phases that involve any ground disturbing activities. On July 13, 2020, City of Norco acknowledged by email their receipt of the Tribe's information. In the City of Norco's assessment, the consultation process did not yield any substantial evidence that would warrant imposition of the Tribe's preferred measures. Accordingly, the City of Norco has determined that the parties cannot reach mutual agreement on the mitigation measures to be incorporated into the proposed Project. As explained during consultation, the City of Norco will recommend imposition of the mitigation measures stated below. These measures, found in PRC Section 21084.3, are consistent with the measures recommended by the NAHC and would ensure significant impacts related to tribal cultural resources would not occur.

Mitigation Measures

TCR-1: Prior to commencement of construction, there will be a pre-construction meeting in which the construction staff and Resident Engineer (RE) will meet to conduct preconstruction archaeological resource sensitivity and awareness training. This meeting will also discuss the specifications and safety to ensure that all parties understand the described regulatory requirements. It is critical that all parties understand the methods and goals, as well as the protocols, for the inadvertent discovery of archaeological resources and/or human remains during construction. Record of this meeting will be placed in the RE file.

TCR-2: If archaeological resources are encountered during construction, the contractor will follow these procedures:

- Halt all work within a 60-foot radius and immediately inform the RE.
- Following notification, a qualified archaeologist will make a preliminary assessment of the discovery to determine whether the find is an isolated artifact or a recent deposit. If the find is determined to be isolated or recent, construction will be allowed to resume.
- Should the archaeologist determine the discovery is potentially significant, the archaeologist will evaluate the discovery and, if necessary, formulate appropriate mitigation measures after consultation with the City of Norco.
- If the discovery contains Native American archaeological resources, all Native American tribes and individuals who requested to be contacted will be informed of the discovery. The archaeological resource discovery, including human remains, will not be disturbed (i.e. photographed, videoed, or moved) until fully assessed by the archaeologist.

Additionally, if prehistoric or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area must halt within a 60-foot radius until a qualified archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation and/or mitigation measures.

Should the deposit contain Native American resources, all interested Native American parties must be first consulted as to how the deposit and any associated artifacts and features should be treated.

Once the archaeologist has determined that the archaeological deposit has been sufficiently documented, recovered/removed, and concluded that further construction activities would not affect additional archaeological deposits in the immediate area, construction activity can resume in that area.

TCR-3: In the event that human remains are discovered during construction at any time, the following provisions will apply:

All construction activity will immediately be halted within 60 feet of the discovery, and the RE will be informed. The RE will then immediately contact the Riverside County Coroner and the archaeologist, if not already present. The coroner will have 2 working days to inspect the remains after receiving notification. During this time, all remains, associated soils, and artifacts will remain in situ and be protected from public viewing. The City will take appropriate measures to protect the discovery site from disturbance during any negotiations. This may include restricting access to the discovery site and the need to hire 24-hour security.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance will occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American and not under the coroner's jurisdiction, within 24 hours the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD will complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Work will be suspended within a 100-foot radius of the human remains until the MLD's recommendations are implemented.

The archaeologist will work with the MLD in regard to the treatment of the remains and all associated funerary objects and ensure that any identified human remains will be secured while they are left in place and treatment decisions are in progress. Information concerning the discovery will not be disclosed pursuant to the specific exemption set forth in California Government Code Section 6254.5(e).

The City will relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all Native American archaeological artifacts and non-human remains found within City right of way (ROW) through one or more of the following methods and provide evidence of same:

- A fully executed reburial agreement with the appropriate culturally affiliated Native American tribes or bands. This will include measures and provisions to protect the future reburial area from any future impacts. Reburial will not occur until all cataloguing and basic recordation have been completed.
- A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated

and made available to other archaeologists/researchers for further study. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.

- Should reburial of collected cultural items be preferred, it will not occur until after the Archaeological Resources Monitoring Report/Data Recovery Report has been submitted to the City. Should curation be preferred, the City is responsible for all costs and the repository and curation method will be described in the Archaeological Resources Monitoring Report/Data Recovery Report.
- Artifacts found outside the City ROW are not subject to these requirements and may be relinquished to the Tribe(s) by the property owner for suitable curation or ownership. It is the responsibility of the Tribe(s) to come to agreement with the property owner.
- According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the City and MLD disagree about the disposition of the remains, State law will apply, and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

TCR-4: Any archaeological resources collected will be documented, analyzed, catalogued, and prepared for eventual curation in accordance with the State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections" unless otherwise specified. All archaeological resources will be evaluated for listing eligibility in the *National Register/California Register* according to the measures set forth in the California Public Resources Code. Documentation of identification and evaluation efforts and results will be documented in the Archaeological Resources Monitoring Report/Data Recovery Report.

Archaeological materials will be sorted by material type and age (historic vs prehistoric) and grouped according to provenience. Great care will be taken during the cleaning process to maintain provenience information; archeological materials will be cleaned to the extent necessary for identification and analysis. Care will be taken during cleaning to preserve any diagnostic information, such as paper bottle labels, delicate decoration on ceramics, and intact bottle contents. The following artifacts will be dry-brushed rather than washed with water: bone, metal, low-fired earthenware, wood, paper, textiles, and structural materials, such as plaster and earthen wall material. As appropriate, other artifacts will be washed prior to labeling and cataloging.

All artifacts will be collected, analyzed and processed offsite and stored in an approved, qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation. Historic-era artifacts may be incorporated into an educational/public display within Riverside County, pending approval of the City.

Should reburial of collected cultural items be preferred, it will not occur until after the Archaeological Resources Monitoring Report/Data Recovery Report has been submitted to the City. Should curation be preferred, the City is responsible for all costs and the repository and

curation method will be described in the Archaeological Resources Monitoring Report/Data Recovery Report.

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, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				x
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				x
c. Result in a determination by the wastewater treatment provider that 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?				x
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?				x
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California PRC § 21001 (b)). As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts to utilities and service system resources must be evaluated.

The California Public Utilities Commission (CPUC) regulates public electric utilities in California. SCAG's Regional Air Quality Management Plan ensures compliance with federal, state, and regional air quality requirements. The *City of Norco General Plan* and *City of Eastvale General Plan* establish policies to address energy conservation.

Environmental Setting

The City of Norco provides its own domestic water service connection to residents through a division of the Public Works Department (City of Norco 2014). Water is imported from the Metropolitan Water District of Southern California, purchased through the Western Municipal Water

District. The City of Norco is located in the Basin Plan for the Santa Ana RWQCB, which encompasses the drainage area of the Santa Ana River. Four active groundwater wells sourced from the Temescal groundwater basin and two inactive wells sourced from the Chino groundwater basin exist in the City of Norco. Southern California Edison (SCE) is the regional power provider that serves the project area.

Domestic water in the City of Eastvale is provided by the Jurupa Community Services District, which supplies groundwater primarily produced from the Chino groundwater basin. Energy used to support development comes from electricity, natural gas, fossil fuels, and renewable sources (e.g., solar and energy), and other sources.

Discussion

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

No Impact. As described above, construction of the proposed project, which would widen existing Hamner Avenue roadway, would generate a minimal amount of wastewater and operation of the proposed project would not generate wastewater. The proposed project is needed to reduce congestion and improve operational efficiency along Hamner Avenue within the project limits. Due to the nature of the project, operation would not result in the construction of new stormwater drainage facilities or expansion of existing facilities that would cause significant environmental effects. Therefore, the proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. There would be no impact.

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

No Impact. The proposed project would widen the existing Hamner Avenue roadway, which would reduce congestion and improve operational efficiency by providing land continuity with the existing segments of Hamner Avenue. The proposed project would not require new or expanded water entitlements and would have sufficient water supplies to serve the project. No new or expanded water supplies are needed. No impact would result and no mitigation is required.

c. Result in a determination by the wastewater treatment provider that 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 widen the existing Hamner Avenue roadway , which would reduce congestion and improve operational efficiency by providing land continuity with the existing segments of Hamner Avenue As detailed in Item (a), construction of the proposed project would generate a minimal amount of wastewater, and operation of the proposed project would not generate wastewater. The proposed project would not require expansion of wastewater treatment services and would not affect the capacity of the wastewater treatment provider. No impact and no mitigation is required.

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 widen the existing Hamner Avenue roadway , which would reduce congestion and improve operational efficiency by providing land continuity with the existing segments of Hamner Avenue. Due to the nature of the project, the amount of additional solid waste that would be generated would be minimal and would not exceed state or local standards. No impact would result, and no mitigation is required.

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

No Impact. The proposed project would widen the existing Hamner Avenue roadway , which would reduce congestion and improve operational efficiency by providing land continuity with the existing segments of Hamner Avenue. The proposed project would be in compliance with all federal, state, and local solid-waste statutes and regulations related to solid waste. No impact would result and no mitigation is required.

Mitigation Measures

No measures are required.

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?			x	
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				x
c. Require the installation or maintenance of associated infrastructure (e.g., 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 on the environment?				x
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?				x

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (California PRC Section 21001 (b)). As required by the CEQA Guidelines Appendix G, the analysis of environmental impacts related to potential wildfires must be evaluated.

Environmental Setting

The Riverside County Emergency Management Department leads efforts to mitigate, prepare for, respond to, and recover from emergencies and disasters. The City of Norco's *Local Hazard Mitigation Plan* and *The City of Eastvale Local Hazard Mitigation Plan Annex* identify city hazards and provide recommendations for mitigation planning. The County and City general plans identify safety hazards and provide infrastructure to provide adequate response in the event of disasters by encouraging development standards that minimize hazards. The vicinity of the project site is not identified as being located within a high severity fire hazard severity zone on the State Responsibility Area Map or Local Responsibility Area Map.

Discussion

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

Less-than-Significant Impact. The proposed project would widen the existing Hamner Avenue roadway from four lanes (i.e., two traffic lanes in each direction) to six lanes (i.e., three traffic lanes in each direction) and would improve the ability of emergency service providers to serve the community, as it would reduce congestion and improve operational efficiency of Hamner Avenue in the project area. According to the *City of Norco General Plan*'s Safety Element, in the event of an emergency, the City of Norco will establish evacuation routes based on the location and magnitude of an event. The City of Norco's main evacuation routes are the I-15 Freeway and Hamner Avenue. Widening Hamner Avenue would allow more traffic to travel along the roadway in the event of an emergency. Therefore, the proposed project would not impair or physically affect any adopted emergency response or evacuation plan. During the construction period, emergency response times could increase temporarily due to increased traffic congestion—caused by temporary lane closures, speed reductions, and the presence of construction personnel and equipment, etc.—in the area. Compliance with Riverside County Fire Authority codes, regulations, and conditions and with City emergency evacuation plans will ensure that project development would not physically interfere with or impair an adopted emergency response plan or emergency evacuation plan. During project construction, a TMP would be implemented to minimize these obstructions, which would help to ensure continued emergency access to the proposed project area and nearby properties. Impacts would be less than significant.

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

No Impact. The vicinity of the proposed project site is considered to have a low fire risk and is not identified as being located within a high-severity fire-hazard severity zone on the State Responsibility Area Maps (CAL FIRE 2019). The project site terrain is generally characterized by flat terrain and would thereby not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impact would result.

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 on the environment?

No Impact. The proposed project would widen the existing Hamner Avenue roadway and would require installation and maintenance of associated roadway infrastructure. However, all associated infrastructure would be installed in compliance with all local safety code ordinances and maintenance of that infrastructure would not exacerbate fire risks. For those reasons, and because the proposed project is located in a fully developed area that is not within a high severity fire hazard zone, no impact would result, and no mitigation measures are required.

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?

No Impact. The proposed project would widen Hamner Avenue which, an existing roadway. A portion of Hamner Avenue near the Santa Ana River is located within a FEMA-designated 100-year (1 percent annual chance) floodplain. However, because the project site is not located within a high

severity fire hazard zone and because it does not include new infrastructure that would increase fire hazards in the area, the proposed project would not expose people or structures to significant risk of loss, injury, or death involving downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. No impact would result and no mitigation measures are required.

Mitigation Measures

No measures are required.

XXI. Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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?		X		
b.	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion

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?

Less-than-Significant Impact with Mitigation Incorporated. As discussed in Section 2.3.4, *Biological Resources*, above, there is potential for effects on biological resources, but impacts would be less than significant with the implementation of MMs BIO-1 through BIO-7. No impacts related to cultural resources or tribal cultural resources are anticipated, but implementation of measures TCR-1 through TCR-4 would ensure that no significant impacts would result.

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

Less-than-Significant Impact. The only known related project in the project vicinity is the Hamner Avenue Bridge Replacement Project, which would be implemented at the same time as the proposed project.

Construction of the two projects will be coordinated through the TMP such that impacts related to traffic congestion, emergency access, and other construction-related impacts would be minimized. Although projects would overlap for the approximately 4-month construction schedule, the proposed project would not result in cumulatively considerable effects when combined with past, present, and reasonably foreseeable future projects, and therefore would have a less-than-significant impact.

c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less-than-Significant Impact. Operation of the project would not result in the exposure of persons to any substantially adverse natural or human-made hazards that could directly or indirectly cause substantial adverse effects on human beings, such as geologic hazards, air emissions, hazardous materials, or flooding. All potential effects that could result in substantial exposure of persons to hazards during construction of the project are fully addressed with measures, and no permanent impacts on human beings have been identified as significant in this IS.

Chapter 3
References Cited

3.1 Aesthetics

California Department of Transportation (Caltrans). 2017. California Scenic Highway Program. Available: www.dot.ca.gov/design/lap/livability/scenic-highways/index.html. Accessed February 20, 2020..

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed: January 10, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed: February 20, 2020.

3.2 Agricultural and Forestry Resources

California Department of Conservation. 2016. California Important Farmland Finder Map. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed January 10, 2020.

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed: January 21, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 10, 2020.

3.3 Air Quality

ADVANTEC Consulting Engineers. 2017. *Final Traffic Operations Analysis, Hamner Avenue Bridge Replacement at Santa Ana River*. Prepared for County of Riverside Transportation Department. November.

California Air Resources Board (CARB). 2020. iADAM: Air Quality Data Statistics. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php . Accessed: May 7, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed: May 7, 2020.

Google. 2020. Google Earth aerial imagery.

South Coast Air Quality Management District (SCAQMD). 2019. Air Quality Modeling webpage. Available: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-modeling. Accessed: February 13, 2020.

Southern California Association of Governments (SCAG). 2016. Regional Transportation Plan/Sustainable Communities Strategy. Available: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx. Accessed: February 20, 2020.

Unites States Environmental Protection Agency (U.S. EPA). 2020. Outdoor Air Quality Data. Available: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report. Accessed: May 7, 2020.

3.4 Biological Resources

CDFW. 2019a. Special Animals List. Sacramento, CA: State of California, The Resources Agency, Department of Fish and Wildlife. August.

CDFW. 2019b. California Natural Diversity Database. Sacramento, CA: California Department of Fish and Wildlife, Biogeographic Data Branch. Element reports for the Corona North USGS 7.5-minute quadrangle maps. Data date: September.

Dudek. 2003. *Final Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP). Riverside, CA: County of Riverside.

ICF. 2018. *Natural Environment Study Report for the Hamner Avenue Bridge Replacement Project*. May.

USFWS. 2019. Critical Habitat GIS Data. Carlsbad, CA. Available: Available: https://ecos.fws.gov/ecp/report/table/critical-habitat.html Accessed: April and September 2019.

USFWS. 2020. Carlsbad Field Office List of Proposed, Threatened, and Endangered Species, and Critical Habitats for Hamner Avenue Widening Project. 08ECAR00-2020-SLI-0794. March 19.

3.5 Cultural Resources

ICF. 2020. *CEQA Cultural Resources Technical Report: Hamner Avenue Widening Project – Schleisman Road to Citrus Street and Detroit Street to 6th Street*. June.

Nationwide Environmental Title Research, LLC. 2020 Historic aerial of project area, 1948. Available: historicaerials.com/. Accessed: May 5, 2020.

3.6 Energy

ADVANTEC Consulting Engineers. 2017. *Final Traffic Operations Analysis, Hamner Avenue Bridge Replacement at Santa Ana River*. Prepared for County of Riverside Transportation Department. November.

California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. Available: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: March 5, 2020.

National Marine Fisheries Administration/Western Riverside Council of Governments (NMFS/WRCG). 2019. *Subregional Climate Action Plan*. Available: http://www.wrcog.cog.ca.us/DocumentCenter/View/188/Subregional-Climate-Action-Plan-CAP-PDF?bidId=. Accessed: March 3, 2020.

3.7 Geology, Soils, and Paleontological Resources

California Department of Conservation. 2018. Earthquake Zones of Required Investigation. Available: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed January 13, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 10, 2020.

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 13, 2020.

United States Geologic Society (USGS). 2017. Earthquake Hazards Interactive Fault Map. Available: https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf. Access January 13, 2020.

3.8 Greenhouse Gas Emissions

ADVANTEC Consulting Engineers. 2017. *Final Traffic Operations Analysis, Hamner Avenue Bridge Replacement at Santa Ana River*. Prepared for County of Riverside Transportation Department. November.

California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. Available: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed: March 5, 2020.

City of Norco. 2014. *City of Norco General Plan* Conservation Element. Available: http://www.norco.ca.us/civicax/filebank/blobdload.aspx?BlobID=25450. Accessed: March 5, 2020.

National Marine Fisheries Administration/Western Riverside Council of Governments (NMFS/WRCG). 2019. *Subregional Climate Action Plan*. Available: http://www.wrcog.cog.ca.us/DocumentCenter/View/188/Subregional-Climate-Action-Plan-CAP-PDF?bidId=. Accessed: March 3, 2020.

3.9 Hazards and Hazardous Materials

Group Delta. 2020. *Initial Site Assessment. Hamner Avenue Widening Project From Schleisman Road To Citrus Street and From Detroit Street To Sixth Street Eastvale and Norco, California*. County Project No. 09-0019. February.

CAL FIRE. 2007. Fire Hazard Severity Zones in SRA-Western Riverside County. https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf. Available: Accessed January 16, 2020.

3.10 Hydrology and Water Quality

California Department of Transportation (Caltrans). 2012. Water Quality Planning Tool. Available: http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx. Accessed: May 7, 2020.

Riverside County Flood Control and Water Conservation District. 2015. Middle Santa Ana River Watershed Fact Sheet. Available: ttp://rcflood.org/downloads/NPDES/Documents/SA_WAP/AppH_SubwatershedFactSheets.pdf. Accessed: May 7, 2020.

State Water Resources Control Board (SWRCB). 2013. NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities.

3.11 Land Use and Planning

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 13, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 13, 2020.

3.12 Mineral Resources

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 14, 2020.

3.13 Noise

ADVANTEC Consulting Engineers. 2017. *Final Traffic Operations Analysis, Hamner Avenue Bridge Replacement at Santa Ana River*. Prepared for County of Riverside Transportation Department. November.

Caltrans 2013. *Transportation and Construction Vibration Guidance Manual*. Final. Report Number: CT-HWANP-RT-13-069.25.3 Sacramento, CA. Prepared for: California Department of Transportation Division of Environmental Analysis Environmental Engineering.

City of Eastvale. 2011. City of Eastvale Municipal Code. Available: https://library.municode.com/ca/eastvale/codes/code_of_ordinances?nodeId=PTAGEOR_TIT8PUMOSA_CH8.52NORE. Accessed: 2/17/2020.

City of Eastvale. 2012. *City of Eastvale General Plan* Noise Section. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed: 2/18/20.

City of Norco. 2013. *City of Norco General Plan* Noise Section. Available: http://www.norco.ca.us/civicax/filebank/blobdload.aspx?BlobID=25453. Accessed: 2/18/2020.

City of Norco. 2014. City of Norco Municipal Code. Available: https://www.codepublishing.com/CA/Norco/#!/Norco09/Norco0907.html#9.07.030. Accessed: 2/17/2020.

County of Riverside. 2006. County of Riverside Municipal Code. Available: https://library.municode.com/ca/riverside_county/codes/code_of_ordinances?nodeId=TIT9PUPEMOWE_CH9.52NORE_9.52.020EX. Accessed: 2/17/2020.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual.* Final. FTA Report No. 0123. Washington, DC. Prepared by: John A. Volpe National Transportation Systems Center, Cambridge, MA.

Federal Highway Administration (FHWA). 2008. *Roadway Construction Noise Model V 1.1*. Prepared by: US Department of Transportation Research and Innovative Technology Administration.

3.14 Population and Housing

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 14, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 13, 2020.

Southern California Association of Governments (SCAG). 2016. *Regional Transportation Plan/Sustainable Communities Strategy*. Available: http://scagrtpscs.net/Documents/FSB0516_Riverside.pdf. Accessed January 14, 2020.

3.15 Public Services

California Department of Forestry and Fire Protection (CAL FIRE). 2007. Fire Hazard Severity Zones in SRA Western Riverside County. Available: https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf. Accessed October 25, 2019.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 15, 2020.

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 15, 2020.

3.16 Recreation

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed: January 16, 2020.

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed: January 14, 2020.

3.17 Transportation

ADVANTEC Consulting Engineers. 2017. *Final Traffic Operations Analysis, Hamner Avenue Bridge Replacement at Santa Ana River*. Prepared for County of Riverside Transportation Department. November.

3.18 Tribal Cultural Resources

Bean, L. J., and C. R. Smith. 1978. Gabrielino. In California, edited by Robert F. Heizer, pp. 538–549. *Handbook of North American Indians, Volume 8*, William C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.

Kroeber, Alfred. 1976. *Handbook of the Indians of California*. Bulletin 78, American Bureau of Ethnology. Reprinted. Dover Publications, Inc., NY. Originally published 1925. Washington, D.C.: Smithsonian Institution.

Harrington, J. P. 1986. *John Harrington Papers*. Volume 3: Southern California/Basin. Washington, D.C.: Smithson Institution, National Anthropological Archives. Microfilm edition (Reel 101).

3.19 Utilities and Service Systems

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 16, 2020.

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 14, 2020.

Southern California Association of Governments (SCAG). 2016. *South Coast Air Quality Management District Plan*. Available: http://www.aqmd.gov/. Accessed January 16, 2020.

3.20 Wildfire

City of Norco. 2014. *City of Norco General Plan*. Available: http://www.norco.ca.us/depts/planning/general.asp. Accessed January 16, 2020.

City of Eastvale. 2012. *City of Eastvale General Plan*. Available: https://www.eastvaleca.gov/home/showdocument?id=2360. Accessed January 16, 2020.

CAL Fire. 2007. Fire Hazard Severity Zones in SRA-Western Riverside County. Available: https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf. Available: Accessed January 16, 2020.

This page intentionally left blank.