INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION
Magnolia Avenue Bridge Widening
El Camino Avenue to 1,000 feet east of All American Way
City of Corona

Prepared for:

City of Corona
Public Works Department
400 South Vicentia Avenue
Corona, CA 92882

Prepared by:

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February 2022

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1 INTRODUCTION

The California Environmental Quality Act ("CEQA"), codified in the Public Resources Code (PRC), Section 21000 et seq., and the CEQA Guidelines, Title 14, Section 15000 et seq. of the California Code of Regulations (CCR), was established to require public agencies to consider and disclose the environmental implications of their actions (projects). CEQA was enacted in 1970 by the California Legislature to disclose to decision makers and the public the significant environmental effects of a proposed project and identify possible ways to avoid or minimize significant environmental effects of a project by requiring implementation of mitigation measures or recommending feasible alternatives. CEQA applies to all California governmental agencies at all levels, including local, regional, and State, as well as boards, commissions, and special districts.

As provided by PRC Section 21067, the public agency with the principal responsibility for approving a project that may have a significant effect upon the environment is considered the Lead Agency. The City of Corona ("City"), as Lead Agency for the approval of the proposed Project ("Project"), is responsible for preparing environmental documentation in accordance with CEQA as amended to determine if approval of the discretionary actions requested and subsequent implementation of the proposed Project could have a significant impact on the environment. As defined by Section 10563 of the CEQA Guidelines, an Initial Study ("IS") is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report ("EIR"), Negative Declaration ("ND"), or Mitigated Negative Declaration ("MND") would be appropriate for providing the necessary environmental documentation and clearance for the proposed Project.

Initial Study and Environmental Evaluation

1.	**Project Title:**	Magnolia Avenue Bridge Widening El Camino Avenue to 1,000 feet east of All American Way City of Corona
2.	**Lead Agency Name:** **Address**	City of Corona City of Corona Public Works Department 400 South Vicentia Avenue, Corona, CA 92882
3.	**Contact Person:**	Barry Ghaemi City of Corona Public Works Department 400 S. Vicentia Avenue, #210, Corona, CA 92882 barry.ghaemi@coronaca.gov (951) 739-4961
5.	**Project Location:**	Magnolia Avenue between El Camino Ave to 1,000 feet east of All American Way *Corona South;* USGS Quad, T 3 South, R 6 West, Section 32 Latitude: 33°52'11.13"N, Longitude: 117°20'7.45"W
4.	**Project Sponsor's Name:** **Address**	City of Corona Public Works Department 400 South Vicentia Avenue, Corona, CA 92882
6.	**General Plan Designation:**	Project: Roadway (Magnolia Ave); OS, OS/G Open Space General (Temescal Creek) Adjacent North: MU 2 - Mixed Use: Industrial/Commercial Adjacent South: MU 2 - Mixed Use: Industrial/Commercial; LI - Light Industrial
7.	**Zoning Designation:**	Project: Roadway (Magnolia Ave); Flood Control (Temescal Creek) Adjacent North: Corona Magnolia Specific Plan (SP-01-02) Adjacent South: Industrial
8.	**Description of Project:**	The City of Corona proposes to widen the Magnolia Avenue Bridge over Temescal Wash Channel and its approaches from El Camino Ave to 1,000 feet east of the private All American Way, or approximately at Leeson Lane. The Project will increase the number of travel lanes from four to six consistent with the City's General Plan, install ADA-compliant sidewalk, curb and gutter, and striping for a shared shoulder and Class III bike lane, medians, and 12-foot-wide travel lanes. The total roadway and bridge width would be increased by approximately 20 feet to approximately 100 feet, curb to curb, throughout the alignment, and right-of-way would vary between 109 and 119 feet wide throughout the alignment.

9. Surrounding Land Uses:

Surrounding land uses are identified in **Table 2.1-1: *Surrounding Land Use***.

Table 2.1-1: Surrounding Land Use

Direction	Land Use Description
North	Commercial and industrial land uses; Temescal Creek
East	Intersection of Leeson Lane; vacant land
South	Intersections of Downs Way, All American Way; commercial and industrial land uses; Temescal Creek
West	Intersections of El Camino Avenue, Downs Way; commercial and industrial uses

10. Other Public Agencies Whose Approval is Required:

The following discretional approvals are required for the Project:

Federal Agencies

- US Army Corps of Engineers – Section 404 Clean Water Act Permit.

State Agencies:

- Regional Water Quality Control Board (RWQCB) – Section 401 Clean Water Act Permit, General Construction Permit Notification;

- Department of Fish and Wildlife (CDFW) – 1600 Lake and Streambed Alteration Agreement.

11. California Native American Consultation:

On April 14, 2020, the City of Corona notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end on May 8, 2019, in accordance with AB52, as well as sent them copies of the cultural resources studies:

- Andrew Salas, Gabrieleno Band of Mission Indians
- Ebru Ozdill, Pechanga Band of Luiseño Indians
- Destiny Colocho, Rincon Band of Luiseño Indians
- Joseph Ontiveros, Soboba Band of Luiseño Indians

Of the tribes contacted, only the Rincon Band of Luiseño Indians and Gabrieleno Band of Mission Indians requested more information. The result of the AB52 consultation was that no tribe requested mitigation measures to reduce potential Native American impacts, and the consultation was subsequently closed.

2 PROJECT DESCRIPTION

2.1 INTRODUCTION

The City of Corona (City) is proposing to widen the Magnolia Avenue Bridge over Temescal Wash Channel and Magnolia Avenue from El Camino Avenue to approximately Leeson Lane generally to increase the number of travel lanes from four to six, consistent with the City's General Plan, and install ADA-compliant sidewalk, curb and gutter, and striping for a shared shoulder and Class III bike lane, medians, and 12-foot-wide travel lanes. The total roadway and bridge width would be increased by approximately 20 feet to approximately 100 feet, curb to curb, throughout the alignment, and right-of-way would vary between 109 and 119 feet wide throughout the alignment.

Magnolia Avenue is an east-west Major Arterial in the City of Corona, accessible from Interstate 15 (I-15). It is identified as six lanes in the General Plan, but it is only striped/constructed to accommodate four lanes. The Project improvements will begin at El Camino Avenue, which is approximately 600 feet east of I-15 and end at approximately Leeson Lane. Land uses along the Project alignment include light industrial to heavy industrial on both sides of the road. The heavy industrial uses include a quarry located south of the Project alignment which is accessible from both Sherborn Street and All American Way, both of which intersect the south side of Magnolia Avenue in the Project alignment.

Given its proximity to the I-15 and the mix of light and heavy industrial uses, this approximately 2,200 linear foot Project alignment experiences a high volume of heavy truck traffic. Build-out of the roadway to the six-lane design as envisioned by the General Plan would improve overall circulation in this segment of Magnolia Avenue. The proposed improvements generally include the following:

- Provide an additional lane of travel in each direction;
- Provide ADA-compliant sidewalks and curbs and gutters in missing areas along the alignment;
- Widen the bridge over Temescal Creek Channel to accommodate the additional lanes and sidewalks and curbs and gutters;
- Provide for a striped shared shoulder and Class III bike lane and a mix of striped and raised concrete landscaped medians.

2.2 PROJECT LOCATION AND SETTING

The proposed Project alignment is located in the City of Corona, along Magnolia Avenue, beginning at approximately the intersection El Camino Avenue and ending approximately 1,000 feet east of All American Way where Magnolia Avenue curves north, or at approximately the intersection of Leeson Lane and Magnolia Avenue **(Figure 2-1: *Regional Overview and Site Vicinity*** and **Figure 2-2: *Project Location)***. The eastbound lane of Leeson Lane intersects at the base of the curve in Magnolia Avenue, and the westbound lane of Leeson Lane intersects Magnolia Avenue approximately 141 feet north of the eastbound Leeson Lane/Magnolia Avenue intersection.

2.3 EXISTING CONDITION

Western Section of Alignment (El Camino Avenue to Temescal Creek Bridge)

The paved travel way in this section is generally approximately 82 feet wide, contains two lanes of travel in each direction, turn lanes, and a striped median to the Temescal Creek Channel Bridge. The right-of-way in this section is approximately 100 feet wide - approximately 40 feet to the north and approximately 60 feet to the south of centerline.

Sidewalk, curb and gutter exist on the south side but not on the north side. City-owned street lights are present on both sides of the street.

The BNSF railroad crossing exists approximately 80 east of the intersection with El Camino Avenue.

Sherborn Street intersects on the south side, approximately half way between El Camino Avenue and the bridge approach.

All electrical and low-voltage (phone, cable) utilities are located underground throughout this section.

Temescal Creek Channel Bridge

The Temescal Creek Channel is an improved, 84-foot-wide by 15-foot-deep rectangular concrete channel. The channel has a storm drain into the channel that includes a grated drop inlet at the north side of Magnolia Avenue west of the Channel; a 30-inch storm drain line that ties into the Channel at the northeast, southeast and southwest corners of the bridge. The channel is owned and maintained by the Riverside County Flood Control and Water Conservation District (RCFC &WCD).

The existing bridge over the channel is 67.5 feet wide providing a travelled way of 64 feet from barrier to barrier. The bridge deck is striped with two lanes in each direction and a striped median. At each approach, the bridge barrier is protected by a standard metal beam guardrail. There are no sidewalks on the bridge. The existing structure was built in 1986. It consists of two spans of cast-in-place reinforced concrete box girder, a pier wall along the centerline of the Channel, and two abutments. The bridge abutments were constructed outside the rectangular concrete channel. The bridge has a high Sufficiency Rating of 95.8 indicating the feasibility of the proposed structure widening with proper rehabilitation, if required.

The City of Corona's 30-inch water transmission line (Cross-Town Feeder) is attached to the exterior edge of the south side of the bridge, and other utilities (Southern California Edison and cable and phone) are within conduits attached to the bridge exterior along the north side.

Eastern Section of Alignment (Temescal Creek Bridge to Eastbound Leeson Lane)

The paved travel way in this section is generally approximately 82 feet wide, contains two lanes of travel in each direction, and turn lanes. A thin concrete median is present in this section, from approximately 1475 Magnolia Avenue to the alignment terminus at the eastbound lane of Leeson Lane. The right-of-way in this section is approximately 110 feet wide - approximately 60 feet to the north and approximately 50 feet to the south of centerline.

Sidewalk, curb and gutter exist on both the north and south sides, side but not in front of the Corona Auto Parts Store, located at 1450 Magnolia Avenue, which is on the southeast corner of All American Way and Magnolia Avenue. City-owned street lights are present on both sides of the street.

All American Way intersects immediately east and adjacent to the bridge on the south side. Other intersecting streets include Trademark Circle (south side) and Leeson Lane toward the end of the alignment.

Low voltage utilities (ie., phone and cable) rise approximately 112 feet west of the Magnolia Avenue bridge, and are located on poles on the south side of the street, for approximately 679 feet to 1480 Magnolia Avenue. The utilities then transition to underground at this location, and remain underground through the end of the Project alignment at the eastbound Leeson Lane.

2.4 PROJECT DESCRIPTION

The City of Corona is proposing to widen the Magnolia Avenue Bridge over Temescal Wash Channel and Magnolia Avenue from El Camino Avenue to 1,000 feet east of the All American Way generally to increase the number of travel lanes from two to three and place sidewalk and curb and gutter in missing areas. Improvements will include restriping for three 12-foot-wide lanes in each direction, a 12-foot-wide median, 5-foot-wide shoulders that will also be a shared Class III bike lane, and 6-foot-wide sidewalks/curb and gutter in locations that currently lack sidewalk/curb and gutter. The total roadway width would be increased to approximately 100 feet, curb to curb, throughout the alignment, and right-of-way will vary from 109 to 119 feet throughout the alignment.

The work will include the following and is depicted on **Figure 2-3: *Conceptual Improvements Overview – Sheet 1*** and **Figure 2-4: *Conceptual Improvements Overview – Sheet 2***.

- Roadway widening including drainage improvements;
- Removal of approximately 16 larger trees located within proposed area of widening in the right-of-way and in the median, and the replacement of 61 trees in the new right-of-way limits and in the new medians.
- Modification to street signs, street lighting, and landscaping;
- Pavement rehabilitation where required;
- Modifying the existing roadway striping to six 12-foot travel lanes and a 5-foot bike lane;
- Provide for landscaped medians;
- Installing new curbs and gutters and sidewalks in the missing sections;
- Re-striping and or replacing the existing BNSF railroad crossing (crossing arms may be relocated depending on final design);
- Widening the concrete bridge over the Temescal Creek Channel by approximately 33 feet to accommodate improvements;
- Relocating utilities that conflict with the planned improvements;
- Provide ADA compliant access ramps at all intersections.

As a part of the bridge construction, one abutment would be extended on each end of the bridge, along with one pier within the Temescal Creek Channel.

As part of the roadway widening, some street trees will be removed and replanted to allow for the new improvements.

2.4.1 Construction Scenario

Construction is anticipated to occur in the first quarter 2024 and will last approximately 24 months.

The estimated construction schedule is identified in **Table 2.4-1: *Construction Scenario*.**

Table 2.4-1: Construction Scenario

Construction Phase	Begin Date	Completion Date
Start of Construction	January 2024	--
Grubbing / Land Clearing	January 2024	March 2024
Roadway, Bridge and Channel Construction	March 2024	October 2025
Final Paving, Striping, Lighting	October 2025	January 2026
End of Construction	--	January 2026

2.4.2 Potential Construction Equipment

Project construction will require the use of heavy equipment. While the final types and numbers of construction equipment will be determined by the construction contractor, examples of types of equipment that will be utilized for this work include but are not limited to:

- Pavement Ripper and Asphalt Roller
- Concrete Trucks
- Crane
- D-8 or D-9 dozer

2.4.3 Rights-of-Way Acquisition

The Project will generally be constructed within the City's rights-of-way (ROW). However, additional permanent partial takes of ROW or temporary construction easement (TCE) permissions may be required as identified in **Table 2.4-2: *Rights-of-Way Acquisition***.

Table 2.4-2: Rights-of-Way Acquisition

APN	Owner	Property Acquisition Interests	Approximate Area
107-020-015	BNSF Railroad	Temp Perm	1,621 sf 767 sf
107-020-006	BNSF Railroad	Temp	898 sf
107-030-022	McWane Inc (Clow Valve)	Temp Perm	10,230 sf 12,593 sf
107-030-023	Riverside County Flood Control and Water Conservation District (North Side of Bridge)	Temp Perm	12,909 sf 3,458 sf
107-070-049	Riverside County Flood Control and Water Conservation District (South Side of Bridge)	Temp Perm	6,916 sf 8,461 sf

APN	Owner	Property Acquisition Interests	Approximate Area
107-070-032	Dix Leasing Corp (All American Way)	Temp Perm	138 sf 2,866 sf
107-060-013	Majeed & Mojgan Modarresi (Corona Auto Parts)	Temp Perm	7,358sf 4,400 sf
107-060-003	Robert & Barbara Hait rink	Temp Perm	995 sf 2,772 sf
107-060-028	Lba Rv Company Xii	Temp Perm	9,837 sf 3,531 sf

Notes:
1. Temp: includes temporary construction easements, staging areas, and encroachments
2. Perm: includes permanent right-of-way take

The rights-of-way to be acquired are described as follows:

- Magnolia Avenue north side, west of Temescal Creek Channel bridge: Providing the desired roadway section with sidewalk will result in the need to acquire 10 to 15 feet of additional right of way from the limits of BNSF Railroad to the Channel. The preliminary impact of this right-of-way acquisition is along the frontage of the Clow Valve facility at 1375 Magnolia Avenue. The area fronting Magnolia Avenue is mostly used as a lay-down yard for their product and there is a segment of landscaped parkway fronting an office building.

- Magnolia Avenue, south side, east of Temescal Creek Channel bridge: Providing the desired roadway section and sidewalk will result in the need to acquire up to 17 additional feet of right of way from All American Way to the eastbound lane of Leeson Lane. The primary impact of this right-of-way acquisition will include:

    - Corona Auto Parts Business, located at 1450 Magnolia Avenue (APN 107-060-13), on the southeast corner of All American Way and Magnolia Avenue, immediately east of the Temescal Creek Channel bridge. There is no sidewalk, and the existing parking lot connects to the edge of the traveled way pavement. There are no defined driveways on this parcel. Under the existing condition, there is just enough clearance between the edge of the roadway and the face of the building for cars to maneuver into parking stalls perpendicular to the front of the building. Constructing a curb, a gutter, and a sidewalk and additional lane consistent with the City's General Plan will place the curb and gutter approximately 35 feet from the building. Therefore, Project improvements will likely reduce the number of customer parking spaces at the business. Design alternatives to the parking lot will be developed to minimize impacts.

    - Existing landscaped buffer areas on the south side of Magnolia Avenue between 1460 Magnolia Avenue (adjacent to the Corona Auto Parts business) and 1560 Magnolia Avenue (at Leeson Lane). In this section, a sidewalk exists in the City's portion of the right-of-way. Within the private property immediately adjacent to the sidewalk exists landscaped buffer areas that separate the sidewalk from the customer parking for the businesses along this section. The landscaped buffer areas range from approximately 11 feet wide at 1480 Magnolia Avenue to approximately 27 feet wide at 1580 Magnolia

Avenue. Trees and shrubs in these landscaped areas would be removed, but customer parking would not be impacted.

- Burlington-Northern Santa Fe (BNSF) railroad. The intersection of El Camino Avenue and Magnolia Avenue is located adjacent to a BNSF grade crossing. The proposed roadway improvements may require upgrades to grade crossing equipment and operation, although major improvements are not expected. Close coordination with the California Public Utilities Commission (CPUC) and BNSF railroad will be required to obtain approvals and permits within the Project schedule. Conceptual plans will be drafted indicating proposed improvements and presented to all stakeholders during a railroad diagnostic meeting.

- Temescal Creek Channel. Bridge widening will require an approximately 10 feet of right-of-way on the north side and approximately 25 feet on the south side of the bridge (for a total of approximately 35 feet) to be acquired from the RCFC &WCD.

2.4.4 Utility Relocation

The streetlights along the Project alignment (owned by the City) will be removed during Project construction to facilitate sidewalk construction. Additionally, all streetlights within the Project limits will be replaced with the most current standard pole and fixture and equipped with light-emitting diode (LED) lamps. The SCE conduit and lower voltage utilities that are attached to the bridge structure on the north side will be relocated to within new cells inside the bridge. The 30-inch water main from the City of Corona, attached to the bridge's structure on the south side, will be relocated use a trenchless jack-and-bore construction method to accommodate the wider bridge. An existing 10-inch City-owned waterline attached to the exterior of the north side of the bridge will be replaced to be along the outside edge of the new north side of the bridge. All pole-mounted utilities located on the south side, between All American Way and 1480 Magnolia Avenue, will be temporarily relocated during construction only but remain above ground.

2.4.5 Construction Staging and Access

Construction Staging

All equipment will remain on-site throughout the Project. Equipment staging and material storage will most likely occur within the existing right-of-way or the contractor may rent empty parking lots or vacant lots within the Project vicinity.

Construction Access

Construction access will be via the existing right-of-way and new right-of-way to be acquired. It is anticipated that heavy equipment will use major freeways and roadways to be brought directly to the Project site. There will be no need to access the Project construction area from any of the commercial or industrial properties, or at points along the flood control channel that are not already targeted for construction.

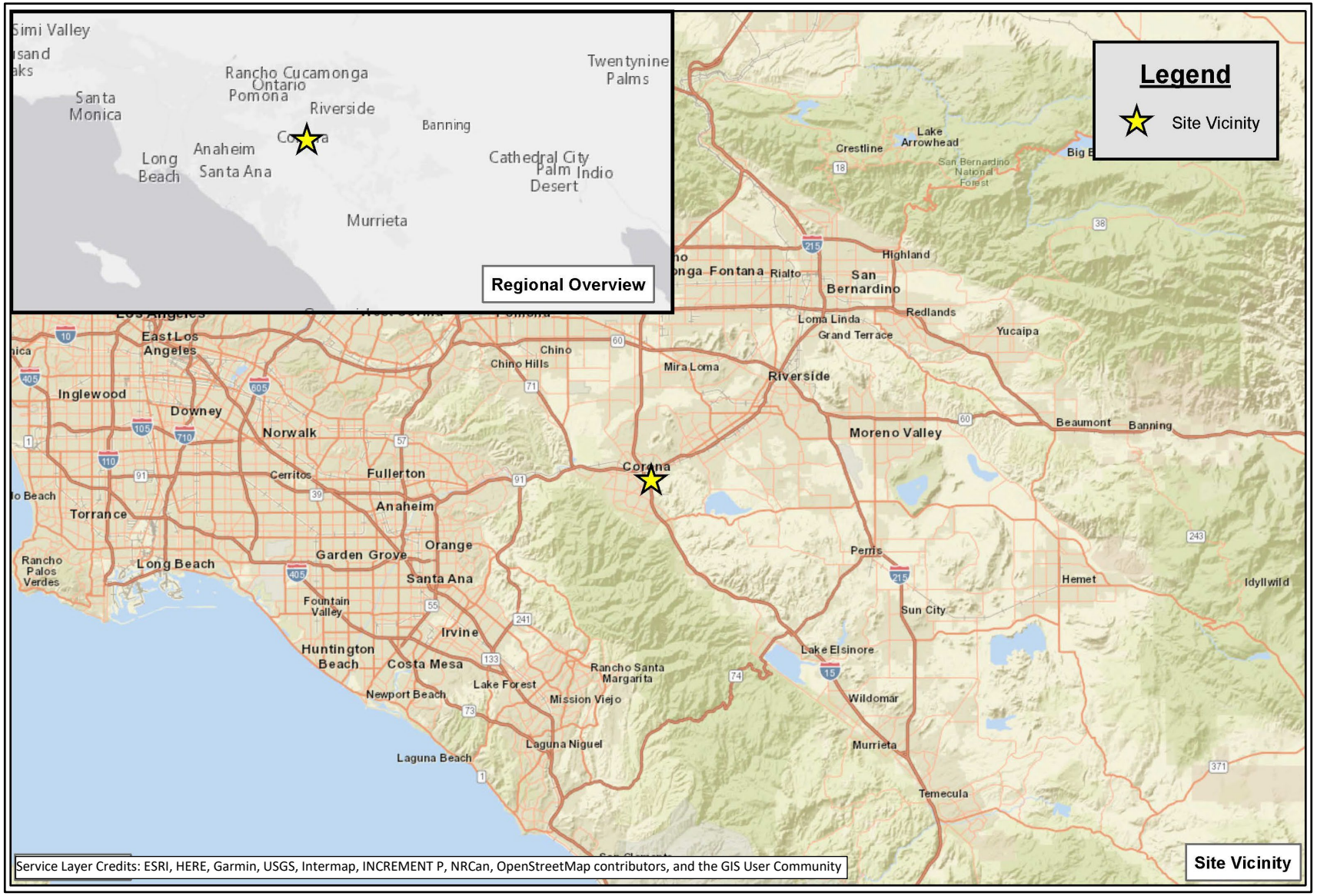

Figure 2-1: Regional Overview and Site Vicinity
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

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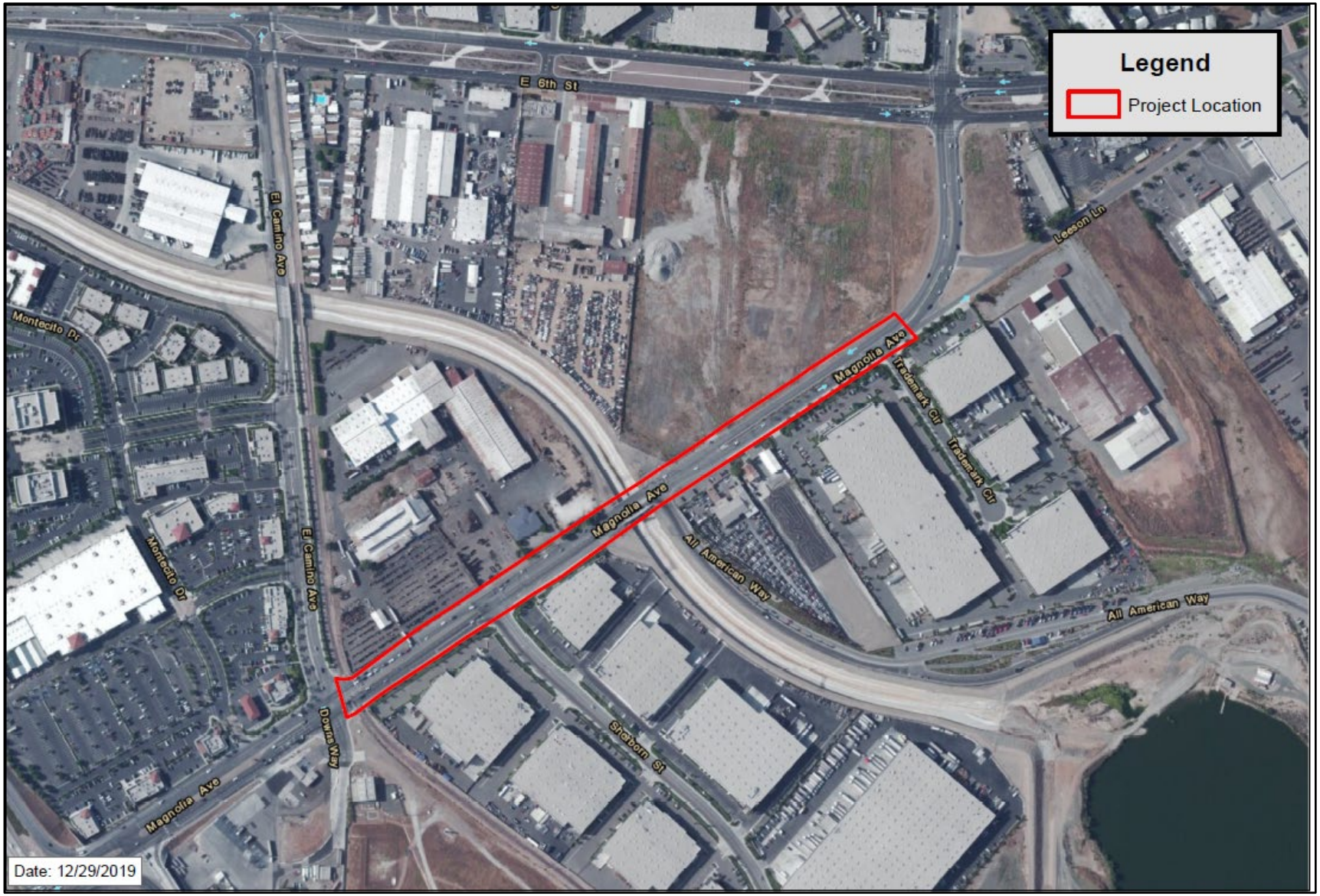

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Figure 2-2: Project Location
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

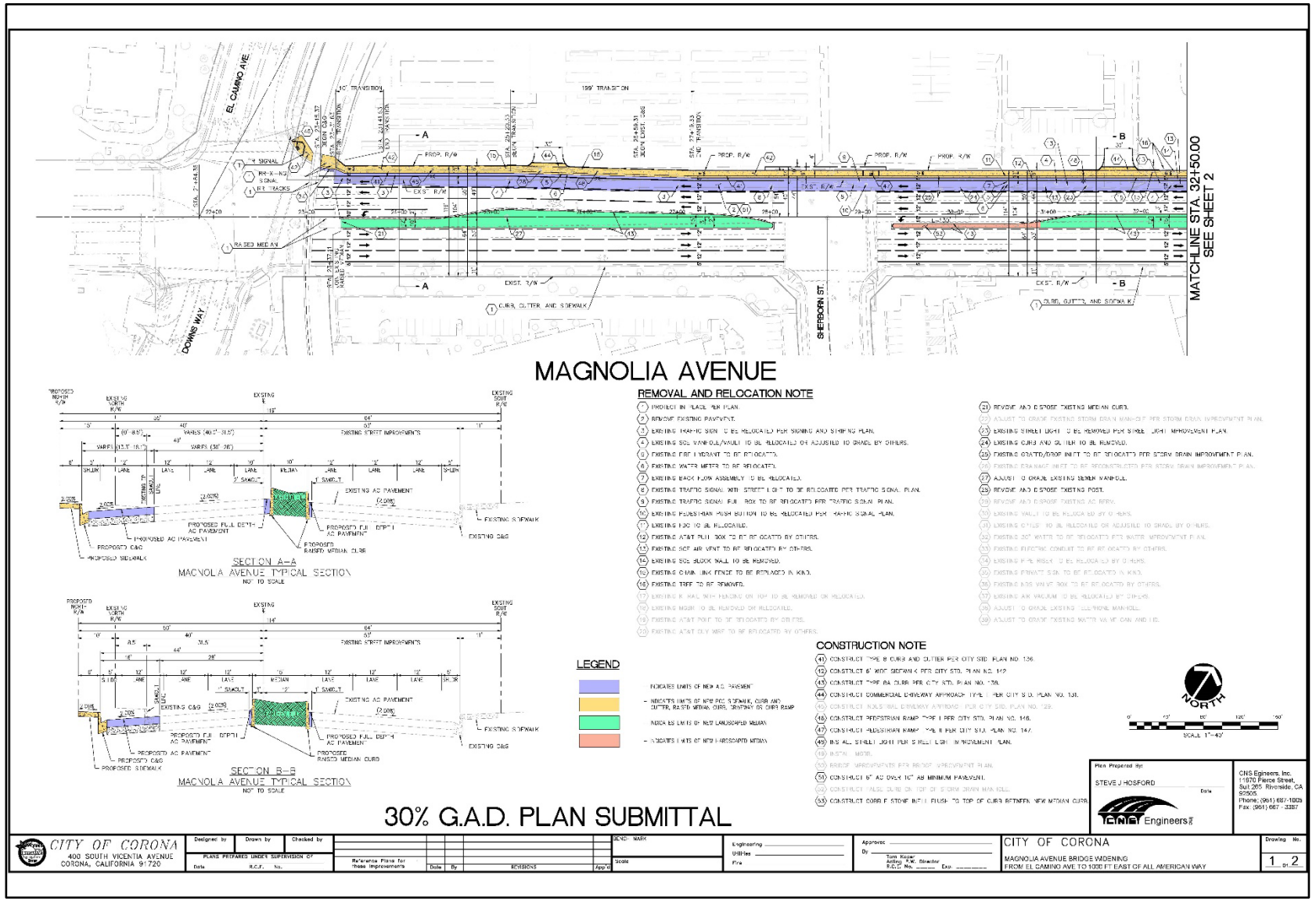

Figure 2-3: Conceptual Improvements Overview – Sheet 1
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

COMPASS Consulting Enterprises, Inc.

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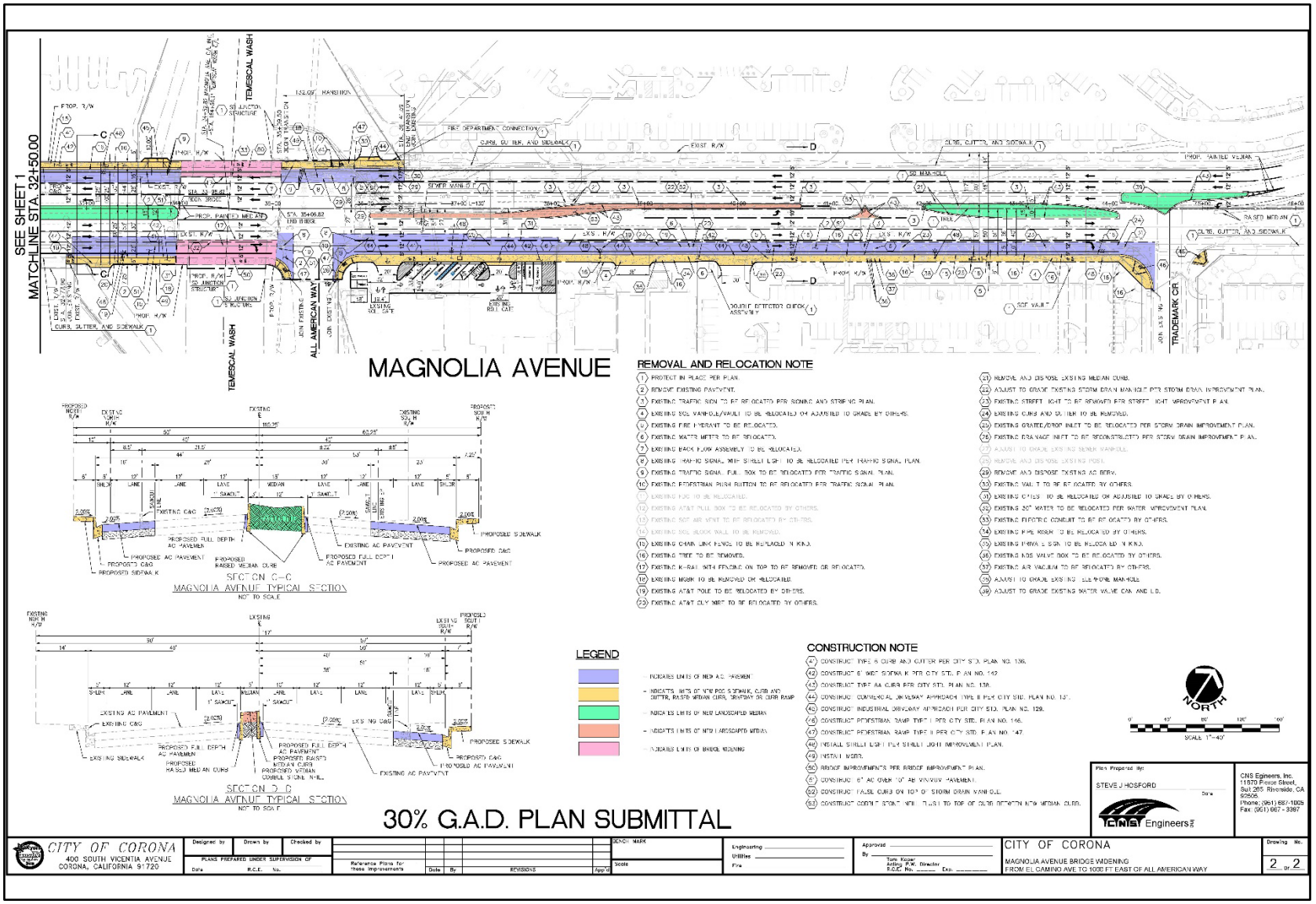

Figure 2-4: Conceptual Improvements Overview – Sheet 2
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

COMPASS Consulting Enterprises, Inc.

Not to Scale

3 ENVIRONMENTAL ANALYSIS AND DETERMINATION

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed Project to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

3.1 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

Section 4 provides a discussion of the potential environmental impacts of the Project. The evaluation of environmental impacts follows the questions provided in the Checklist provided in the CEQA Guidelines.

3.2 TERMINOLOGY USED IN THIS ANALYSIS

For each question listed in the IS checklist, a determination of the level of significance of the impact is provided. Impacts are categorized in the following categories:

- **No Impact.** A designation of no impact is given when no adverse changes in the environment are expected.

- **Less Than Significant.** A less than significant impact would cause no substantial adverse change in the environment.

- **Less Than Significant with Mitigation**. A potentially significant (but mitigatable) impact would have a substantial adverse impact on the environment but could be reduced to a less-than-significant level with incorporation of mitigation measure(s).

- **Potentially Significant.** A significant and unavoidable impact would cause a substantial adverse effect on the environment and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level.

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

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 the project (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

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

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 EIR is required.

"Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." Mitigation measures are identified and explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).

Earlier analyses may be used where, pursuant to the 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 analyses used where they are available for review.

b) Which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and whether such effects were addressed by mitigation measures based on the earlier analysis.

c) 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 for effects that are "Less than Significant with Mitigation Measures Incorporated.

References and citations have been incorporated into the checklist references to identify information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document, where appropriate, include a reference to the page or pages where the statement is substantiated.

Source listings and other sources used, or individuals contacted are cited in the discussion.

The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question

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

3.4 ENVIRONMENTAL FACTORS POTENTIALL AFFECTED

Based on the analysis in Section 4, the proposed Project could potentially affect ("Potentially Significant" or "Less than Significant with Mitigation Incorporated") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and identifies where mitigation measures would be necessary to reduce all impacts to less than significant.

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

3.5 DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, 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.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Julie A. Gilbert
Signature

Feb. 27, 2022
Date

Julie A. Gilbert
Name

President, Compass Consulting Enterprises, Inc
Title

4 ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

4.1.1 Environmental Setting

Magnolia Avenue is an east-west Major Arterial in the City of Corona, accessible from Interstate 15 (I-15). It is identified as six lanes in the General Plan, but it is only striped/constructed to accommodate four lanes. The Project improvements will begin at El Camino Avenue, approximately 600 feet east of the I-15. Land uses along the Project alignment include light industrial to heavy industrial on both sides of the road. The heavy industrial uses include a quarry located south of the Project alignment, accessible on the south side of Magnolia Avenue from Sherborn Street and All American Way.

Photos 1 through 12 at the end of this section depict the Project's aesthetic environment.

4.1.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: 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 within a state scenic highway?				X
c) In nonurbanized 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 a 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 which would adversely affect day or nighttime views in the area?			X	

Discussion

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

No Impact. The CEQA Guidelines do not provide a definition of what constitutes a "scenic vista" or "scenic resource" or a reference as to from what vantage point(s) the scenic vista and/or resource, if

any, should be observed. However, a scenic vista can generally be defined as a viewpoint from a public vantage that provides expansive views of a highly-valued landscape for the benefit of the general public. Common examples include undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to a developed area. Scenic resources are those landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings.

The City of Corona General Plan (COC, 2019b) has designated Magnolia Avenue from Garretson and Ontario Avenues to Rimpau Avenue, located on the west side of I-15, approximately one-half mile west of the Project alignment, as a City-designated scenic highway. This section of Magnolia provides views of the Santa Ana Mountains to the southwest, as well as views of the narrow pass between the San Bernardino Mountain foothills at the northwest end of the City, through which I-15 travels.

The Project will not impact the scenic vistas from the scenic-designated section of Magnolia Avenue because the Project alignment cannot be viewed from the section of Magnolia Avenue designated as a scenic highway.

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

No Impact. The Project does not occur within a state scenic highway. Therefore, there is no impact.

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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact. The Project is located in an industrial-commercial area. The north side of Magnolia Avenue, between I-15 and 6th Street, is designated as being within the Corona Magnolia Specific Plan. The Specific Plan area is bordered on the west by the I-15 Freeway, on the south by Magnolia Avenue, and on the north by Sixth Street and an existing improved Riverside County Flood Control District flood control channel (Temescal Wash). Some of the objectives of the Specific Plan that relate to this Project include the following:

- *Develop the Specific Plan Area as a gateway from the I-15 (easterly gateway to the City)*
- *Develop clear circulation linkages and access points to adjacent streets: Magnolia Avenue, Sixth Street, and El Camino Avenue.*
- *Provide appropriate landscape buffers between the site and surrounding properties and between differing on-site uses.*

The Project alignment is only four lanes while the General Plan envisions this section of Magnolia Avenue as six lanes. Additionally, curb-and-gutter and sidewalks are only present in portions of the Project alignment. The Project will improve Magnolia Avenue so that it will provide a cohesive and standard look throughout the Project alignment.

Therefore, the Project is consistent with the objectives of the Specific Plan. Therefore, there will be a less than significant impact.

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

Less Than Significant Impact. The City of Corona does not permit construction activities outside of daylight hours, so the construction associated with the proposed Project would not cause the emission of light beyond existing circumstances in that area. Within the City limits, the majority of lands are developed, and daytime and nighttime skies are already impacted to a limited extent by light and glare.

The proposed Project includes the retrofit of the existing streetlights to Light Emitting Diode (LED) lamps. LED lamps are naturally directional in that they emit light for 180 degrees by default, unlike the standard High Pressure Sodium (HPS) lamps used in most streetlights which emit light omnidirectionally, or 360 degrees. Therefore, the LED streetlights will emit almost no leakage onto off site areas. Therefore, the Project will not create a substantial source of light or glare that would adversely affect day or nighttime views and the impact is less than significant.

4.1.3 Mitigation Measures:

No mitigation measures are required.

Photo 1 – Magnolia Avenue looking east approaching El Camino Avenue intersection.

Photo 2 – Magnolia Avenue looking east at El Camino Avenue intersection with railroad crossing.

Photo 3 – Magnolia Ave looking east approaching Magnolia Ave Bridge.

Photo 4 – Magnolia Ave Bridge (north side)looking west under bridge.

Photo 5 – Magnolia Ave Bridge (south side) looking west under bridge.

Photo 6 – Magnolia Ave looking east from All American Way and Corona Auto Parts business parking lot toward Leeson Lane.

4.2 AGRICULTURE & FORESTRY RESOURCES

4.2.1 Environmental Setting

The Project is located within a fully developed roadway within an entirely urbanized area of the City of Corona.

4.2.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to 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 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 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 which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

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 Project alignment is identified as within "urban-built up" lands of California Department of Conservation, Farmland Mapping and Monitoring Important Farmland Finder. No impacts would occur.

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

No Impact. None of the land within the Project alignment is currently under agricultural production, nor are any parcels under a Williamson Act contract. No impacts would occur.

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. Forest land is defined in Public Resources Code section 12220(g) as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." No timberland or lands zoned Timberland Production as defined above are within the Project alignment. The Project is located in an urbanized area, not located in areas zoned for forest land or timber production. No impacts would occur.

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

No Impact. As mentioned above, the disturbances associated with the Project activities would not impact the lands' ability to support 10-percent native tree cover of any species, and thus no forest lands as defined in Public Resources Code Section 12220(g) would be lost. In addition, no such lands would be converted to non-forest use as a result of the project construction and operations activities. No impacts would occur.

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

No Impact. The construction and operation of the proposed Project do not involve other changes in the existing environment that could result in the conversion of farmland to non-agricultural use or forest land to non-forest land use. No impacts would occur.

4.2.3 Mitigation Measures:

No mitigation measures are required.

4.3 AIR QUALITY

Urban Crossroads performed an Air Quality Report for the proposed project in April 2021 (**Appendix A - *Air Quality Report***).

4.3.1 Regulatory Setting

Air pollutants are regulated at the national, State, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (CARB) regulates at the State level. The South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

Federal and State Regulations

The EPA is responsible for global, international, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Air Quality Standards (NAAQS), also known as federal standards. There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the Clean Air Act of 1970.

- Ozone (O_3)
- Nitrogen Dioxide (NO_x)
- Lead
- Particulate Matter (PM_{10} and $PM_{2.5}$)
- Carbon Monoxide (CO)
- Sulfur Dioxide (SO_2)

California has set standards for certain pollutants. **Table 4.3-1: *State and Federal Ambient Air Quality Standards*** documents the current Federal and State air quality standards.

The U.S. EPA has also identified nine priority mobile source air toxics: 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. In California, sulfates, visibility reducing particles, hydrogen sulfide, and vinyl chloride are also regulated.

Table 4.3-1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentrations[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm	Ultraviolet Photometry	- -	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm		0.070 ppm (147 µg/m³)		
Respirable Particulate Matter (PM10)	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µ/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		- -		
Fine Particulate Matter (PM2.5)	24-Hour	- -	- -	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 µg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 µg/m³)	- -	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 µg/m³)		9 ppm (10 µg/m³)	- -	
	8-Hour (Lake Tahoe)	6 ppm (7 µg/m³)		- -	- -	
Nitrogen Dioxide (NO_2)	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	- -	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (357 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	- -	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	- -		- -	0.5 ppm (1300 mg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	- -	
	Annual Arithmetic Mean	- -		0.14 ppm (for certain areas)[10]	- -	
Lead	30 Day Average	1.5 µg/m³	Atomic Absorption	- -		
	Calendar Qtr	- -		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	- -		0.15 µg/m³		
Visibility Reducing Particles	8-Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Notes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
10. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
12. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
13. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Air Basin Attainment Status

EPA and CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. **Table 4.3-2: *State and Federal Attainment Status*** lists the attainment status for the criteria pollutants in the South Coast Air Basin.

Table 4.3-2: State and Federal Attainment Status

Pollutant	State Attainment Status	Federal Attainment Status
Ozone (O_3)	Nonattainment	Nonattainment - Extreme
Respirable Particulate Matter (PM_{10})	Nonattainment	Maintenance
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment - Moderate
Carbon Monoxide (CO)	Attainment	Maintenance
Nitrogen Dioxide (NO_2)	Attainment	Unclassifiable/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassifiable/Attainment
Lead (Pb)	Attainment	Unclassifiable/Attainment
Visibility-Reducing Particles	Unclassifiable/Attainment	N/A
Sulfates	Attainment	N/A
Hydrogen Sulfide	Unclassifiable/Attainment	N/A
Vinyl Chloride	Unclassifiable/Attainment	N/A

By federal standards, the Riverside County section of the Basin is currently in extreme nonattainment for O3 (precursors: VOC or NOX); nonattainment for PM2.5; maintenance for PM10; attainment NO2; maintenance for CO; and attainment/maintenance for lead. Per state standards, the South Coast Air Basin is in nonattainment for both 1 and 8 hour O3 (precursors: VOC or NOx), attainment for CO, attainment for NO2, nonattainment for PM10 and PM2.5, attainment for H2S, attainment for sulfates, and attainment for vinyl chloride. There are no federal standards for H2S, sulfates, or vinyl chloride, and there are no state standards for SO2 or lead. No data was available to identify Riverside County's attainment status for visibility reducing particles.

Mobile Source Air Toxics

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Federal Clean Air Act. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources, 66 FR 17229 (March 29, 2001). This rule was issued under the authority in Section 202 of the Federal Clean Air Act. In its rule, the EPA examined the impacts of existing and newly promulgated mobile source control programs, including its reformulated gasoline (RFG) program, its national low emission vehicle (NLEV) standards, its Tier 2 motor vehicle emissions standards and gasoline sulfur control requirements, and its proposed heavy duty engine and vehicle standards and on-highway diesel fuel sulfur control requirements. Even if VMT increases by 145 percent as assumed between years 2010 and 2050, FHWA projects would reduce on-highway emissions by an average of 72 percent. Thus, the EPA concluded that no further motor vehicle emissions standards or fuel standards were necessary to control MSATs. The EPA is preparing a subsequent rule under the authority of Section 202(l) of the Federal Clean Air Act that would address these issues and make adjustments to the primary and secondary MSATs.

Transportation Conformity

The conformity requirement is based on Federal Clean Air Act Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional—or, planning and programming level—and the project level. The proposed Project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. The U.S. EPA regulations at 40 CFR 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has attainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis.

Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP), and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), FHWA, and Federal Transit Administration (FTA), make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and the TIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP and the project has a design concept and scope[4] that has not changed significantly from those in the RTP and TIP. If the design concept and scope have changed substantially from that used in the RTP Conformity analysis, RTP and TIP amendments may be needed. Project-level conformity also needs to demonstrate that project analyses have used the latest planning assumptions and U.S. EPA-approved emissions models; the project complies with any control measures in the SIP in PM areas. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

South Coast Air Quality Management District (SCAQMD)

SCAQMD is responsible for controlling emissions primarily from stationary sources and maintains air quality monitoring stations throughout the air basin. SCAQMD, in coordination with the Southern California Association of Governments (SCAG), is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the air basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or State ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

Every three (3) years the SCAQMD updates the AQMP with a 20-year horizon.

On March 3, 2017, SCAQMD adopted the 2016 AQMP. The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including the SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. In addition, the 2016 AQMP includes the new and changing federal requirements, the implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

South Coast Air Quality Management District Rules

The AQMP for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the State and federal standards. Some of the rules and regulations that apply to this Project include, but are not limited to, the following:

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable suppression techniques are indicated below and include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas in active for 10 days or more).
- Water active sites at least three times daily.

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of Project must comply with Rule 1113.

Idling Diesel Vehicle Trucks – Idling for more than 5 minutes in any one location is prohibited within California borders.

4.3.2 Environmental Setting

Meteorology and Climate

The Project site is located in the South Coast Air Basin, a 6,745-square mile sub-region of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The larger South Coast district boundary includes 10,743 square miles.

The Project area is bound by the Santa Ana Mountains to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Metropolitan Riverside 1 climatological station, located at the Corona Airport, approximately 4 miles west of the Project, is located in the same Sensitive Receptor Area (SRA) as the Project and is representative of meteorological conditions near the Project. The highest temperatures occur in July with an average high temperature of 89 degrees Fahrenheit (°F) and an average low temperature of 60 °F. The coolest temperatures in December with an average high temperature of 67 °F and a low temperature of 39 °F. The average precipitation is 10.7 inches per year (IEM 2020). Snow has only been recorded in the city once in the 20th century, in the winter of 1949. Mountains averaging 3,000 feet in altitude to the west of the city and 8,000 feet in altitude further northeast of the city trap pollutants. The semi-persistent marine layer creates frequent inversions, also helping to trap pollution in the winter and significantly increase ozone concentrations in the summer.

The SCAQMD has divided the South Coast Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. **Table 4.3-3: *Air Quality Concentrations – Metropolitan Riverside 1 Station*** identifies the California Air Quality Standard (CAAQS) trends for the past three years at the Metropolitan Riverside 1 climatological station as it within the same air basin and in the

Project area. In the years monitored, pollution concentrations have been largely stable, though there have been significant decreases in pollution between the 1970s and 2018.

Table 4.3-3: Air Quality Concentrations – Metropolitan Riverside 1 Station

Pollutant	Standard	Year		
		2017	2018	2019
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.120	0.117	0.118
Maximum 8-Hour Concentration (ppm)		0.105	0.103	0.095
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	33	31	26
Number of Days Exceeding Federal/State 8-Hour Standard	> 0.07 ppm	80	70	64
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		1.9	2.6	1.5
Maximum 8-Hour Concentration (ppm)		1.7	2.4	1.2
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.063	0.054	0.056
Annual Arithmetic Mean Concentration (ppm)		0.015	0.014	0.014
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m^3)		75	64	97
Annual Arithmetic Mean (µg/m^3)		32.2	29.7	25.3
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	11	3	4
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m^3)		50.3	50.7	46.7
Annual Federal Arithmetic Mean (µg/m^3)		12.2	12.4	11.1
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	6	2	4
Sulfur Dioxide (SO_2)				
Maximum 1 Hour Concentration (µg/m^3)	> 75 ppb	2.5	1.7	1.8

Sensitive Receptors

A sensitive receptor is defined by SCAQMD as any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. Also included are long term care hospitals, hospices, prisons, and dormitories or similar live-in housing. The Air Quality Report in Appendix A identified that the zone of greatest concern near roadways is within 500 feet. Based on a review of the Project location and a 500 foot area around the Project, there are no residences, schools, hospitals, other health care facilities, child/day care facilities, parks, or playgrounds within 500 feet of the Project site.

4.3.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		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	

Discussion

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

Less Than Significant Impact. CEQA requires a discussion of any inconsistencies between a proposed Project and applicable general plans and regional plans (CEQA Guidelines Section 15125). The applicable air quality plan is SCAQMD 2016 AQMP. The AQMP is a regional blueprint for achieving air quality standards and healthful air. Conflicts with the AQMP would arise if Project activities result in a substantial increase in employment or population that was not previously adopted and/or approved in a General Plan. Large population or employment increases could affect transportation control strategies, which are among the most important in the air quality plan, since transportation is a major contributor to particulates and ozone for which the SCAB is not in attainment.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook. These indicators are discussed below:

Consistency Criterion No. 1: The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized or regional significance thresholds were exceeded. The Project would not exceed the applicable LST thresholds or regional significance thresholds for construction activity after implementation of applicable mitigation measures. Therefore, the Project would not conflict with the AQMP according to this criterion.

Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the General Plan is considered to be consistent with the AQMP. The Project plans to improve Magnolia Avenue consistent with the City's General Plan, therefore, the Project is consistent with the AQMP.

Construction Impacts

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. Development consistent with the growth projections in the General Plan is considered to be consistent with the AQMP. On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

Construction is planned to last approximately two years; no construction activities are anticipated to last more than five years at any individual site. Emissions from construction-related activities are thus considered temporary as defined in 40 CFR 93.123(c)(5); and are not required to be included in PM hot-spot analyses to meet conformity requirements. Table 2.4-1 in the previous section describes the anticipated milestone completion dates used for this analysis.

Project level construction emissions were estimated for the Project using equipment inventories and construction scheduling information included in the model, which is based on roadway construction surveys (Appendix A). The emissions as presented in **Table 4.3-4: *Projected Construction Emissions*** are based on the best information available at the time of calculations. The emissions represent the estimated peak daily construction emissions that would be generated the Widening Alternative.

Table 4.3-4: Projected Construction Emissions

Activity	PM_{10} (lbs/day)	PM2.5 (lbs/day)	CO (lbs/day)	NO_x (lbs/day)	CO_2e (tons/day)
Grubbing/Land Clearing	50.4	10.7	9.6	9.3	1.3
Grading/Excavation	51.9	12.1	43.3	44.0	4.8
Drainage/Utilities/Sub-Grade	50.9	11.2	27.4	22.5	2.8
Paving	0.5	0.5	17.1	11.2	1.6
Maximum	51.9	12.1	43.3	44.0	4.8
SCAQMD Thresholds	150	55	550	100	NA
Exceed Local Standards	**No**	**No**	**No**	**No**	**NA**

The Project would not result in or cause NAAQS or CAAQS violations. The Project does not propose a land use development but rather the widening of a road segment. The Project is therefore considered to be consistent with the AQMP. A less than significant impact is identified, and no mitigation measures are proposed.

Operational Impacts

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 conditions and the No Build and Project (Widening) Alternatives.

Regional operational emissions associated with Project implementation were calculated using EMFAC2017, version 1.03. EMFAC2017 is the most recent on-road emissions modeling tool in California that has been approved for use by the U.S. EPA (refer to full details in Appendix A). **Table 4.3-5: *Summary of Comparative Operational Emissions Analysis*** identifies the results of the comparative operational level emissions.

Table 4.3-5: Summary of Comparative Operational Emissions Analysis

Scenario/ Analysis Year	CO (tons/day)	PM_{10} (tons/day)	PM2.5 (tons/day)	NO_X (tons/day)
Baseline (Existing Conditions) 2019	1.81	0.08	0.08	3.79
No-Build 2026	0.07	0.01	0.01	0.86
Widening Alternative 2026	0.07	0.01	0.01	0.13
No-Build 2040	0.84	>0.01	>0.01	0.14
Widening Alternative 2040	0.77	>0.01	>0.01	0.13

The results indicate would not generate new vehicle trips and would have the greatest effect on congestion. Table 4.3-5 identifies that emissions decrease in 2026 and 2040 compared to the existing condition primarily due to fleet turnover and improvements in exhaust controls. When compared to the No Build Alternative, the Widening Alternative would result in slight reductions in daily criteria pollutant emissions due to improved traffic flow.

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

Less Than Significant Impact With Mitigation Incorporated. The Project construction would require earthmoving, material removal, and other activities such as removal of plants and /or other organics. The Project's construction activities were screened for emission generation using latest version of CalEEMod™ as required by the SCAQMD. The results are summarized in Tables 4.3-4 and 4.3-5 which identified that none of the criteria pollutants would be exceeded. Therefore, there is a less than significant impact.

Compliance with SCAQMD Rules 402 and 403

Although the proposed Project does not exceed SCAQMD thresholds during construction activities, the City and or its contractor is required to comply with all applicable SCAQMD rules and regulations as the SCAB is in non-attainment status for ozone and suspended particulates (PM_{10}). The Project shall comply with, Rules 402 nuisance, and 403 fugitive dust, and Rule 1113 for paints to contain low volatile organic compounds, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source; and the Air Quality Management Plan (AMCP), which identifies Best Available Control Technologies (BACT) for area sources and point sources, respectively.

Therefore, to ensure compliance with Rule 403 and Rule 1113, **Mitigation Measures AIR-1** and **AIR-2** are included. Mitigation measures are located at the end of this section.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. The Project alignment is directly adjacent to commercial and industrial buildings. There are no residences, schools, hospitals, other health care facilities, child/day care facilities, parks, or playgrounds within 500 feet of the Project site.

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

Less Than Significant Impact. Project construction equipment would generate odors from the combustion of fuels. The determination of an impact from Project-generated odors is dependent on a number of variables including:

- Nature of the odor source;
- Frequency of odor generation (e.g., daily, seasonal, activity-specific);
- Intensity of the odor (e.g., concentration);
- Wind direction (e.g., upwind or downwind); and
- Sensitivity of the receptor.

Impacts associated with odors from construction equipment and paving would be temporary during Project construction. It is also anticipated that any short-term odors generated by construction equipment would dissipate. Due to the temporary nature of Project construction activities impacts would be less than significant and no mitigation measures are proposed.

Impacts from operations would also be less than significant or reduced. The Project will widen a roadway and bridge to better allow for traffic flow and truck turning movements. This will likely reduce the odors from diesel trucks that are idling at the signal at All American Way and Magnolia Avenue.

4.3.4 Mitigation Measures:

AIR-1 The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.

AIR-2 The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113:

- Only “Low-Volatile Organic Compounds” paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113 shall be used.

4.4 BIOLOGICAL RESOURCES

Jericho Systems, Inc (Jericho) prepared a general biological resources assessment and jurisdictional waters delineation in July 2020 for the proposed Project **(Appendix B - *Biological Resources and MSHCP Compliance***).

4.4.1 Regulatory Setting

Federal Endangered Species Act (ESA)

The USFWS administers the federal ESA of 1973. The ESA provides a legal mechanism for listing species as either threatened or endangered, and a process of protection for those species listed. Section 9 of the ESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Take" can include adverse modification of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act. Take authorization can be obtained under Section 7 or Section 10 of the act.

No federally listed species were observed during the field survey nor are any expected to occur. No impact to federally protected species or habitats will result from implementation of the proposed Project.

California Endangered Species Act (CESA)

The CDFW administers the State CESA. The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is likely to become an endangered species soon, in the absence of special protection or management. And a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species applies to California native plants. Further, all raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code (FGC). Species of Special Concern (SSC) is an informal designation used by CDFW for some declining wildlife species that are not proposed for listing as threatened or endangered. This designation does not provide legal protection but signifies that these species are recognized as sensitive by CDFW.

No State listed species, or other sensitive species were observed during the field survey nor are any expected to occur. No impact to species protected by the State will result from implementation of the proposed Project.

Migratory Bird Treaty Act (MBTA)

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or

death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

Western Riverside Multiple Species Habitat Conservation Plan (WR-MSHCP)

The Western Riverside County Multiple Species Habitat Conservation Plan (WR-MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County. The overall goal of this plan is to maintain biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows Riverside and its Cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts.

The MSHCP Plan Area encompasses approximately 1.26 million acres (1,966 square miles); it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the Cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. This HCP is one of the largest plans ever attempted. It covers multiple species and multiple habitats within a diverse landscape, from urban centers to undeveloped foothills and montane forests, all under multiple jurisdictions. It extends across many bioregions as well, including the Santa Ana Mountains, Riverside Lowlands, San Jacinto Foothills, San Jacinto Mountains, Agua Tibia Mountains, Desert Transition, and San Bernardino Mountains. It provides a coordinated MSHCP Conservation Area and implementation program to preserve biological diversity and maintain the region's quality of life.

Jurisdictional Waters and Streambeds

The U.S. Army Corps of Engineers (USACE), under Section 404 of the Federal Clean Water Act (CWA), regulates discharges of dredged or fill material into "waters of the United States." These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a connection to interstate or foreign commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or it may be indirect (through a connection identified in USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an "ordinary high water mark" or OHWM. In order to be considered a jurisdictional wetland under Section 404, an area must possess hydrophytic vegetation, hydric soils, and wetland hydrology.

The California Department of Fish and Wildlife (CDFW), under Sections 1600 et seq. of the California Fish and Game Code, regulates alterations to lakes, rivers, and streams. A stream is defined by the presence of a channel bed and banks, and at least an occasional flow of water. The CDFW also regulates habitat associated with the streambed, such as wetland, riparian shrub, and woodlands.

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB may also regulate discharges to "waters of the state" including wetlands, under the California Porter-Cologne Water Quality Control Act.

4.4.2 Environmental Setting

The City of Corona is located in northwestern Riverside County between the Temescal Mountains and Santa Ana Mountains, just north of the Temescal Valley. Corona extends approximately two miles north of State Highway 91, the Santa Ana mountain range on the southwest, and the Temescal mountain range to the southeast. The general climate of Corona is described as warm, dry summers and mild winters and is characterized as warm-summer Mediterranean with average temperatures ranging from 93 in the summer to 40 degrees Fahrenheit in the winter and an average annual rainfall of 12 inches. The Project site sits at the northwestern base of the Temescal mountain range along the northeastern boundary of the city limits.

The Project alignment occurs within an established, paved road right-of-way and associated facilities, such as some existing sidewalks. The Temescal Creek Channel is an improved, 84-foot-wide by 15-foot-deep rectangular concrete channel that includes a storm drain outlet directly into the channel and which is owned and maintained by Riverside County Flood Control and Water Conservation District (RCFC & WCD).

The existing bridge over the channel is 67.5 feet wide and was built in 1986. It consists of two spans of cast-in-place reinforced concrete box girder, a pier wall along the centerline of the channel, and two abutments. The bridge abutments were constructed outside the rectangular concrete channel.

Jericho's field survey identified that plant species identified in the barren ground surrounding the concrete channel were ruderal and mowed or ornamental. Ruderal species observed were limited to mustard (*Hirschfeldia incana*) and Russian thistle (*Salsola tragus*). Ornamental tree species were limited to pine (*Pinus ssp.*) , Mexican fan palm (*Washingtonia robusta*), and African sumac (*Searsia lancea*). There are eight African sumac trees with a DBH of approximately 6 inches that will be removed and replaced. The Project is classified as "Urban/Developed" per the MSHCP Vegetation Layer (2016) is consistent with conditions currently found on site.

Wildlife observed in adjacent areas include house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), and yellow-rumped warbler (*Setophaga coronate*). No bats were observed around the bridge and no echolocation were recorded via bat detectors.

Sensitive Species

Per the CNDDB, CNPSEI, and other relevant literature and databases, 54 sensitive species (22 plant species, 32 animal species) and have been documented in the *Corona South* and *Corona North* USGS 7.5-minute series quadrangles (Appendix B). This list of sensitive species and habitats includes any State- and/or federally-listed threatened or endangered species, California Fully Protected species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

There are 15 State- and/or federally-listed species documented within the *Corona South* and *Corona North* quads. Of the 15 State- and/or federally-listed species, only the following two have been documented in the Project vicinity (within approximately 1 mile):

- Coastal California gnatcatcher (*Polioptila californica californica*)
- Least Bell's vireo (*Vireo bellii pusillus*)

An analysis of the likelihood for occurrence of all sensitive species documented in the *Corona South* and *Corona North* quads is provided in Appendix B. This analysis considers species' range as well as documentation within the vicinity of the Project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions.

The Project alignment is not within or adjacent to any critical habitat for any listed or candidate species. Coastal scrub habitat necessary for California gnatcatcher or riparian scrub habitat necessary for least Bell's vireo are not found anywhere along the Project alignment, and there is no potential for either species to occur within the Project alignment or within the area of the bridge.

Riverine/Riparian Areas and Jurisdictional Waters

The bridge crosses a concrete lined section of the Temescal Creek Channel. The channel is void of vegetation and consists of vertical slopes approximately 20 ft in height and a bed approximately 67 ft wide. The Temescal Creek Channel flows seasonally/ephemerally and is a tributary to the Santa Ana River from Lake Elsinore. Temescal Wash is a watercourse subject to CWA and FGC under the jurisdictions of USACE, RWQCB, and CDFW. Any proposed permanent or temporary impacts to this tributary will require a Streambed Alteration Agreement from the CDFW, as well as CWA Sections 401/404 permits from the RWQCB and Corps, respectively.

The jurisdictional waters to be impacted within the concrete channel is anticipated to be the bridge abutments along the bank and a support pier. The amount of waters impacted will be determined after final design is complete.

Sensitive Bats

The structure of the bridge does not allow for roosting habitat for bats. Expansion joints that form crevices are utilized by many bat species, and these joints have been filled and sealed to prevent occupation and retain structure integrity. No bats were observed exiting the bridge at sunset, and no bats were detected during acoustic surveys. The Magnolia Bridge at the time of surveys is thereby considered unoccupied by bats.

4.4.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and 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, 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, marsh, vernal pool, coastal, 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	

Discussion

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

No Impact. There are no candidate, sensitive or special status species in the Project area. The Temescal Creek Wash is a concrete-lined channel and contains no vegetation that would support sensitive or candidate species.

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

No Impact. The City of Corona is a signatory to the MSHCP which requires that a project comply with the MSHCP policies identified in Section 6 of the MSHCP. The Project alignment is located in the Temescal Canyon Area Plan of the MSHCP. The site is not located in within any MSHCP designated criteria cell, cell group, or area identified for conservation, nor in an area that requires surveys for amphibian, criteria area species, mammals, burrowing owl, or narrow endemic plants. According to the biological resources survey, there is no riparian habitat along the alignment or in the concrete-lined channel. Therefore, there is no impact.

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

No Impact. The Jericho biological resources survey utilized a variety of reference materials relevant to the Project alignment during the course of the jurisdictional delineation, including historical and current aerial imagery, Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRM), National Oceanic & Atmospheric Administration (NOAA) climate data, USFWS National Wetland Inventory (NWI) and EPA Water Program "My Waters" data layers and United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) web soil survey. The data provided in the Web Soil Survey provides a standard basis for the soil textures and types that are assigned a hydric indicator status of "hydric" or "non-hydric" by the National Technical Committee for Hydric Soils.

The Temescal Creek Channel impacted by the Project is a concrete-lined channel. There were no wetland areas, nor any soils or hydric soils that have been deposited in the channel that would become habitat for wetlands. Therefore, there is no impact.

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

Less Than Significant With Mitigation Incorporated. Nestable vegetation occurs within and adjacent to the Project alignment, primarily in the trees along the south side of Magnolia Avenue. Pursuant to the Migratory Bird Treaty Act and California Fish and Wildlife Code, construction activities, demolition activities and/or the removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season to avoid impacts to nesting birds. The nesting season generally extends from February 1 through August 31 but can vary slightly from year to year based upon seasonal weather conditions.

Because construction may occur during the avian nesting season, **Mitigation Measure BIO-1** would reduce the potential impact to nesting birds to less than significant. Mitigation measures are located the end of this section.

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

Less Than Significant Impact. The Project includes the removal of approximately 16 larger trees located within proposed area of widening in the right-of-way and in the median, and the replacement of 61 trees in the new right-of-way limits and in the new medians.. The Jericho biological resources report identified that the tree species were primarily pine (*Pinus ssp.*), Mexican fan palm (*Washingtonia robusta*), and African sumac (*Searsia lancea*). There are eight African sumac trees with a diameter at breast height (DBH) of approximately 6 inches that will be removed and replaced. These trees are not of the type or size that are protected by any City policy or ordinance. Therefore, there is a less than significant impact.

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. The City of Corona is a signatory to the WR-MSHCP which requires that a Project comply with the WR-MSHCP policies identified in Section 6 of the WR-MSHCP. The Project alignment is located in the Temescal Canyon Area Plan of the WR-MSHCP. The site is not located in within any MSHCP designated criteria cell, cell group, or area identified for conservation, nor in an area that requires surveys for amphibian, criteria area species, mammals, burrowing owl, or narrow endemic plants. Additionally, the biological resources evaluation identified that the Project alignment was consistent with the WR-MSHCP. Therefore, there is a less than significant impact.

4.4.4 Mitigation Measures:

The following mitigation measure is required to reduce potential impacts to less than significant:

BIO-1: **Avian Monitoring.** If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer

distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

4.5 CULTURAL RESOURCES

CRM Tech prepared a Historic Property Survey Report (HPSR) and an Abridged Archaeological Survey (ASR) Report that evaluated the potential for historic resources in the Project alignment (**Appendix C - *Historical Property Survey Report***).

Cultural resources include archaeological sites, buildings and other kinds of structures, historic districts, cultural landscapes, and resources important to specific ethnic groups. Archaeological sites represent the material remains of human occupation and activity either prior to European settlement (prehistoric sites) or after the arrival of Europeans (historical sites). The historic "built environment" includes structures used for habitation, work, recreation, education and religious worship, and may be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges and other kinds of structures. An historic district is any “geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history” (36 CFR 60.3).

4.5.1 Environmental Setting

In 1769, with the establishment of the Franciscan mission in San Diego, Alta California became a part of Spain’s colonial empire in the Americas. During the ensuing mission period, the present-day Corona area fell nominally into the vast landholdings of Mission San Gabriel, established in 1771, and Mission San Luis Rey, established in 1798. After gaining independence from Spain in 1821, the Mexican government began to secularize the mission system in Alta California in the mid-1830s. As a result, the area was split among three large land grant ranchos that were created in 1846, shortly before the U.S. takeover: La Sierra (Yorba), La Sierra (Sepulveda), and El Sobrante de San Jacinto (refer to Appendix C).

In 1886 Robert B. Taylor, an Iowa transplant, purchased 11,510 acres of land from Rancho La Sierra (Yorba) with the backing of a group of investors in Iowa and founded the town of South Riverside. Well- known civil engineer Hiram Clay Kellogg was contracted by Taylor to survey the land and lay out a townsite that featured a “grand” circular boulevard to make the new settlement unique in design. In 1896, when the citizens of South Riverside voted to incorporate, the name of the town was changed to Corona, Spanish for “Crown,” with the informal name “Circle City” eventually incorporated into the city seal.

During the late 19th century and most of the 20th, Corona was known as a leading producer in the southern California citrus belt, later establishing itself as a the “Lemon Capital of the World.” The post-World War II boom era brought profound changes to the future growth of Corona, as the demand for affordable housing. Agricultural fields and citrus production shifted to the San Joaquin Valley, and by 1982, Corona had become known as a bedroom community for workers commuting to Orange County (Appendix C).

Between 1954 and 1967, the Project alignment and the surrounding area experienced notable growth, when a number of industrial-commercial complexes emerged along Magnolia Avenue and nearby Sixth Street. Sometime between 1967 and 1980, another industrial-commercial complex was built adjacent to the Project alignment, and over the next 15 years, further development also occurred along the Project alignment.

Historical Resources in Project Alignment

As part of the cultural resources study, CRM Tech conducted a records search at the South Central Coastal Information Center (SCCIC) to determine the potential for historical resources within the Project alignment, especially those that could be eligible to the National Register of Historic Places (NRHP). The research identified five potential "historic properties," all of them built-environment features, lying within or partially within or adjacent to the Project alignment. These five properties are identified as follows (refer also to Appendix C).

- Atchison, Topeka and Santa Fe Railway Temescal Valley Line. This segment represents the 22-mile alignment of the former ATSF Temescal Valley Line between Corona and Lake Elsinore. The segment of the rail line across the APE was originally built in 1926-1927 by the Corona and Santa Fe Railway Company, an ATSF subsidiary, to connect to an existing spur line at Alberhill and restore service to the Lake Elsinore-Temecula area, after the ATSF abandoned its tracks through the troublesome Railroad Canyon south of Perris to what is now the Canyon Lake reservoir. During the field survey conducted for this Project, the portion of the railway that crosses the Project alignment was found to be extant and functional, but all features associated with railroad operations at this location are modern in origin or appear to be so. To the north of the intersection, the year stamps "2013" were observed on the rails, while similar stamps of "1993" were observed on the rails to the south.

- 1375 Magnolia Avenue/1001 El Camino Avenue, APN 107-030-022, industrial complex. When first recorded in 2011, this property was described as an industrial- commercial complex where "multiple businesses operate on the property, sharing addresses and making use of the same buildings, all six of which are 45 years of age or older." The construction date was estimated to be the 1955-1960. The Modern-style concrete block building closest to the Magnolia Avenue right-of-way is known to have been built in 1966- 1967. The CRM Tech field inspection conducted for this Project revealed no substantial changes in the conditions of the buildings or the complex as a whole. The proposed Project would require a 15,800-square-foot ROW acquisition and additionally a 10,600-square-foot temporary easement along the Magnolia Avenue frontage of this parcel, with the Project footprint reaching approximately 40 feet from the 1966-1967 building at its closest, but would not have a direct impact on any of the buildings in the complex.

- 1480 Magnolia Avenue, APN 107-060-003, industrial complex. Recorded in 2011, this property consisted of two industrial-commercial buildings at 1480 Magnolia Avenue, most likely constructed around 1956. One of them was a front-gabled building with a corrugated metal roof and a recent stucco coating, and the other one was a side-gabled building of utilitarian character, "clad entirely in corrugated metal and several sheets of plywood." During the field inspection conducted for this Project, both buildings were found to be relatively unchanged from the 2011 listing description except that the stucco-clad main building has been extended slightly in the rear and that its corrugated metal roof has been replaced with composition shingles. The proposed Project would require an approximate 3,200-square-foot ROW acquisition and a 1,700-square-foot temporary easement from this parcel, extending to within 20 feet from both buildings at the nearest, but would have no direct impact on the buildings.

- 1450 Magnolia Avenue, APN 107-060-013, industrial complex. The industrial-commercial complex consists primarily of a vernacular and utilitarian single-story building with a complex irregular

footprint made up of four generally rectangular-shaped masses of different sizes, heights, and vintages, clad mostly with corrugated metal sheets. The parcel is subject to a 5,100-square-foot ROW acquisition and a 6,650-square-foot temporary easement along the frontage, and construction activities associated with a new sidewalk, curb, and gutter assemblage would likely reach the front and the building and its perimeter walls. Available archival records offer no information on the exact date of construction for this building, although historical photographs indicate that the office portion of the building in the front and the workshop/garage behind it were built between 1967 and 1980, initially as separate structures. The rest of the building dates to the 1995-2002 era, the northeastern wing replacing two smaller buildings that had occupied that area before. City records yield only two building permits issued on this property, one for a block wall in 1995 and the other for a 2,000-square-foot concrete drive in 1997.

- Magnolia Avenue over the Temescal Creek Channel. The Magnolia Avenue bridge over the Temescal Creek Channel (Bridge No. 56C0199) also remains extant and in use in the Project alignment. It has been formally determined not to be eligible for the NRHP.

4.5.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion

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

Less Than Significant Impact. The CRM Tech reports (Appendix C) identified properties within or adjacent to the Project alignment that have been studied for their significance as potential historical resources. However, the historical and archaeological resources reports in Appendix C concluded that that none of these five properties meet the official definition of "historic properties" under Section 106 provisions and therefore are not considered significant historical or archaeological resources. No other potential "historic properties," including historic districts,

historic landscapes, locally designated sites, or properties of traditional cultural value, were encountered within or adjacent to the Project alignment during this study. Therefore, there is a less than significant impact.

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

Less Than Significant Impact. Refer to a) above.

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

Less than Significant Impact. Based on an analysis of records and archaeological survey of the property, it has been determined that the Project site does not include a formal cemetery or any archaeological resources that might contain interred human remains. Nonetheless, the Project will be required to adhere to State Health and Safety Code Section 7050.5 if in the event that human remains are encountered and by ensuring that no further disturbance occur until the County Coroner has made the necessary findings as to origin of the remains. Furthermore, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. Compliance with State Law is not considered mitigation. Therefore, impacts in this regard are considered less than significant.

4.5.3 Mitigation Measures:

No mitigation measures are required.

4.6 ENERGY

Urban Crossroads performed an Energy Analysis Memorandum for the proposed Project in November 2021 (**Appendix D - *Energy Analysis Memorandum***).

4.6.1 Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [EIA] 2018). California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 million cubic feet of natural gas in 2017 (California Energy Commission [CEC] 2019; EIA 2018). In addition, Californians consume approximately 18.9 billion gallons of motor vehicle fuels per year (Federal Highway Administration 2019). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018).

Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest (Alberta, British Columbia, Idaho, Montana, Oregon, South Dakota, Washington, and Wyoming) and Southwest (Arizona, Baja California, Colorado, Mexico, Nevada, New Mexico, Texas, and Utah) in 2017. In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, SB 100 accelerates the State's Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from refineries located in California. Gasoline is the most used transportation fuel in California with 15.5 billion gallons sold in 2017 and is used by light-duty cars, pickup trucks, and sport utility vehicles (California Department of Tax and Fee Administration 2018). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016). Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO_2 and NO_X. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (California Air Resources Board [CARB] 2018).

Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015 and established new clean energy, clean air, and greenhouse gas reduction goals for 2030. SB 350 establishes periodic increases to the California Renewables Portfolio Standard (RPS) Program with the target to increase the amount of electricity generated per year from eligible renewable energy resources to an amount that equals at least 33% of the total electricity sold annually to retail customers, by December 31, 2020. The SB 350 specifically calls for the quantities of eligible renewable energy resources to be procured for all other compliance periods reflecting reasonable progress in each of the intervening years to ensure that the procurement of

electricity products from eligible renewable energy resources achieves 40 percent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the goal of the California RPS Program to achieve at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

4.6.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a 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

Discussion

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

Less than Significant Impact. Energy use during Project construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery and employee trips.

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately $14,630. Additionally, based on the assumed power cost it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 112,541 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 59,386 gallons of diesel fuel. Construction equipment use of fuel would not be

atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 9,872 gallons of fuel. Additionally, fuel consumption from construction vendor, water trucks, and hauling trips (MHDTs and HHDTs) will total approximately 3,803 gallons. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2020 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

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

No Impact. SB 100 mandates 100 percent clean electricity for California by 2045. SCE has achieved over 46% Carbon-Free energy sources as of the EIA 2018 Suitability Report. The proposed Project is a widening of an existing bridge and its approaches to improve traffic flow. Therefore, approval of the improvements would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur, and no mitigation measures are required.

Mitigation Measures:

No mitigation measures are required.

4.7 GEOLOGY AND SOILS

In December 2020, Converse Consultants prepared a Materials Report for the Project (**Appendix E - *Materials Report***) which assessed the Project soils and regional geology. A Geotechnical Design Report was also prepared for the Project and is located in **Appendix E-1.**

4.7.1 Environmental Setting

The Project alignment is within an urbanized area. Project features consist of removal and replacement of pavement in an existing roadway, removal and replacement of a concrete bridge in a concrete channel, and removal of other developed and undeveloped areas adjacent to the Project alignment to install improvements such as concrete curb and gutter, sidewalks and street trees.

Subsurface Project impacts include removal of asphalt and roadway up to 2.5 feet, drilling up to 70 feet deep along the Temescal Creek Wash banks to place the bridge abutments, and drilling up to 70 feet deep to place a center span for the bridge support.

Regional Faults

The Project alignment is located in the City of Corona which is in the northwestern portion of the Peninsular Ranges Geomorphic Province of Southern California. The Peninsular Ranges province is characterized by northwest tending valleys and mountain ranges which have formed in response to regional tectonic forces along the boundary between the Pacific and North American tectonic plates. The geologic structure is dominated by northwest trending right-lateral faults, most notable, the San Andreas Fault, San Jacinto Fault, Elsinore Fault, Whittier Fault, and the Newport-Inglewood Fault. The province extends southward from the Transverse Ranges province at the north end of the Los Angeles Basin to the southern tip of the Baja California Peninsula.

Southern California is seismically active. Several known active or potentially active faults are located in and around Corona. The Elsinore Fault zone is the closest major fault system to the Project alignment, located approximately 3 miles to the southwest. The City's General Plan (EIP Associates, 2004) identifies that the Elsinore Fault Zone is one of the largest fault zones in Southern California, and historically, has been one of the least active systems. The Elsinore Fault zone splays into two segments, the Chino-Central Avenue Fault and the Whittier Fault. The Chino-Central Fault is located approximately 3 miles to the east of the Project site, and could produce a maximum moment magnitude 6.7 earthquake.

The Project alignment is not located within an Alquist-Priolo Fault Zone.

Soils and Geology

Basement rocks in the region are predominantly granitic and metamorphic rocks associated with the Mesozoic-age Southern California Batholith. Erosional remnants of granitic rocks are exposed in isolated hilly outcrops within the northern portions of the Chino Basin. Cenozoic-age sedimentary rocks overly the basement rocks in many areas and are well exposed in the Santa Ana Mountains and the Chino Hills southwest and west of the site.

Based the report in Appendix E, the Project alignment is underlain by Holocene and late Pleistocene artificial fill and alluvial deposits. These deposits primarily consist of fine to medium-grained sand with gravel and possible cobbles. Descriptions of each unit are provided below.

- **Qaf: Artificial fill (late Holocene)—**Deposits of fill, may exist on the site, resulting from human construction or mining activities; includes numerous noncontiguous areas related to sand and gravel operations and flood control in and adjacent to Temescal Wash and to road grade and ramps along Corona Freeway segment of I-15.

- **Qya: Young alluvial channel deposits (Holocene and late Pleistocene)—** Gray, unconsolidated alluvium. Found chiefly in Temescal Wash and its tributaries, where it consists of medium- to fine-grained sand in lower reaches and coarsens to gravel and cobbles up stream. Also found in Wardlaw Canyon and its tributaries, and in Ladd Canyon in southwestern part of quadrangle.

- **Qyf: Young alluvial fan deposits (Holocene and late Pleistocene)—**Gray- hued gravel and boulder deposits derived largely from volcanic and sedimentary units of Santa Ana Mountains. Fans consisting mainly of gravel emanate and coalesce from Tin Mine, Hagador, Main Street, and Eagle Canyons. Fan emanating from Bedford Canyon is coarser grained, containing a large component of boulders. All fans coarsen toward mountains. Locally, young alluvial fan deposits are divided into subunits based on sequential terrace development and other factors; one such unit is found in quadrangle.

More specifically, the US Dept of Agriculture classifies the Project area as approximately 90 percent being underlain by Cortina gravelly sandy loam (CpA), 0 to 2 percent slopes, and the remainder is classified as Cortina sandy loam (CoA), 0 to 3 percent slopes (**Figure 4-1: *Soils Overlay***). Both of these alluvium types of soil are similar except the Cortina gravelly sandy loam contains more stratified gravel loamy sand.

Soil samples were collected along the Project alignment, including up to 11 feet deep in the area of the road and up to 90 feet deep in the area of the bridge abutments, or up to 15 feet deep below the channel bottom., The total depth of the bridge abutments is anticipated to be 8 feet below ground surface, and a center span beam will be placed in the channel bottom, up to 26 feet below the channel bottom. The samples identified that soils below the Project alignment include alluvium consisting of primarily of sand, silt, gravel and cobbles. In the vicinity of the bridge, largest cobbles, between 2.5 inches and 5 inches were identified primarily at depths of 90 feet deep, although possible boulders may be present at 20 to 31 feet below ground surface (bgs), as well as two sandy clay layers between approximately 36.5 and 45.0 feet, and 70.0 and 75.0 feet bgs.

Groundwater

Based on available data, the report in Appendix E indicates that the historical high groundwater level within the alignment area is estimated in the past to have been approximately 12 feet below roadway grade. However, during the current exploration groundwater was encountered at 596.8 mean sea level (msl), which is approximately 50 feet below roadway grade, approximately 42 feet below the bridge abutments, and approximately 24 feet below the center pier. Therefore, groundwater is not expected to be encountered during construction of the roadway or bridge improvements. It should be noted that the groundwater level could vary depending upon the seasonal precipitation and possible groundwater

pumping activity in the site vicinity. Shallow perched groundwater may be present locally, particularly following precipitation or irrigation events.

4.7.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: Would the project:				
a) 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.			X	
• Strong seismic ground shaking?			X	
• Seismic-related ground failure, including liquefaction?			X	
• 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 on- site or off-site 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 risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Discussion

Impact Analysis

a) Expose people or structures to 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.*
- *Strong seismic ground shaking?*
- *Seismic related ground failure, including liquefaction?*
- *Landslides?*

Less Than Significant Impact. Proposed construction activities include the removal of existing pavement, soil and vegetation which could expose soils to erosion. To ensure the control of erosion, the City is required to implement Best Management Practices (BMPs) for both wind and water erosion. For potential wind erosion, during construction, contractors will be required to use water trucks to control dust and stabilize any temporary stockpiles of soil (until removed from the sites). Dust control is evaluated in more detail in Section III, Air Quality. For potential soil erosion associated with storm events and runoff during construction, contractors will be required to comply with each site's Stormwater Pollution Prevention Plan (SWPPP) BMPs that may include a combination of erosion control blankets, fiber rolls, silt fences, and stabilized construction methods to prevent trackout of soil onto roadways. Also see Section X, Hydrology and Water Quality for a discussion of these requirements and mitigation measures, which if implemented, will reduce impacts to less than significant.

For potential wind erosion, contractors must comply with SCAQMD Rule 403 which requires the implementation of best available dust control measures (BACM) during active operations that are capable of generating fugitive dust. These may include but are not limited to applying water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes and using tarps or other suitable enclosures on haul trucks.

Mitigation measures relative to topsoil erosion are generally less than significant with respect to geological resources. However, other impacts of top soil erosion may impact air quality and hydrology and water quality, which are addressed in Section III, Air Quality and Section X, Hydrology and Water Quality.

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

Less Than Significant Impact. Proposed construction activities include the removal of existing pavement, soil and vegetation which could expose soils to erosion. To ensure the control of erosion, the City is required to implement Best Management Practices (BMPs) for both wind and water erosion. For potential wind erosion, during construction, contractors will be required to use water trucks to control dust and stabilize any temporary stockpiles of soil (until removed from the sites). Dust control is evaluated in more

detail in Section III, Air Quality. For potential soil erosion associated with storm events and runoff during construction, contractors will be required to comply with each site's Stormwater Pollution Prevention Plan (SWPPP) BMPs that may include a combination of erosion control blankets, fiber rolls, silt fences, and stabilized construction methods to prevent trackout of soil onto roadways. Also see Section X, Hydrology and Water Quality for a discussion of these requirements and mitigation measures, which if implemented, will reduce impacts to less than significant.

For potential wind erosion, contractors must comply with SCAQMD Rule 403 which requires the implementation of best available dust control measures (BACM) during active operations that are capable of generating fugitive dust. These may include but are not limited to applying water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes and using tarps or other suitable enclosures on haul trucks.

Soil erosion will also be controlled through the preparation of a Stormwater Pollution Prevention Plan (SWPPP) as discussed in Section 4.10, Hydrology and Water Quality.

Mitigation measures relative to topsoil erosion are generally less than significant with respect to geological resources. However, other impacts of top soil erosion may impact air quality, which are discussed in Section 4.3, Air Quality.

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

Less Than Significant Impact. The Project alignment is located within Quaternary alluvium that is primarily unconsolidated. The report in Appendix E identified that variations in subsurface conditions are anticipated due to the soil types and that gravel, cobble and boulders could possibly be encountered during subsurface excavation for the bridge abutments, but not in the roadway improvement segments. The Project alignment has not been identified by the County of Riverside or the US Geological Survey to be within an area that would be subject to landslides, lateral spreading, subsidence or collapse.

With respect to liquefaction, the City of Corona's General Plan (COC, 2019a) identifies the Project area to be within a "High" to "Very High" potential to liquefaction (**Figure 4-2: *Liquefaction Hazards*,** located at the end of this section). However, the Geotechnical Design Report (Appendix E-1) determined that the Project has a negligible potential for liquefaction based on testing and analysis. Additionally, the bridge will be constructed to the latest engineering standards. Therefore, there is a less than significant impact from potential liquefaction.

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

Less Than Significant Impact. Expansive soils are considered those that contain a significant amount of clay and are subject to swelling as a response to changes in water content. Soils with a high content of expansive material can form cracks in drier seasons, and impact building loads. In the Project area, expansive soils are not considered a hazard because the soils contain little clay and are primarily gravel,

sand and silt of very low expansion, derived from the regional granitic and sandstone bedrock. Therefore, there is a less than significant impact.

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

No Impact. None of the Project activities propose or involve the use of septic tanks or alternative wastewater disposal systems. Therefore, there is no impact.

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

Less Than Significant With Mitigation Incorporated. There are no unique geological features that were identified in the Project alignment during the historical resources survey (Appendix C). However, the City of Corona's General Plan (COC, 2019b) Paleontological Sensitivity Map identifies the Project alignment in an area of "Low-to-high Sensitivity, increasing with depth" potential for paleontological resources. Therefore, to accommodate any unanticipated resources **Mitigation Measure GEO-1,** located at the end of this section, is required and will reduce impacts to less than significant.

4.7.3 Mitigation Measures:

Mitigation measures are required to reduce potential impacts of topsoil erosion to less than significant, however, these measures are identified in Section III, Air Quality and Section X, Hydrology and Water Quality.

GEO-1 **Paleontological Resources**. Any substantial excavations (i.e. over 5 feet in depth) in the proposed Project area should be monitored closely by excavation crews to identify potential fossil remains discovered while not impeding development. If fossils are found, excavation in the area will cease and a qualified paleontologist shall be retained to identify and collect the fossils. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

COMPASS Consulting Enterprises, Inc.

Not to Scale

N

Figure 4-1: Soils Overlay
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

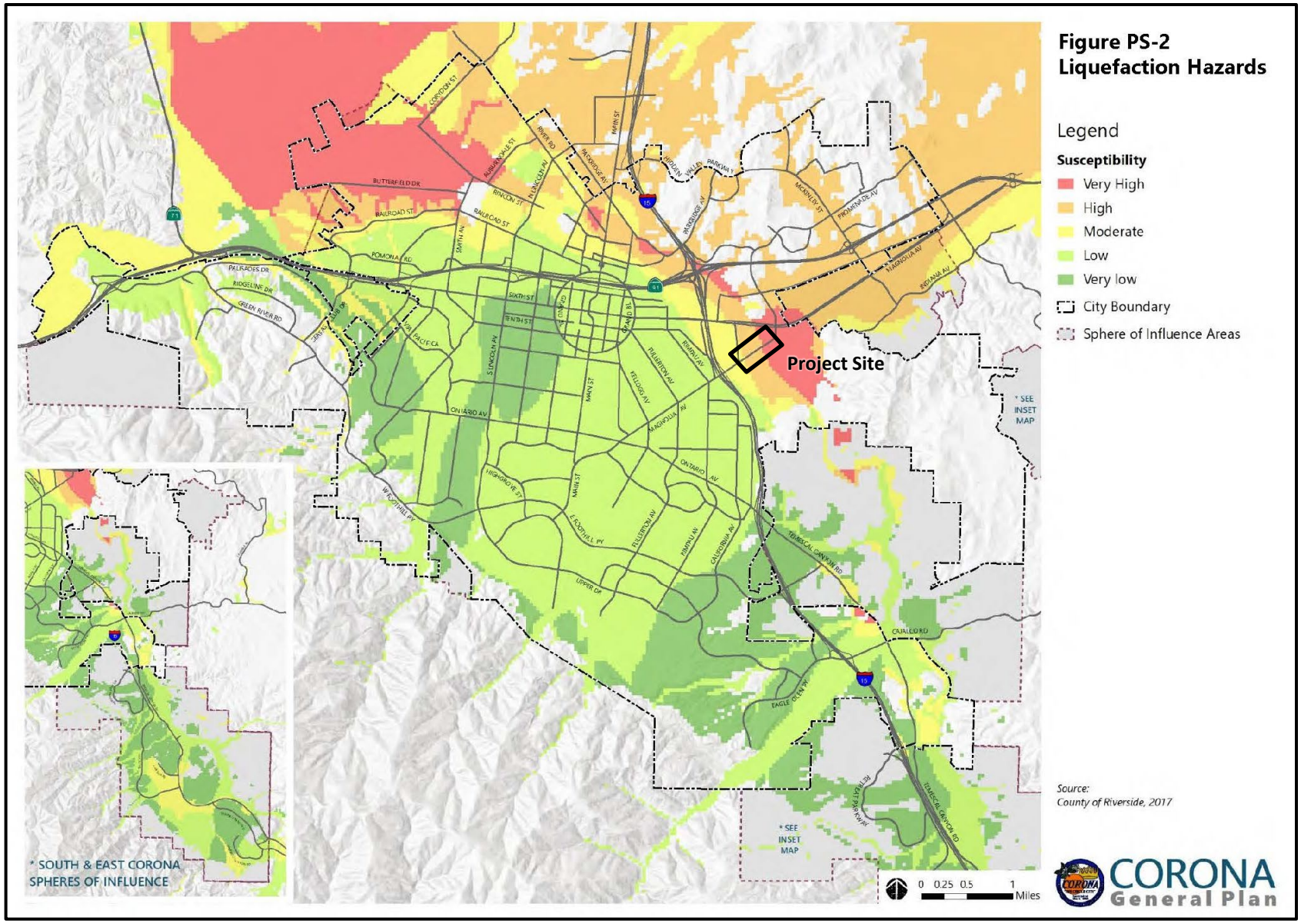

Figure 4.7-2: Liquefaction Hazards
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

COMPASS Consulting Enterprises, Inc.

Not to Scale

4.8 GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions were analyzed for this Project by the Urban Crossroads Air Quality Report located in Appendix A.

According to CEQA Guidelines Section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." In addition, CEQA Guidelines section 15064.7(c) provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence." For the purpose of this initial study SCAQMD guideline will be adhered to.

4.8.1 Regulatory Setting

The Project would be required to comply with regulations imposed by the State of California and the South Coast Air Quality Management District (SCAQMD) aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of greenhouse gas emissions include but are not limited to:

State Executive Orders and Legislation

Executive Order S-3-05. California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following targets:

- By 2010, California shall reduce greenhouse gas emissions to 2000 levels;
- By 2020, California shall reduce greenhouse gas emissions to 1990 levels.
- By 2050, California shall reduce greenhouse gas emissions to 80 percent below 1990 levels.

The executive order directed the secretary of CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-01-07. Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

SB 97. Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Resource Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The GHG emission reduction amendments went into effect on March 18, 2010 and include the use of climate action plans to evaluate a project's impacts and methods to mitigate a project's GHG emissions.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. CARB is the State agency charged with monitoring and regulating sources of greenhouse gases.

The CARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007 (California Air Resources Board 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO2e. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 MMTCO2e.

CARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (California Air Resources Board 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors.

SB 375. Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed Project is located within the Southern California Association of Governments (SCAG), which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 13 percent below 2005 per capita GHG emissions levels by 2035. On April 4, 2012, SCAG adopted the *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy* (RTP/SCS), which meets the CARB emission reduction requirements.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS or APS. However, new provisions of CEQA would incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

Assembly Bill 939 and Senate Bill 1374. Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

Executive Order S-13-08. Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resource Agency 2009) was adopted, which is the "… first statewide, multi-sector, region-specific, and information-based climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. Executive Order B-30-15, establishing a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, was signed by Governor Brown in April 2015.

Executive Order B-29-15. Executive Order B-29-15, mandates a statewide 25% reduction in potable water usage and was signed into law on April 1, 2015.

Executive Order B-37-16. Executive Order B-37-16, continuing the State's adopted water reduction, was signed into law on May 9, 2016. The water reduction builds off the mandatory 25 percent reduction called for in EO B-29-15.

South Coast Air Quality Management District

The Project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.

- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.

- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD Threshold Development

SCAQMD has established recommended significance thresholds for greenhouse gases for local lead agency consideration. SCAQMD has published a five-tiered draft GHG threshold which includes a 10,000 metric ton of CO_2e per year for stationary/industrial sources and 3,000 metric tons of CO_2e per year significance threshold for residential/commercial projects. Tier 3 is anticipated to be the primary tier by which the SCAQMD will determine significance for projects. The Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90-precent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to CEQA analysis. The 90-percent capture rate GHG significance screening level in Tier 3 for stationary sources was derived using the SCAQMD's annual Emissions Reporting Program.

The current draft thresholds consist of the following tiered approach:

Tier 1	consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
Tier 2	consists of determining whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
Tier 3	consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant: – All land use types: 3,000 MTCO2e per year – Based on land use types: residential is 3,500 MTCO2e per year; commercial is 1,400 MTCO2e per year; and mixed use is 3,000 MTCO2e per year
Tier 4	has the following options: – Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined – Option 2: Early implementation of applicable AB 32 Scoping Plan measures – Option 3: Year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans; – Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans
Tier 5	involves mitigation offsets to achieve target significance threshold.

California Code of Regulations (CCR) Title 24, Part 6. CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. CalEEMod modeling utilizes 2013 standards which became effective July 1, 2014.

California Code of Regulations (CCR) Title 24, Part 11. All buildings for which an application for a building permit is submitted on or after January 1, 2014 must follow the 2013 standards. The 2013 commercial standards are estimated to be 30 percent more efficient than the 2008 standards; residential standards are 25 percent more efficient. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

California Green Building Standards. California Green Building Standards Code went into effect on January 1, 2011. The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. in response to continued efforts to reduce GHG emissions associated with energy consumption, CCR Title 24, Part 11 requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

4.8.2 Environmental Setting

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate.

Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses.

Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and nitrous oxide (NOx) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean.

4.8.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: 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	

Discussion

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

Less Than Significant Impact. Construction activities associated with the Project would result in emissions of CO_2 and CH_4 from construction activities. The Air Quality Report (Appendix A) contains detailed information regarding construction activity.

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by a 30-year project life. As such, construction emissions were amortized over a 30-year period.

Project-related CO_2e emissions were estimated using EMFAC2017. Annual emissions were calculated by multiplying daily emissions within the Project area by 365 days in a year. **Table 4.8-1: *Modeled Annual CO_2 Emissions and Vehicle Miles Traveled, by Alternative*** shows CO_2e emissions in the Existing Condition and 2026 and 2040 for the No Build and Project Alternatives. The Project would not result a change in local or regional vehicle miles traveled (VMT) as identified in the traffic report in **Appendix I -*Traffic Impact Study Report***. The Project would result in less CO_2e emissions due to improved traffic flow and reduced delay when compared to the No-Build Alternative in 2026 and 2040. The No- Build Alternative in 2026 and 2040 would also result in less CO_2e emissions than Existing Conditions, primarily due to improvements in vehicle fuel efficiencies. CH_4 and N_20 would represent a negligible amount of CO_2e emissions (less than 1%).

Table 4.8-1: Modeled Annual CO_2 Emissions and Vehicle Miles Traveled, by Alternative

Alternative	Emissions (MT CO_2e/Year)	Annual Vehicle Miles Traveled[1]
Existing/Baseline 2019	1,599	45,654,000
Design Year 2026		
No Build	539	52,441,200
Widening Alternative	503	52,441,200
Horizon Year 2040		
No Build	363	79,485,000
Widening Alternative	375	79,485,000

CO2e = carbon dioxide equivalent
Source: KOA 2020, EMFAC2017
[1] Annual VMT values derived from Daily VMT values multiplied by 365, per ARB methodology (ARB 2008).

Landscaping reduces surface warming and, through photosynthesis, decreases CO2. The Project would include plantings in the medians to the extent feasible. These plantings will help offset any potential CO2 emissions increase through carbon sequestration and reducing the heat island effect.

The Project would incorporate the use of energy-efficient lighting, such as light emitting diode (LED) street lights. The LED bulbs consume 10% of the electricity of traditional lights, which will also help reduce the Project's CO2 emissions through energy efficiency.

Therefore, overall, the impacts are less than significant.

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

Less than Significant Impact. The City of Corona implements a Climate Action Plan, last updated in March 2019, that established goals and policies that incorporate environmental responsibility into the everyday management of its community operations consistent with State and Federal regulations. **Table 4.8-2: *Summary of Corona Community GHG Reduction Strategies and Emission Reductions*** identifies the goals and policies relative to the Project.

Table 4.8-2: Summary of Corona Community GHG Reduction Strategies and Emission Reductions

Goals and Measures	2030 Emission Reduction Measures (MTCO2e)	2040 Emission Reduction Measures (MTCO2e)
Goal 1: Increase Energy Efficiency in Existing Residential Units		
1.1: Energy Efficiency Training, Education, and Recognition in the Residential Sector	Supporting Measure[1]	
1.2: Increase Community Participation in Existing Energy Efficiency Programs	3,715	3,885
1.3: Home Energy Evaluations	Supporting Measure[1]	
1.4: Residential Home Energy Renovations	2,276	2,380
Goal 2: Increase Energy Efficiency in New Residential Units		
2.1: Exceed Energy Efficiency Standards	3,918	4,097
Goal 3: Increase Energy Efficiency in Existing Commercial Units		
3.1: Energy Efficiency Training, Education, and Recognition in Commercial Sector	Supporting Measure[1]	

Goals and Measures	2030 Emission Reduction Measures (MTCO2e)	2040 Emission Reduction Measures (MTCO2e)
3.2: Increase Business Participation in Existing Energy Efficiency Programs	7,031	7,557
3.3: Nonresidential Building Energy Audits	Supporting Measure[1]	
3.4: Nonresidential Building Retrofits	37,592	40,406
Goal 4: Increase Energy Efficiency in New Commercial Units		
4.1: Exceed Energy Efficiency Standards	5,742	6,172
Goal 5: Increase Energy Efficiency through Water Efficiency		
5.1: Water Efficiency through Enhanced Implementation of Senate Bill X7-7	1,524	1,607
5.2: Exceed Water Efficiency Standards	Supporting Measure[1]	
Goal 6: Decrease Energy Demand through Reducing Urban Heat Island Effect per Title 24 Requirements		
6.1: Tree Planting for Shading and Energy Saving	Supporting Measure[1]	
6.2: Light-Reflecting Surfaces for Energy Saving	601	633
Goal 7: Decrease Greenhouse Gas Emissions through Reducing Vehicle Miles Traveled		
7.1: Alternative Transportation Options	53,944	57,849
7.2: Implement Bicycle Master Plan to Expand Bike Routes around the City	482	517
Goal 8: Decrease Greenhouse Gas Emissions through Reducing Solid Waste Generation		
8.1: Reduce Waste to Landfills	20,271	21,378
Goal 9: Decrease Greenhouse Gas Emissions through Increasing Clean Energy Use		
9.1: Clean Energy	21,999	21,999
Total Community Measures without CCA	**159,096**	**168,481**
Goal 9: Decrease Greenhouse Gas Emissions through Increasing Clean Energy Use		
9.2: Join CCA Program	214,052	230,348
Total Community Measures with CCA	**373,148**	**398,829**

Note: [1] Supporting Measures are the measures that will reduce emissions but cannot be quantified. These measures enhance the quantifiable measures through education and outreach programs.
CCA = Community Choice Aggregation (See pages 13 and 40 for explanation of CCA)
MT CO2e = metric tons of carbon dioxide equivalent

Goal 7 "Decrease Greenhouse Gas Emissions through Reducing Vehicle Miles Traveled" is relative to the Project. Based on the January 11, 2019 City of Corona's Draft VMT Analysis Guidelines, VMT applies to land use projects. The Project is not a land use project, and therefore, is not subject to a VMT analysis. The Project seeks to improve traffic flow along Magnolia Avenue within the vicinity of the Magnolia Avenue Bridge. The two policies to implement the goal center around providing alternative modes of transportation, including expanding bike routes and funding bike lanes. The Project includes striping for a Class III bike lanes along the improved travel ways. The City of Corona defines a Class III bike lane as an onstreet or offstreet "bike route" which provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

Therefore, the Project would not conflict with the City of Corona's Climate Action Plan, includes compliance with State and Federal GHG reduction plans. The impacts are less than significant.

4.8.4 Mitigation Measures:

No mitigation measures are required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

A Phase 1 Environmental Site Assessment was prepared for the Project alignment by Converse Consultants (**Appendix F - *Phase I Environmental Site Assessment***) in 2019 that reviewed the alignment and the adjacent properties for Recognized Environmental Conditions (RECs), which are releases to the environment, or potential releases to the environment, of hazardous substances or petroleum products on or in the vicinity of the Project. This Phase 1 assessment was a compilation of interviews, document research, and on-site and area reconnaissance to identify potential environmental conditions at the Property, in conformance with the ASTM Standard E: 1527-13 Environmental Site Assessment Standard Practice (ASTM Standard: E1527- 13).

Converse Consultants also conducted a sampling for Aerial Deposited Lead (ADL) for the Project (**Appendix F-1 - *Aerially Deposited Lead and Limited Phase II Subsurface Investigation Report***).

4.9.1 Regulatory Setting

A hazardous material is a substance that is toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high or chronic toxicity, carcinogenic, bioaccumulative properties, persistence in the environment, or that are water reactive. Improper use, storage, transport, and disposal of hazardous materials and waste may result in harm to humans, surface and groundwater degradation, air pollution, fire, and explosion.

Both the EPA and the California Department of Health Services (DHS) regulate the concentration of various chemicals in drinking water. variety of pesticides, fungicides and herbicides are used in the cultivation of row crops. Some pesticides and herbicides are injected into the soil as fumigants, while fungicides are generally sprayed by crop dusters. The CalEPA's Department of Pesticide Regulations establishes regulations regarding agricultural chemical use. These regulations are designed to prevent pesticides from being used in such a way as to jeopardize or cause injury to others. Among these regulations is Section 6614 from Title 3 of the California Code of Regulations.

Hazardous materials and hazardous wastes are heavily regulated by a range of federal, State and local agencies. One of the primary hazardous materials regulatory agencies is the California Environmental Protection Agency (EPA) Department of Toxic Substances Control (DTSC). DTSC is authorized by the U.S. EPA to enforce and implement federal hazardous materials laws and regulations.

Federal and State hazardous materials regulations require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to obtain a hazardous materials permit and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance with all applicable hazardous materials regulations. The City of Corona is a Participating Agency (PA) to the Certified Unified Program Agency (CUPA); Riverside County Department of Environmental Health.

The City of Corona regulates the following elements:

- Hazardous Materials Inventory
- Emergency Response and Training Plans

- Fire Code Compliance

Riverside County Department of Environmental Health regulates the remaining elements:

- Underground Storage Tanks
- Tiered Permitting
- Recyclable Materials Report
- Remote Waste Consolidation Site Annual Notification
- Aboveground Petroleum Storage Act
- Hazardous Waste Tank Closure Certification
- California Accidental Release program

Hazardous Materials are required to be reported, and an emergency response plan developed, when the materials on site at any given time, exceed any of the following:

- 55 gallons of a liquid
- 500 pounds of a solid
- 200 cubic feet of a compressed gas
- 200 cubic feet of liquefied carbon dioxide used for beverage carbonization
- or 1000 cubic feet of an inert compressed gas where the only hazard is that of an asphyxiant.

4.9.2 Environmental Setting

The Project Area is considered the public right-of-way and therefore, does not have a zoning designation. The Project Area consists of Magnolia Avenue between El Camino Avenue and Leeson Lane, the paved and unpaved sidewalks contiguous to the north and south sides of the street, and is approximately 2,300 feet long by 119 feet wide.

As early as 1931 to at least 1952, the Project Area appeared as an unimproved roadway with Temescal Creek crossing Magnolia Avenue along the eastern side and off-road vehicular roads and trees appeared on the western side. By 1962, the eastern side of Magnolia Avenue, east of Temescal Creek, appeared as improved (concrete road) over Temescal Creek and by 1985 the creek appeared as concrete lined. By 1966, Magnolia Avenue appeared as an improved road. By 1973, concrete berm perimeter walls were evident along Temescal Creek. By 2002, a new road was cut perpendicular to Magnolia Avenue (Trademark Circle) and a median appeared north of the road along Magnolia Avenue. In 2005, the sidewalk at the southeast side of Magnolia Avenue was improved with concrete. Since 2005, no changes to the Project Area were noted as significant (Appendix F-1).

The surrounding area from as early as 1931 was predominantly agricultural land, with residential development to the far northeast and a railway to the far north of the Project Area. A reservoir appeared south of the Project by 1938. By 1954 a city dump was identified to the southwest. By 1966, an increase in industrial development was evident north and east. By 1980, commercial development began to appear southeast. By 2005, the industrial development located northwest of the intersection of El Camino Avenue and Magnolia Avenue was redeveloped into a commercial shopping center including a gasoline station near the intersection.

Currently, the Project area consists of sidewalks, curbs, gutters, and landscaping along Magnolia Avenue and Temescal Wash bridge that will be impacted by the Magnolia Avenue Bridge Widening Project and a portion of a parking lot associated with Corona Auto Parts (1450 Magnolia Avenue) that will be upgraded. Adjacent properties located on the north side of Magnolia Avenue, contiguous with the Project area, are located in the Corona Magnolia Specific Plan with a zoning designation of Business Park. Properties located on the south side of Magnolia Avenue, and contiguous to the Project Area, are zoned M2 and M3 which is defined as General and Heavy Manufacturing, respectively. Temescal Creek is zoned FP1, which is defined as Flood Plain.

4.9.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		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 handle 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 which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				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

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 With Mitigation Incorporated. Project construction would involve the use of heavy equipment, which would contain fuels, oils, lubricants, solvents, and various other possible contaminants. Temporary storage tanks necessary to store fuel and/or other flammable or combustible liquids required on the Project Site during construction would be regulated through the applicable federal, State, and local regulations as overseen by agencies such as the State Department of Health Services and San Bernardino County. Therefore, impacts related to construction hazards are considered less than significant with mitigation incorporated.

The Proposed Project would involve the removal of existing asphalt roadway and historical asphalt road sections. Asphalt is not currently regulated as a hazardous material, but potential contaminants in the asphalt binder require off-site disposal restrictions imposed by the State of California Integrated Waste Management Board. The asphalt removed may be ground on-site and reused in the road base material. Or, the asphalt may be hauled for disposal. Implementation of **Mitigation Measure HAZ-1,** located at the end of this section, would ensure that all asphalt removed from the Proposed Project would be disposed of in accordance with current regulations at a permitted facility.

Elevated lead concentrations exist in soils along older roadways as a result of aerially deposited lead (ADL) from the historical use of leaded gasoline. To determine if soils along the Project alignment contained ADL, which could be excavated, reused or disposed of, an ADL survey was conducted (Appendix F-1). A 2016 agreement between the California Department of Toxic Substances Control (DTSC) and the California Department of Transportation (CalTrans) defines ADL as excavated soil with total lead concentrations greater than 80 milligrams per kilogram (mg/kg) and/or 5 mg/L extractable lead, as determined by the STLC/CA-WET method, based on 95 percent upper confidence limit (95% UCL) concentrations (Appendix F-1). Soil borings were completed at 16 different locations to depths of 3 feet below ground surface (bgs). The borings were placed in exposed soil on the shoulders and slopes adjacent to Magnolia Avenue. The results identified that soils across the Project site were below the thresholds of concern and were considered to be clean and appropriate for unrestricted and use without further testing, notification, or handling restrictions. Therefore, the potential impacts from ADL are less than significant and no mitigation is required.

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 With Mitigation Incorporated. The potential exists for localized spills of petroleum-based products or other chemicals during construction. These spills could expose construction workers and the public to hazardous materials either directly, at the site of the spill, or indirectly, by introducing these substances into stormwater runoff. Additionally, the

Project will replace a bridge over the Temescal Creek Wash, which is a concrete lined channel in the area of construction.

All development requiring ground disturbance would be subject to regional and local regulations, including the need for an SWPPP under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAR000002). Compliance with SWRCB's General Construction Activity Stormwater Permit regulations requiring a SWPPP would ensure hazardous materials generated during construction would not create a significant impact. Additionally, construction is anticipated be temporary, therefore any potential impacts would have a limited and temporary timeframe to occur. However, to ensure that potential impacts would be less than significant, implementation of **Mitigation Measures HAZ-2** and **HAZ-3** is required. Mitigation Measures are located at the end of this section.

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

No Impact. There are no public schools within one-quarter mile. The closest school is Lincoln Alternative Elementary School, nearly 1 mile to the northwest

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

Less Than Significant Impact With Mitigation Incorporated. State and Federal databases were reviewed to identify hazardous waste facilities including Federal Superfund sites, State Response sites, Voluntary Cleanup sites, School Cleanup sites, Permitted Operating sites, Corrective Action sites, and Tiered Permit sites within or adjacent to the Project. The database search revealed that there were no sites of this concern within the Project area.

The Phase 1 Environmental Site Assessment (Appendix F) identified that while a number of sites along the alignment were identified to have had reported hazardous materials and other actions, all were either closed or considered not a significant concern, and no site was identified as a Superfund or other significantly hazardous site. As such, the report concluded that there were no Recognized Environmental Conditions (RECs) - which are particular, potential environmental impairment on a property - along the alignment or adjacent to the alignment.

However, two sites were identified along the alignment where their environmental records may impact Project construction:

- Clow Valve Company and Rich MFG Co. of CA #3, 1375 Magnolia Avenue. Clow Valve Company has been identified on the ENVIROSTOR database as a Cleanup site under the DTSC tiered permit program. The facility consists of a 16 acre site developed in the 1950s for the manufacturing of fire hydrants and other equipment. Contamination was identified at this site beginning in 1993 when four (4) USTs were removed. Since 1994,

ongoing investigations and remediation activities have been performed in an effort to clean up the soil which has been contaminated with lead, PCBs and diesel fuel. There have been nine (9) areas of concern (AOC) identified at this facility that have undergone extensive clean up. It appears that the lateral and vertical extent of contamination has been delineated, and is confined to the AOCs on the Clow Valve property. To date, a Land Use Covenant and soil management plan have been instituted. The Project will grade onto this parcel and install roadway and sidewalks. As such, **Mitigation Measures HAZ-3,** located at the end of this section, is required to reduce potential impacts to less than significant.

- Corona Auto Parts Recycling, Inc./ Mels Foreign Auto, 1450 Magnolia Avenue. This facility was cited by Riverside County DEH in 1990 for engine oil draining onto the dirt and in 1996 for storing waste oil in open containers which led to oil saturated soil in the work area. A document was on file with the building department regarding the occupant as pouring concrete over oil contaminated soil. In 1996, Mels Foreign Auto was identified for manifesting 0.2293 tons of contaminated soil from site clean up. There were no violations identified in databases for Corona Auto Parts Recycling. The Project will grade onto this parcel and install roadway and sidewalks. An ADL survey was conducted after the Phase I site assessment by drilling three borings to 10 feet deep and conducting analysis for petroleum-based constituents. The result of the sampling identified that the parking lot located on the north side of 1450 Magnolia Avenue, adjacent to Magnolia Avenue, does not appear to be impacted with petroleum-based constituents.

e) For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Corona Municipal Airport lies nearly 4 miles to the northwest. Therefore, the Project does not lie within an airport land use plan, or within two miles of an airport. No impacts would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Magnolia Avenue is classified as a major arterial and therefore is eligible to be considered an evacuation route. However, the City of Corona has not identified Magnolia Avenue as an emergency response or evacuation route. The Project includes roadway widening activities that will reduce the number of lanes available for travel in the immediate vicinity of the Project during construction. A construction traffic plan will be prepared in accordance with all accepted City, State and Federal regulations for temporary road closures and lane restrictions and will contain provisions for emergency access in accordance with those regulations. Therefore, there will be a less than significant impact and no mitigation is required.

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

No Impact. The Project alignment is located in an area that consists of fully developed urban uses in an urban setting, and not located adjacent to an area susceptible to wildland fires. Therefore, there is no impact.

4.9.4 Mitigation Measures

The following mitigation measures are required to reduce potential impacts to less than significant:

HAZ-1 All asphalt requiring removal from the Project alignment shall be disposed of in accordance with current regulatory standards.

HAZ-2 A hazardous spill prevention plan shall be prepared by the Contractor and submitted to the City for approval to minimize the likelihood of a spill shall be prepared prior to construction. The plan shall state the actions that would be required if a spill occurs to prevent contamination of surface waters and provide for cleanup of the spill. The plan shall follow Federal, state, and local safety guidelines and standards to avoid increased exposure to these pollutants.

HAZ-3 Grading and excavation at 1375 Magnolia Avenue shall follow the procedures identified in the Soil Management Plan, or most recent plan or procedures as authorized by regulatory agencies, that identifies procedures for soil management on this property. The City and the Contractor will work with the property owner to gain access to the most recent testing and other related data, as well as coordinate all excavation sites and the storage and staging of equipment, to ensure compliance with the plan and to minimize any risk of exposing any contaminated soils during Project construction.

4.10 HYDROLOGY AND WATER QUALITY

A Water Quality Assessment Report (WQAR) was prepared for the proposed Project in February 2021 (**Appendix G - *Water Quality Assessment Report***).

4.10.1 Regulatory Setting

Federal Regulations

In 1972 Congress amended the Federal Water Pollution Control Act, known today as the Clean Water Act (CWA0 making the addition of pollutants to the waters of the United States (U.S.) from any discharge is in compliance with various permits that are administered through State and local agencies, depending on the regulatory program. Key components of the CWA include:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.

- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., 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 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The Federal Environmental Protection Agency delegated to the California State Water Resources Control Board (SWRCB) the implementation and administration of the NPDES program in California. The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the Federal NPDES program and all water quality programs and regulations that cross Regional boundaries. The nine RWQCBs enact, administer and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s).

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S, including wetlands. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

State Regulations

California's Porter-Cologne Act, enacted in 1969, regulates California's groundwater and surface waters and is administered through the SWRCB and the individual RWQCBs. Under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Chapter 2 § 13050) the uses of waters and water quality criteria are separately considered as beneficial uses and water quality objectives. Beneficial uses and water quality objectives are established for all waters of the state, both surface and subsurface (groundwater).

Key programs for construction Projects administered through the SWRCB to regulate water quality include but are not limited to:

Municipal Separate Storm Sewer Systems (MS4).

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater." The SWRCB has identified the City of Corona as an owner/operator of an MS4 pursuant to federal regulations. The City of Corona's MS4 permit covers all Cities rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Construction General Permit (CGP)

Construction General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009- DWQ, adopted on November 16, 2010) became effective on February 14, 2011 and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development.

For all projects subject to the CGP, the applicant is required to hire a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP.

Projects that disturb over 1.0 acre but less than 5 acres of soil, may qualify for waiver of CGP coverage through a specific formula.

Reports of Waste Discharge

A "Report of Waste Discharge" is required for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State.

The California Department of Fish and Wildlife (CDFW), through provisions of the California Fish and Wildlife Code (Sections 1601, 1602, and 1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams and rivers are defined by the presence of a channel bed and banks and at least an intermittent flow of water.

4.10.2 Environmental Setting

Regional Hydrology

The Project discharges into Temescal Creek Reach 1, which is located in the Santa Ana River Watershed. The Santa Ana River watershed is located in southern California, south and east of the City of Los Angeles. The watershed includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed

is generally bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north/west by the Mojave and San Gabriel watersheds. The watershed is approximately 2,650 square miles in area.

The headwaters of the Santa Ana River are in the San Bernardino Mountains with two of its major tributaries Bear Creek and Mill Creek. Other tributaries include Lytle Creek originating in the San Gabriel Mountains and the San Jacinto River originating in the San Jacinto Mountains. These major tributaries confluence to form the Santa Ana River in the San Bernardino Valley located at the southern base of the Transverse Ranges of the San Bernardino Mountains. The Santa Ana River traverses through the San Bernardino Valley before cutting through the Santa Ana Mountains and flowing to the Orange Coastal Plain. Eventually the river discharges to the ocean in the City of Huntington Beach.

Surface Water

The receiving water for the Project is Temescal Creek, Reach 1, which discharges into the Santa Ana River, Reach 3, approximately 2.28 miles northwest of the Project location. Temescal Creek is a concrete lined channel, which is also known Temescal Creek Channel. According to the Santa Ana River Basin Plan, the proposed Project area falls within the Santa Ana River hydrologic unit, the Middle Santa Ana River hydrologic area, and the Temescal hydrologic sub-area.

Groundwater

According to the City of Corona 2015 Urban Water Management Plan, the City draws groundwater from three basins: the Temescal Basin; the Coldwater Basin; and the Bedford Basin.

- Temescal Basin: Temescal Basin is the main basin that the City draws groundwater from. It is a part of the Upper Santa Ana Valley Basin. It underlies the southwest part of upper Santa Ana Valley. On the north, the subbasin is bounded by the Chino Subbasin, marked by the Santa Ana River and a set of low hills of crystalline rock near Norco. The eastern part of the subbasin is bounded by nonwater-bearing crystalline rocks of the El Sobrante de San Jacinto and La Sierra Hills. The subbasin is bounded on the west by the Santa Ana Mountains and the south by the Elsinore Groundwater Basin at a constriction in the alluvium of Temescal Wash. Average annual precipitation ranges from 14 to 16 inches per year. Recharge to the groundwater reservoir is through percolation of precipitation on the valley floor and infiltration of stream flow within tributaries existing the surrounding mountains and hills. In 2015, the groundwater storage capacity was 16,131 acre-feet per year.

- Coldwater Basin and Bedford Basins: The Coldwater Basin and the Bedford Basin are separated by the North Glen Ivy Fault. In 2015, Coldwater Basin and Bedford Basin were being considered for resignation as a single basin by the Department of Water Resources (DWR). The Coldwater Basin is located southwest of the Bedford Basin and the Temescal Wash. The basin covers an area of approximately 2.6 square miles and lies within the structural graben between the Santa Ana Mountains to the west and the El Sobrante Hills to the east with a depth ranging from 30 to 700 feet. In 2015, the groundwater storage capacity for Coldwater Basin was 2,154 acre-feet per year. The Bedford Basin is located south of the Temescal Basin in Temescal Canyon between the Santa Ana Mountains and the El Sobrante Hills. The basin covers an area of approximately 10 square miles with an alluvial depth ranging from 30 to 200 feet.

4.10.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?		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 which would:			X	
• result in substantial erosion or siltation onsite or offsite;			X	
• substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;			X	
• create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
• 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	

Discussion

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

Less than Significant Impact With Mitigation Incorporated. The total Disturbed Soil Area (DSA) for the Project is 0.45 acre. Construction activity that results in soil disturbances of less than 1 acre is subject to Construction General Permit (CGP) if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB and/or the State's Watershed Erosion Estimate calculator tool. The CGP contains a risk-based permitting approach by establishing three levels of risk possible for a construction site. Risk levels are determined during the planning, design, and construction phases, and are based on project risk of generating sediments and receiving water risk of becoming impaired. Within this CGP formula, there is a factor related to when and where the construction will take place. This factor, the 'R' factor, may be low, medium or high. When the R factor is below the numeric value of 5, projects can be waived from coverage under the CGP, and are instead covered by the County MS4.

Even though the disturbed soil area is less than 1 acre, the State Watershed Erosion Estimate calculator tool indicates that the Project's R Factor is greater than 5.

The Project will comply with standardized measures that will minimize any temporary or permanent water quality impacts created by the project:

- National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the City of Corona, Order No. R8-2010-0033, NPDES Permit No. CAS618033 and the and any subsequent permits in effect at the time of construction.

- NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, NPDES No. CAS000002 and the and any subsequent permits in effect at the time of construction.

- Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants. All work must conform to the Construction Site BMP requirements specified in the latest edition of the *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed.

- Construction General Permit by preparing and implementing a Water Quality Management Plan (WQMP) for urban runoff to address the post construction impact to water quality. The WQMP will identify the sources of pollutants that may affect the quality of storm water and include LID BMPs to control the pollutants. All work must conform to the requirements specified in the *RCFC & WCD Design Handbook for Low Impact*

Development Best Management Practices to control and minimize the impacts of the proposed Project to water quality on the watershed.

The Project is also required to obtain permits from the Corps of Engineers and Regional Water Quality Control Board under the Clean Water Act, as well as a permit from the CDFW for alterations to Temescal Creek. These permits will contain general and project-specific conditions for the protection of water quality under Federal and State water quality standards. Therefore, the impacts will be less than significant.

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

Less than Significant Impact. The Project is not anticipated to need to dewater the excavation for the bridge abutments and center span or use more than a standard temporary supply for construction dust control. And though the Project will install an impervious roadway, stormflows will be directed into Temescal Creek, pursuant to the SWPPP. Therefore, the proposed Project is not anticipated to interfere with groundwater supplies or deplete groundwater supplies. Therefore, overall, the impact is less than significant.

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

- *result in substantial erosion or siltation onsite or offsite;*
- *substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;*
- *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
- *impede or redirect flood flows?*

Less than Significant Impact. The Project alignment along the roadway is relatively flat. All grading and drainage is designed to mimic natural flows. Construction will not result in substantial erosion or siltation on- or off-site by complying with the State's Construction Stormwater Permit.

The Magnolia Avenue bridge over Temescal Creek contains one support pier. This pier will be widened from its current width of 67.5 feet wide to its ultimate width of approximately 85 feet wide. Therefore, because the Project will be extending the existing pier in a manner that maintains the existing flow path of the channel, the Project will not redirect flood flows. The Project's SWPPP will include protective measures for pier installation in Temescal Creek to ensure the pier construction does not contribute to erosion or siltation, increase surface water flow, or impede or redirect flood flows.

Therefore, there is an overall less than significant impact.

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

Less Than Significant Impact. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Number 06065C1356G, dated August 28, 2008 and revised on June 14, 2018, indicates that the Project alignment is mapped within a Zone X (unshaded) flood designation and indicates that the 100-year flood discharge within the Temescal Creek Channel at the bridge crossing is contained within the channel. According to FEMA, Zone X (unshaded) is an "area of minimal flood hazard, usually above 500-year flood. There are no impacts from flood inundation.

The City of Corona General Plan (COC, 2019a) identifies that the Project alignment lies within the projected Dam Inundation zone for Lake Mathews and Lee Lake. Release or failure from the dam is projected to be minimal, and would impact more of Corona than just the Project area. Therefore, there is a less than significant impact from Project implementation should the dam fail.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The proposed Project would comply with the City's MS4 permit, as noted above. Implementation of Project BMPs from the SWPPP during proposed construction activities would reduce any impacts associated with water quality to less than significant. In addition, the proposed Project does not include any activities that will interfere with any groundwater management plan. Impacts would be less than significant.

4.10.4 Mitigation Measures:

No mitigation measures are required.

4.11 LAND USE PLANNING

4.11.1 Environmental Setting

The Project Area is considered the public right-of-way and therefore, does not have a zoning designation. The Project Area consists of Magnolia Avenue between El Camino Avenue and Trademark Circle, the paved and unpaved sidewalks contiguous to the north and south sides of the street, and is approximately 2,300 feet long by 119 feet wide.

Currently, the Project Area consists of sidewalks, curbs, gutters, and landscaping along Magnolia Avenue and Temescal Wash bridge. Adjacent properties located on the north side of Magnolia Avenue, contiguous with the Project Area, are located in the Corona Magnolia Specific Plan with a zoning designation of Business Park. Properties located on the south side of Magnolia Avenue, and contiguous to the Project Area, are zoned M2 and M3 which is defined as General and Heavy Manufacturing, respectively. Temescal Creek is zoned FP1, which is defined as Flood Plain.

4.11.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: 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

Discussion

a) Would the project physically divide an established community?

No Impact. The Project proposes to widen an existing bridge and the eastbound and westbound bridge approach lanes within Magnolia Avenue to improve traffic flow. In addition, the Project will install sidewalks and curb and gutter where none exist. No impacts would occur, and no mitigation is required.

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

No Impact. The Project is designed to increase the number of lanes along Magnolia Avenue from four to six consistent with the City's General Plan. The Project does not propose to change zoning and will not conflict with any land use plan, policy or regulation. No impacts would occur, and no mitigation is required.

4.11.3 Mitigation Measures:

No mitigation measures are required.

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

In 1975, the California legislature enacted the Surface Mining and Reclamation Act (SMARA). This act provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the state to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data.

The County of Riverside General Plan identifies Mineral Resource Zones within the county:

- MRZ-1 – No significant mineral deposits
- MRZ-2 – Known or inferred significant mineral resources
- MRZ-3 – Significance of mineral deposits undetermined
- MRZ-4 – Presence and significance of mineral deposits undetermined
- Unstudied – No MRZ designation

The City of Corona's General Plan identifies the Project area to be within MRZ-2 for aggregate resources, and an area of "Classified Aggregate Minerals."

The City of Corona (City) is proposing to widen the Magnolia Avenue Bridge over Temescal Wash Channel and Magnolia Avenue from El Camino Avenue to 1,000 feet east of the All American Way. A mining company exists immediately south of Magnolia Avenue, and trucks access the mine from two streets located on the south side of Magnolia Avenue, which are Sherborn Street and All American Way. The Project will not utilize its resources. During construction, however, there may be some delivery delays due to intermittent, temporary lane closures. As stated, the Project will not utilize any resources from the mine.

4.12.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			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	

Discussion

a) Would the project 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?

Less Than Significant Impact. The Project will excavate and regrade an existing roadway. The Project will utilize existing materials, with a minor amount of structural excavation (approximately 180 cy) and structural backfill (approximately 150 cubic yards) anticipated to be necessary for structural integrity, and which will be imported from a local source. The amounts are not significant to result in the loss of a State or regional resource. Impacts are less than significant, and no mitigation is required.

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

Less Than Significant Impact. Refer to a). Impacts are less than significant, and no mitigation is required.

4.12.3 Mitigation Measures:

No mitigation measures are required.

4.13 NOISE

A Noise Study Report was prepared for the Project by Urban Crossroads in November 2020 (**Appendix H - *Noise Study Report***).

Environmental noise is commonly measured in A-weighted decibels (dBA). A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called a "sound level") measured in dB. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response that duplicates the sensitivity of human ears. Decibels are measured on a logarithmic scale. Generally, a three dBA increase in ambient noise levels represents the threshold at which most people can detect a change in the noise environment; an increase of 10 dBA is perceived as a doubling of loudness.

Noise Descriptors

These noise descriptors include but are not limited to the following:

- Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

- Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24- hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

- Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square amplitude is most frequently used to describe the affect of vibration on the human body. The root mean square amplitude is defined as the average of the squared amplitude of the signal. Decibel notation is commonly used to measure root mean square amplitude. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2018). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration

The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is

produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. The Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, identifies physical effects at various levels.

4.13.1 Regulatory Setting

Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

State Regulations

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold.

City of Corona

The City has established a land use compatibility matrix that outlines exterior CNEL limits by land use category as shown in **Table 4.13-1: *City of Corona Noise Levels and Land Use Compatibility Guidelines.***

Table 4.13-1: City of Corona Noise Levels and Land Use Compatibility Guidelines

Land Use Categories		Community Noise Equivalent Level CNEL						
Categories	**Uses**	**55**	**60**	**65**	**70**	**75**	**80**	
Residential	Single Family, Duplex	A	A	B	B	D	D	D
	Multiple Family	A	A	B	B	C	D	D
Residential	Hotel, Motel Transient Lodging	A	A	B	C	C	D	D
Commercial Regional, District	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	B	B	C	C	D

Land Use Categories		Community Noise Equivalent Level CNEL						
Categories	**Uses**	**55**	**60**	**65**	**70**	**75**	**80**	
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Office Institution	Office Building, Research and Development, Professional Offices,City Office Building	A	A	A	B	B	C	D
Commercial Recreation Institutional Civic Center	Amphitheatre, Concert HallAuditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, SportsClub	A	A	A	B	B	D	D
Commercial General, Special Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools'Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers Wildlife Reserves, WildlifeReserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture		A	A	A	A	A	A	A

Zone A: Clearly Compatible. Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction.

Zone B: Normally Compatible. New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C: Normally Incompatible. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D: Clearly Incompatible. New construction of development should generally not be undertaken.

Table 4.13-2: *Transportation Noise Standards* shows the transportation noise source standards from the City of Corona Municipal Code Section 17.84.040(C)(3)(a), Roadway Noise (COC, 2019). Under this section, a noise study is required to be prepared prior to the construction of new master planned roads, roadway improvements, rail lines and/or prior to the construction of residential or sensitive land uses adjacent to existing or master planned roads or railways. The noise study must identify the existing and future noise contours for the roadway and propose mitigation measures to reduce the noise impacts to a maximum of 65 dBA CNEL in the private outdoor living area of residences and to a maximum interior noise level of 45 dBA CNEL for residential and sensitive land uses, as shown in Table 4.13-2.

Table 4.13-2: Transportation Noise Standards

Type of Land Use	Exterior Noise Level (Private Outdoor Living Areas)	Interior Noise Level
Residential (Roadway)	65 CNEL	45 CNEL
Residential (Airport)	65 CNEL	45 CNEL
Other sensitive land uses (Roadway)	65 CNEL	45 CNEL
Other sensitive land uses (Airport)	65 CNEL	45 CNEL
Hotels/Motels (Roadway)	65 CNEL	45 CNEL
Hotels/Motels (Airport)	65 CNEL	45 CNEL

Source: City of Corona Municipal Code Section 17.84.040(C)(3)(a), Roadway Noise
Note: transportation noise sources preempted by state or federal law are exempted from the provisions of the municipal code.

The City of Corona Municipal Code Section 17.84.040(D)(2), Construction Noise, prohibits construction noise between the hours of 8:00 PM and 7:00 AM, Monday through Saturday and 6:00 PM to 10:00 AM on Sundays and federal holidays. Construction noise is defined by the municipal code as noise which is disturbing, excessive or offensive and constitutes a nuisance involving discomfort or annoyance to persons of normal sensitivity residing in the area, which is generated by the use of any tools, machinery or equipment used in connection with construction operations.

The City of Corona (COC, 2019) identifies that certain land uses, such as residences, senior housing schools, places of worship, recreational areas, and hospitals are particularly sensitive to noise and vibration. These uses are regarded as sensitive because they are where citizens most frequently engage in activities which are likely to be disturbed by noise, such as reading, studying, sleeping, resting, or otherwise engaging in quiet or passive recreation. Commercial and industrial uses are not particularly sensitive to noise or vibration.

4.13.2 Environmental Setting

Magnolia Avenue is an east-west Major Arterial in the City of Corona, accessible from Interstate 15 (I-15). It is identified as six lanes in the General Plan, but it is only striped/constructed to accommodate four lanes. The Project improvements will begin at El Camino Avenue, approximately 600 feet east of the I-15. Land uses along the Project alignment include light industrial to heavy industrial on both sides of the road. The heavy industrial uses include a quarry located south of the Project alignment, accessible on the south side of Magnolia Avenue from Sherborn Street and All American Way. Given its proximity to the I-15 and the mix of light and heavy industrial uses, this approximately 2,100 linear foot Project alignment experiences a high volume of heavy truck traffic. Build-out of the roadway to the design as envisioned by the General Plan would improve overall circulation in this section.

4.13.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		~~X~~		
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?				X

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

Less than Significant Impact With Mitigation Incorporated. The Noise Study Report in Appendix H analyzed construction (temporary) and permanent potential noise impacts of the additional lane and widened bridge.

Construction

The proposed Project would generate noise during construction, which is considered a temporary impact. Construction will generally occur between the hours of 10:00 a.m. and 6:00 p.m. Monday through Saturday and will not be undertaken anytime on Sundays or holidays, which is within the acceptable hours of operation per the City's municipal ordinance. Therefore, noise generated by the potential construction is not inconsistent with the City's noise ordinance.

Table 4.13-3: *Typical Construction Equipment Noise Levels* summarizes noise levels produced by construction equipment that are commonly used on roadway construction projects.

Table 4.13-3: Typical Construction Equipment Noise Levels

Type of Equipment	Range of Maximum Sound Levels (dBA Lmax at 50 ft)	Suggested Maximum Sound Levels for Analysis (dBA Lmax at 50 ft)
Pile drivers	81–96	93
Rock drills	83–99	96
Jackhammers	75–85	82
Pneumatic tools	78–88	85
Pumps	74–84	80
Scrapers	83–91	87
Haul trucks	83–94	88
Cranes	79–86	82
Portable generators	71–87	80
Rollers	75–82	80
Dozers	77–90	85
Tractors	77–82	80
Front-end loaders	77–90	86
Hydraulic backhoe	81–90	86
Hydraulic excavators	81–90	86
Graders	79–89	86
Air compressors	76–89	86
Trucks	81–87	86

Source: Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek & Newman, 1987.
dBA = A-weighted decibels
ft = feet
Lmax = maximum instantaneous sound level

While there are no sensitive receptors as defined by the City's General Plan along the Project alignment, there are office buildings and commercial buildings located approximately 50 ft from the Project construction areas. As identified in Table 4.13-3, construction equipment is expected to generate noise levels ranging from 80 to 95 dBA Lmax at a distance of 50 ft, although noise would be reduced over distance at a rate of approximately 6 dB per doubling of distance. And though construction noise is anticipated to be short-term, **Mitigation Measure NOI-1**, located at the end of this section, requires that construction occur within acceptable time limits in accordance with the City's General Plan and implementation of Caltrans Standard Specifications. Implementation of this measure would ensure that potential impacts are less than significant.

Operation

Consistent with the City of Corona Municipal Code Section 17.84.040(C)(3)(a), Roadway Noise, a noise study (Appendix H) was conducted to assess future traffic noise levels at 10 receptor locations within the Project alignment (**Figure 4-3: *Noise Study Locations – Sheet 1*** and **Figure 4-4: *Noise Study Locations – Sheet 2,*** located at the end of this section).

Table 4.13-4: *Predicted Traffic Noise Levels* identifies the predicted traffic noise levels, post Project at each of these locations. The traffic was based on the projected future AM peak-hour traffic volumes obtained from the traffic study presented in Appendix I.

Table 4.13-4: Predicted Traffic Noise Levels

Receptor	Location	Type of Land Use	Existing Noise Level (dBA Leq)	Opening Year Noise Level (dBA Leq)	Future Build Noise Level (dBA Leq)	Change from Existing Noise Level
R1	Magnolia Ave.	Commercial	64	69	70	6
R2	Sherborn St.	Commercial	65	70	70	5
R3	Sherborn St.	Commercial	67	71	72	5
R4	Magnolia Ave.	Commercial	66	69	70	4
R5	Magnolia Ave.	Commercial	68	71	72	5
R6	Magnolia Ave.	Commercial	66	69	70	5
R7	Magnolia Ave.	Commercial	68	71	72	4
R8	Magnolia Ave.	Commercial	65	68	69	5
R9	Magnolia Ave.	Commercial	65	68	68	4
R10	Magnolia Ave.	Commercial	63	66	67	4

It should be noted that the noise study in Appendix H projected the noise in Leq, while the City's General Plan identifies noise levels in CNEL. For this roadway Project, CNEL and Leq are roughly equivalent because traffic noise was studied at peak hour.

Table 4.13-4 identifies that the operational noise would increase noise to adjacent properties by 4 to 6 dBA, from approximately 66 and 68 dBA to 70 and 72 dBA. However, this is less than significant because the City's General Plan identifies that up to 80 dBA is compatible noise for an industrial zoned area, such as is with the location of the Project. Additionally the City of Corona General Plan (COC, 2019b) identifies that future transportation noise levels are anticipated to be approximately 70 CNEL within the Project area along Magnolia Boulevard.

Therefore, the Project will not cause a substantial temporary or permanent increase in noise in excess of that established by the City's General Plan.

b) Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. Construction activities can produce vibration that may be felt by some adjacent land uses. Typical vibration generated for the project include jackhammers and dozers to remove existing pavement and sidewalk, and various trucks and asphalt pavers/rollers for installing new pavement and sidewalk.

The relocation of the 30-inch water main on the south side of the bridge is anticipated to cause the most vibration of all of the activities as it will use a jack-and-bore method of construction to tunnel under Temescal Creek to install the relocated section of the water main. Jack and bore is a trenchless method of construction. Typically crews would dig a pit on each side of Temescal

Creek at the location for the new pipe section. They place a jack and bore machine in the sending pit and cut a hole underground horizontally from the sending pit to the receiving pit, without disturbing the surface above. The jack and bore construction method works similarly to a jackhammer, using air to pound through the ground Once the hole is made, a machine would then push the pipe through the hole. The new portion of the pipeline is then reconnected at each end.

Typically, particle velocity (measured in inches per second) and/or acceleration (measured in gravities) are used to describe vibration. **Table 4.13-5: *Vibration Source Levels for Construction Equipment*** identifies typical construction sources of vibration as identified by the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (September 2018). **Table 4.13-6: *Typical Reaction to Vibration Levels*** presents the human and structural reaction to various levels of peak particle velocity (PPV) as identified in the Caltrans Transportation and Construction Vibration Guidance Manual, April 2020. **Table 4.13-7: *Vibration Velocities for Construction Equipment (PPV)*** identifies the potential PPV that could be generated from jack and bore and directional drilling construction methods. As shown, jack and bore tunneling could cause damage to sturdy structures within 25 feet of the construction site or to fragile structures within 75 to 100 feet of the construction site. Therefore, impacts from vibration generated during jack and bore tunneling would be potentially significant to nearby structures.

Table 4.13-5: Vibration Source Levels for Construction Equipment

	Peak Particle Velocity (inches/second) at 25 feet	**Approximate Vibration Level LV (dVB) at 25 feet**
Pile driver (impact)	1.518 (upper range)	11 2
	0.644 (typical)	10 4
Pile driver (sonic)	0.734 upper range	10 5
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018

Table 4.13-6: Typical Reaction to Vibration Levels

Vibration Level Peak Particle Velocity(in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins andancient monuments should be subjected
0.10	Level at which continuous vibration begins toannoy people	Virtually no risk of "architectural" (i.e., not structural) damageto normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls andceilings
0.4–0.6	Vibrations considered unpleasant by peoplesubjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possiblyminor structural damage

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual, April 2020.

Table 4.13-7: Vibration Velocities for Construction Equipment (PPV)

Distance (feet)	Jack and Bore[a]	Directional Drilling[b]
25	0.644	0.089
50	0.228	0.031
75	0.124	0.017
100	0.081	0.011
150	0.044	0.006

Notes:
A Peak particle velocities from jack and bore operations were assumed to be comparable to impact pile driving techniques.
B Peak particle velocities from directional drilling operations were assumed to be comparable to drilling techniques.
Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, September 2018

Most of the office buildings and other structures are located greater than 100 feet from the Project work area where PPV could be a minimum of 0.081 (Table 4.13-7), which may be readily perceptible to people but would not cause architectural damage to sturdy buildings. Therefore, based on the potential impacts identified in Table 4.13-6, there will be a less than significant impact from potential impacts of vibration from the jack and bore operation.

Other construction activities that will utilize heavy equipment is also anticipated to have a less than significant impact because the equipment used will be standard trucks and dozers, and will typically occur more than 50 feet from the buildings. Therefore, overall, the potential impacts from vibration is less than significant.

c) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is not within the vicinity of a private airstrip, not within two miles of a public airport or public use airport and is not within an airport land use plan. No impacts would occur.

4.13.4 Mitigation Measures

The following mitigation measure is required to reduce potential impacts to less than significant:

NOI-1 Implement *Caltrans' Standard Specifications in Section 14-8.02, "Noise Control".* Section 14-8.02 which states: "*Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.*"

COMPASS Consulting Enterprises, Inc.

Not to Scale

N

Figure 4-3: Noise Study Locations – Sheet 1
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

COMPASS Consulting Enterprises, Inc.

Not to Scale

Figure 4-4: Noise Study Locations – Sheet 2
Magnolia Avenue Bridge Widening - El Camino Avenue to 1,000 feet east of All American Way
Initial Study

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

The Project is to widen and improve an existing roadway and does not involve housing, or the construction of structures for housing. The Project is located in an existing commercial/industrial area of Corona.

4.14.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

Discussion

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

No Impact. The purpose of the Project is to relieve existing traffic congestion, which does not induce growth. Therefore, the Project does not indirectly induce an increase in population.

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

No Impact. No existing housing would be displaced as the Project site is a roadway and bridge and would remain as such upon Project implementation. No impacts would occur, and no mitigation is required.

4.14.3 Mitigation Measures:

No mitigation measures are required.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

The Project is to widen and improve the Magnolia Avenue Bridge over Temescal Wash Channel and Magnolia Avenue from El Camino Avenue to 1,000 feet east of the All American Way.

4.15.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	X
Schools?				X
Recreation/Parks?				X
Other public facilities?			X	

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection, Police Protection, Schools, Recreation/Parks, or Other Public Facilities.

Fire Protection

Less than Significant Impact. The closest fire station to the Project area is Fire Station No. 1, 540 Magnolia Avenue, approximately 1.7 miles west of the Project area. No significant demand for fire protection or other emergency services is anticipated to be necessary. The possibility exists for a work-related injury, but this type of occurrence is considered to be rare, and therefore, not create a substantial need for emergency medical services for the Project. Therefore, there is a less than significant impact on fire protection services.

Police Protection

The Corona Police Dept provides police services in the Project area. Response times are approximately 5 minutes for life-threatening events. Corona averaged approximately 1,800 vehicle collisions, 31 bicycle-vehicle accidents, 47 pedestrian-vehicle collisions, and approximately 1 vehicle-train collision, from 2014 to 2017. While the number of accidents increased from 2014 to 2016, the accidents have moderated in number during 2017 down to levels before the SR-91 was improved. The main exceptions are that both bicycle and pedestrian collisions gradually increased (COC, 2019a).

Magnolia Avenue will be open for travel during construction, although within some lane restrictions. All traffic controls will be in place during the construction. It is anticipated that some police services may be necessary for traffic-related calls for service, but the service performed will be within the standard services ability and no new facilities or additional forces may be required. Therefore, there will be a less than significant impact on police services.

Schools, Recreation and Parks

No Impact. The Project will not impact schools, recreational facilities because the Project is to widen and improve an existing bridge and roadway approaches. There will be no impact.

Other Public Facilities

Less Than Significant Impact. The Project will widen the bridge over Temescal Creek Channel, an improved, 84-foot-wide by 15-foot-deep rectangular concrete channel. The channel has a storm drain into the channel that includes a grated drop inlet at the north side of Magnolia Avenue west of the Channel; a 30-inch storm drain line that ties into the Channel at the northeast, southeast and southwest corners of the bridge. The channel is owned and maintained by the Riverside County Flood Control and Water Conservation District (RCFC &WCD).

The City of Corona's 30-inch water transmission line (Cross-Town Feeder) is attached to the exterior edge of the south side of the bridge. The City's water service will remain in operation for customers along the alignment during construction. The new water transmission line will be relocated prior to bridge construction by a jack-and bore method under the channel, south of the area of bridge widening, thereby allowing the existing transmission line to remain in operation. The City may temporarily reroute its water service along the Project alignment while the newly installed pipeline will be connected. However, users within the Project alignment will not be affected. The impact will be less than significant, and no mitigation is required.

4.15.3 Mitigation Measures:

No mitigation measures are required.

4.16 RECREATION

4.16.1 Environmental Setting

The Project is to widen and improve an existing roadway and does not involve recreation, the use of recreation, or the construction of recreational facilities.

4.16.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion

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

No Impact. The Project does not propose any residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, thus, impacts there will be no impacts.

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

No Impact. The Project does not propose to construct any recreational facilities or require the construction or expansion of any recreational facility. There are no impacts.

4.16.3 Mitigation Measures:

No mitigation measures are required.

4.17 TRANSPORTATION

A Traffic Impact Study Report was prepared for the Project by KOA Consultants in May 2021 (**Appendix I - *Traffic Impact Study Report***).

4.17.1 Regulatory Setting

Senate Bill (SB) 743 encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB 32]). The CEQA Guidelines were also subsequently revised to require that lead agencies utilize VMT-related metric(s) that evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects, beginning on July 1, 2020. In response to SB73, the City of Corona developed VMT Analysis Guidelines (Fehrs & Peers, 2019). SB 743 eliminates auto delay, Level of Service (LOS), and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA, although it allows Cities to still consider LOS in project evaluation.

Intersections within incorporated cities associated with freeway on- and off-ramps fall under Caltrans jurisdiction. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities. Caltrans utilizes the Highway Capacity Manual 6 (HCM 6) methodology which estimates a quantitative delay in seconds per vehicle (sec/veh) at intersections and assigns a qualitative letter grade that represents the operations of the intersection. These grades range from LOS A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. Descriptions of the LOS letter grades for signalized and unsignalized intersections are provided in **Table 4.17-1*: Level of Service Descriptors***, as identified in the City's General Plan (COC, 2019a).

Table 4.17-1: Level of Service Descriptors

LOS	Description	Intersection Control Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay occurring with favorable progression and/or shortcycle length.	≤ 10	≤ 10
B	Operations with low delay occurring with good progression and/or short cyclelengths.	>10 and < 20	>10 and < 15
C	Operations with average delays resulting from fair progression and/or longer cyclelengths. Individual cycle failures begin to appear.	>20 and < 35	>15 and < 25
D	Operations with longer delays due to a combination of unfavorable progression,long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	>35 and < 55	>25 and < 35
E	Operations with high delay values indicating poor progression, long cycle lengths,and high V/C ratios. Individual cycle failures are frequent occurrences.	>55 and < 80	>35 and < 50
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 80	> 50

The Southern California Association of Governments (SCAG) is a council of governments representing the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Every four years SCAG updates the Regional Transportation Plan (RTP) for the six-county region. On April 7, 2016, the SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (2016 RTP/SCS). The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding goods movement).

The City of Corona's General Plan (COC, 2019b) identifies goals and policies that direct the City's future planning for growth. The City of Corona's General Plan, Circulation Element, identifies Magnolia Avenue in the Project alignment as:

- Major Arterial, 6 Lane;
- Proposed Class III bikeway;
- Local Truck Route

4.17.2 Environmental Setting

The Project alignment along Magnolia Avenue is an approximately 0.45 segment from El Camino Avenue to approximately 1,000 feet east of All American Way. Magnolia Avenue within Project alignment is currently four lanes (two lanes of travel each way), has sidewalks only in some sections along the alignment, and currently has no bike lane. Roadway widths along Magnolia Avenue vary, but are generally 82 feet curb to curb, while the Magnolia Bridge is approximately 64 feet wide curb to curb.

El Camino Avenue, the westernmost end of the Project alignment, exists approximately 600 feet east of the Interstate 15 (I-15) Freeway and Magnolia Avenue on ramps and off ramps, and the terminus of the Project is approximately the intersection of Magnolia Avenue and the eastbound lane of Leeson Lane. Commercial and industrial uses exist adjacent to the Project alignment.

The BNSF railroad crossing exists approximately 80 east of the intersection with El Camino Avenue, and is within the Project alignment, and the only work proposed is to install ADA-compliant sidewalks and replacing the signal that is in front of the arms that control the westbound lanes.

Corona's bus service, the Corona Cruiser, provides transit to local activity centers—major retail areas, hospitals, medical facilities, public service agencies, library, civic center, and commercial/retail areas—in the City and unincorporated areas. The Corona Cruiser Blue Line operates along Magnolia Avenue in the Project alignment, with bus stops just east of El Camino Avenue and Trademark Avenue.

For regional travel, the Riverside Transit Agency buses connect to the Metrolink stations and other regional destinations. Regional transit is provided by Metrolink, which provides passenger rail service from outlying communities to employment centers in Burbank, Irvine, and Los Angeles.

4.17.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION / TRAFFIC: 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 CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Less than Significant Impact. The Project is identified in SCAG's 2019 RTP as "Magnolia Ave Bridge Widening from 4 to 6 lanes from El Camino Ave to 1000 ft E/O All American Way, including the widening over the Temescal Channel; includes construction of missing sidewalk, bike lanes, ADA compliant ramps and decorative landscaping." Therefore, the Project is consistent with the RTP.

The Project will widen Magnolia Avenue from four lanes to six lanes and provide for a striped Class III Bike Lane, as well as install sidewalks in segments where they are missing, consistent with the City's General Plan. Any bus stops impacted during construction would be replaced in-kind. Therefore, the Project is consistent with the City's General Plan.

The City of Corona has adopted Level of Service (LOS) D as the maximum threshold of significance at all collector and arterial intersections. A project impact occurs when the project-related traffic causes the volume to capacity (V/C) ratio of a study intersection already performing at LOS D to increase by more than 0.01 and results in LOS E or F (Appendix I).

Table 4.17-2: *Project Traffic Impacts* compares the LOS and V/C ratios under existing conditions and future conditions, both with and without the Project.

Table 4.17-2: Project Traffic Impacts

Intersection	Peak Hour	Existing Conditions (2019)		Buildout Year (2040) No Build		Buildout Year (2040) Widened Alt.		Change in Delay	Project Impact	Satisfactory LOS?
		Delay	LOS	Delay	LOS	Delay	LOS			
Magnolia Avenue at El Camino Ave	AM	28.8	C	65.5	E	37.3	D	-28.2	NO	YES
	PM	28.0	B	104.4	F	53.1	D	-51.3	NO	YES
Magnolia Avenue at Sherborn Street	AM	4.0	A	4.4	A	4.2	A	-0.2	NO	YES
	PM	10.0	A	10.8	B	6.1	A	-4.7	NO	YES
Magnolia Avenue at All American Way	AM	8.0	A	10.7	B	9.1	A	-1.6	NO	YES
	PM	8.8	A	17.0	B	10.4	B	-6.6	NO	YES
Magnolia Avenue at 6^{th} Street	AM	36.7	D	73.6	E	49.2	D	-24.4	NO	YES
	PM	82.0	F	297.9	**F**	237.6	**F**	-60.3	NO	NO

Table 4.17-2 identifies that the Project would improve long-term traffic congestion at the intersections where widening will occur along Magnolia Avenue at the El Camino Ave and All American Way intersections. The table also identifies that the intersection of Magnolia at 6^{th} Street, which is not part of the Project, is rated at a LOS of "F" under both the existing condition and under proposed Project conditions. Therefore, the Project is consistent with the City's adopted standards for acceptable circulation.

Therefore, the Project would not conflict with any program, plan or ordinance that addresses the circulation system.

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

Less than Significant Impact. For purposes of CEQA Guidelines section 15064.3(b), SB 743 compliance, a VMT analysis should be conducted for land use projects as deemed necessary by the Traffic Engineering Division and would apply to projects that have the potential to increase the average VMT per service population (VMT/SP). Service population is typically the aggregate of total employment and population within a study area or project.

The Project is not a land use project nor does it require any land use action. The Project seeks to widen a bridge and add a lane of travel consistent with the City's General Plan. This will significantly reduce the existing traffic bottleneck that exists along this segment of roadway. Additionally, the City's VMT Guidelines allows for the City's discretion in determining which projects require a VMT analysis. Given the nature and objectives of this Project to improve overall travel conditions, the Project is exempt from a VMT analysis per the City's discretion afforded it

in its VMT guidelines. Impacts would be less than significant, and the Project traffic would not rise to a level that could conflict with CEQA Guidelines. Impacts would be less than significant.

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

Less Than Significant Impact. The Project involves widening the Magnolia Avenue bridge over Temescal Wash and its approaches. The Project will provide an additional lane of travel and travel lanes that are consistent widths thereby providing safer travel for motorists. Therefore, the Project will not create a hazard due the geometric design. Impacts are less than significant.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. The proposed Project would not result in inadequate emergency access. The proposed construction activities would include reducing lanes of travel during construction, however, traffic control will be conducted in accordance with State and federal guidelines which provides for emergency vehicle access through the construction zone when required. Impacts are less than significant, and no mitigation is required.

4.17.4 Mitigation Measures:

No mitigation measures are required.

4.18 TRIBAL CULTURAL RESOURCES

A Historic Property Survey Report for the proposed Project was performed by CRM Tech (Appendix C). The report included a written request made to the Native American Heritage Commission (Commission) on May 21, 2020, requesting a records search in the Sacred Lands File. The Commission replied on the same day that the Sacred Lands File search results were negative but recommended further consultation with local tribes.

City of Corona AB 52 Tribal Consultation

The City of Corona conducted consultation with Native American tribes in compliance with AB 52.

On April 14, 2020, the City of Corona notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end on May 8, 2019, in accordance with AB52:

- Andrew Salas, Gabrieleno Band of Mission Indians
- Ebru Ozdill, Pechanga Band of Luiseño Indians
- Destiny Colocho, Rincon Band of Luiseño Indians
- Joseph Ontiveros, Soboba Band of Luiseño Indians

Of the tribes contacted, the following responses were received:

- Rincon Band of Luiseño Indians. May 1, 2020 – request for consultation. Project orientation meeting held May 20, 2020.
- Gabrieleno Band of Mission Indians. May 13, 2020 – request for consultation. Project orientation meeting held June 20, 2020.

On September 12, 2021, copies of the cultural resources report was provided to the following tribes per their request:

- Andrew Salas, Gabrieleno Band of Mission Indians
- Ebru Ozdill, Pechanga Band of Luiseño Indians
- Cheryl Madrigal, Rincon Band of Luiseño Indians
- Joseph Ontiveros, Soboba Band of Luiseño Indians

No tribal resources were identified within or surrounding the Project alignment, and no comments on the cultural report were received by the tribes. Consultation was concluded.

4.18.1 Environmental Setting

The City of Corona is situated in an area where the traditional territories of the Luiseño of the Perris/Elsinore region and the Gabrielino of the Los Angeles Basin overlapped, with a late influx of Cahuilla from the San Gorgonio Pass and San Jacinto Mountains area during the 19th century.

In 1769, with the establishment of the Franciscan mission in San Diego, Alta California became a part of Spain’s colonial empire in the Americas. During the ensuing mission period, the present-day Corona area

fell nominally into the vast landholdings of Mission San Gabriel, established in 1771, and Mission San Luis Rey, established in 1798.

The surface of the Project alignment is completely developed. The deeper impact required by the undertaking, up to 20 feet below surface, is concentrated in the portion of the Project alignment lying across the Temescal Creek channel, where the current landscape is largely the result of flood control works along the creek since the 1960s, in particular the complete channelization of the creek in the 1980s (Appendix C). Prior to the completion of these works, much of the APE was a part of the flood plain of the unbridled creek and its meandering braid of branches, which would not have offered a favorable setting for long-term settlement in prehistoric times.

4.18.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

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)?

Less Than Significant. According to PRC Chapter 2.5, Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and items with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in Section 5020.1.

There are no resources that have been identified as eligible for listing to the California Register of Historic Places within or near the Project site. Additionally, based on AB 52 tribal consultation, there are no tribal cultural resources within the Project alignment, nor are they anticipated to occur within the Project alignment. Impacts are less than significant, and no mitigation is required.

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. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact. The Project alignment is previously disturbed land currently under commercial land use. Additionally, there are no tribal cultural resources within the Project alignment, or anticipated to be within the Project alignment, per AB 52 tribal consultation. Impacts are less than significant, and no mitigation is required.

4.18.3 Mitigation Measure:

No mitigation measures are required.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

The Project is to widen and improve the Magnolia Avenue Bridge over Temescal Wash Channel and Magnolia Avenue from El Camino Avenue to 1,000 feet east of the All American Way.

The streetlights along the Project alignment (owned by the City) will be removed during Project construction to facilitate sidewalk construction. Additionally, all streetlights within the Project limits will be replaced with the most current standard pole and fixture and equipped with light-emitting diode (LED) lamps. The SCE conduit and lower voltage utilities that are attached to the bridge structure on the north side will be relocated to within new cells inside the bridge. The 30-inch water main from the City of Corona, attached to the bridge's structure on the south side will also be relocated to accommodate a widened bridge. An existing 10-inch City-owned waterline attached to the exterior of the north side of the bridge will be replaced to be along the outside edge of the new north side of the bridge. All pole-mounted utilities located on the south side, between All American Way and 1480 Magnolia Avenue, will be temporarily relocated during construction only but remain above ground.

4.19.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, 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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			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	

Discussion

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

Less than Significant Impact. The proposed Project consists of the relocation of a City of Corona 30-inch water main, which is attached to the bridge abutments and pier on the south side of the bridge. The pipeline will be relocated to under the channel on the south side and reattached at its existing locations. The pipeline will remain the same size and not result in new or expanded water service. The Project does not expand storm water volume or use. Other utilities, such as electric natural gas and telecommunications would also be relocated to their new positions within the alignment per engineering. These facilities may be taken out of service temporarily during construction. However, all utility providers will re-route service to the area by use of other nearby facilities. Impacts will be less than significant, and no mitigation is required.

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

Less than Significant Impact. Construction activities may utilize water for dust control and/or other uses during construction. The amount to be used for the approximately 0.45-mile construction area is minimal and can be served by existing water supplies. Impacts would be less than significant, and no mitigation is required.

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

Less than Significant Impact. Construction workers may use portable waste facilities serviced by a contractor. Wastewater demands would be accommodated existing facilities. Therefore, impacts would be less than significant as the project does not propose activities that would necessitate an increase in the capacity of existing wastewater systems.

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?

Less than Significant Impact. Construction and operations may generate small amounts of construction debris such as wood waste and concrete. The City is served by a contract waste hauler who utilizes the County's landfill system, which has sufficient capacity to serve the Project needs. Impacts would be less than significant, and no mitigation is required.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The Project needs would be served by a contract waste hauler that complies with State standards. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

4.19.3 Mitigation Measures:

No mitigation measures are required.

4.20 WILDFIRE

4.20.1 Environmental Setting

A wildland fire is an uncontrolled fire in combustible vegetation that is typically found in a rural or wilderness area. Wildland fires pose a great danger to urban areas where lives and property can be severely affected. Conditions contributing to the severity of wildland fires are primarily related to weather, including temperature, humidity, and wind. Winds commonly referred to as "Santa Ana" winds typically occur during the fall months and pose a particularly significant hazard.

The Project alignment is not within a Very High Fire Severity Zone (COC, 2019a).

4.20.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: 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, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				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

Discussion

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

No Impact. The Project does not occur within or near state responsibility areas or lands classified as very high fire hazard severity zones. Nor will the Project alignment serve as an emergency

evacuation route for any nearby areas within the zones because the Project alignment are not near these zones. There will be no impact.

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

No Impact. The Project does not occur within or near state responsibility areas or lands classified as very high fire hazard severity zones, and there are no slopes or other factors that would exacerbate wildfires or the uncontrolled spread of a wildfire. There will be no impact.

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

No Impact. The Project does not occur within or near state responsibility areas or lands classified as very high fire hazard severity zones, and there is no installation or maintenance of associated infrastructure or other factors that would exacerbate wildfires or the uncontrolled spread of a wildfire. There will be no impact.

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 Project does not occur within or near state responsibility areas or lands classified as very high fire hazard severity zones, and there are no slopes where downslope or downstream flooding or landslides or other conditions could occur. There will be no impact.

4.20.3 Mitigation Measures:

No mitigation measures are required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
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 which 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 with Mitigation Incorporated. As stated in this Initial Study, although the proposed Project would affect the quality of the environment with respect to the habitat of a plant or animal community, the mitigation identified in the Initial Study would reduce such impacts through the provision of adherence to the MTBA and its protection of nesting birds through implementation of Mitigation Measure BIO-1. The project may adversely affect unknown paleontological resources, however, implementation of Mitigation Measures GEO-1 would reduce potential impacts to less than significant. With mitigation, impacts related to this issue are considered to be less than significant.

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 proposed Project alignment is currently a developed roadway with developed commercial and industrial uses. While some modification of the adjacent uses, coupled with the on-going development in the City, there may be some incremental impacts to traffic and air quality, however, these are short-term during construction and are less than significant. The Project will reconstruct Magnolia Avenue to the City's General Plan designation, which is designed to better serve the region's circulation. Therefore, overall, any on-going cumulative impacts as a result of operations would also be less than significant. As such, impacts related to this issue are considered to be less than significant.

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

Less Than Significant with Mitigation Incorporated. Implementation of the of the proposed Project may result in direct and indirect impacts such as exposure to hazards associated with hazardous waste and noise. However, adherence to standard requirements and identified mitigation measures (Mitigation Measure HAZ-1, HAZ-2, HAZ-3 and NOI-1) would reduce these impacts to less than significant.

Conclusion: The project would have a less-than-significant impact on the CEQA mandatory findings of significance with the incorporation of mitigation measures and standard permit conditions identified in this document.

5 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of the Public Resources Code and Section 15097 of the CEQA Guidelines require adoption of a Mitigation Monitoring or Reporting Program (MMRP) for all projects for which an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) has been prepared. This requirement was originally mandated by Assembly Bill (AB) 3180 which was enacted on January 1, 1989 to ensure the implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process. Specifically, Section 21081.6 of the Public Resources Code states that "…the agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment…[and that the program]…shall be designed to ensure compliance during project implementation." AB 3180 provided general guidelines for implementing monitoring and reporting programs, which are enumerated in more detail in Section 15097 of the CEQA Guidelines.

Specific reporting and/or monitoring requirements to be enforced during project implementation are defined prior to final approval of the project. The proposed monitoring and reporting program will be considered by the City of Corona (the lead agency) prior to certification of the MND. Although the lead agency may delegate reporting or monitoring responsibilities to other agencies or entities, it "…remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program." The Mitigation Monitoring and Reporting Program describes the procedures for the implementation of the mitigation measures to be adopted for the proposed project as identified in the MND. The MMRP for the proposed project will be in place through all phases of the project, including design (pre-construction), construction, and operation (post-construction both prior to and post-occupancy). The City is responsible for administering the MMRP activities or delegating them to staff, other City departments (e.g., Department of Building and Safety, Department of Public Works, etc.), consultants, or contractors. The City will also ensure that monitoring is documented through reports (as required) and that deficiencies are promptly corrected. The designated environmental monitor (e.g. City building inspector, project contractor, certified professionals, etc., depending on the provision specified below) will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to remedy problems.

The MMRP is provided on the following pages.

Mitigation Monitoring and Reporting Program

Impact/Threshold	Project Mitigation Measures	Monitoring/ Timing Frequency	Compliance Action	Monitoring Party	Verification		
					Initials	Date	Remarks
AIR QUALITY							
Project will result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.	**MM AIR-1**: The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to: • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions. • The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day. • The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.	During construction	Construction Inspection documentation	City of Corona Public Works Division			
	MM AIR-2: The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113: • Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113 shall be used.	During construction	Construction Inspection documentation	City of Corona Public Works Division			
BIOLOGICAL RESOURCES							
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	**MM BIO-1**: **Avian Monitoring**. If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction	Prior to issuance Notice to Proceed with Construction Contractor	Monitoring report submitted to City of Corona Public Works Division	City of Corona Public Works Division			

Impact/Threshold	Project Mitigation Measures	Monitoring/ Timing Frequency	Compliance Action	Monitoring Party	Verification		
					Initials	Date	Remarks
the use of native wildlife nursery sites?	clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.						
GEOLOGIC RESOURCES							
The Project will directly or indirectly destroy a unique paleontological resource orsite or unique geologic feature	**MM GEO-1**: **Unanticipated Paleontological Resources**. Any substantial excavations (i.e. over 5 feet in depth) in the proposed Project area should be monitored closely by excavation crews to identify potential fossil remains discovered while not impeding development. If fossils are found, excavation in the area will cease and a qualified paleontologist shall be retained to identify and collect the fossils. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.	During Construction	Construction Inspection documentation	City of Corona Public Works Division			
HAZARDS AND HAZARDOUS MATERIALS							
Create a significant hazard to the public or	**MM HAZ-1**: All asphalt requiring removal from the Project alignment shall be disposed of in accordance with current regulatory standards.	During Construction	Construction Inspection documentation				

Impact/Threshold	Project Mitigation Measures	Monitoring/ Timing Frequency	Compliance Action	Monitoring Party	Verification		
					Initials	Date	Remarks
the environment through the routine transport, use, or disposal of hazardous materials?							
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?	**MM HAZ-2**: A hazardous spill prevention plan shall be prepared by the Contractor and submitted to the City for approval to minimize the likelihood of a spill shall be prepared prior to construction. The plan shall state the actions that would be required if a spill occurs to prevent contamination of surface waters and provide for cleanup of the spill. The plan shall follow Federal, state, and local safety guidelines and standards to avoid increased exposure to these pollutants.	During Contractor Pre-Construction Submittals	Contract compliance review				
	MM HAZ-3: Grading and excavation at 1375 Magnolia Avenue shall follow the procedures identified in the Soil Management Plan, or most recent plan or procedures as authorized by regulatory agencies, that identifies procedures for soil management on this property. The City and the Contractor will work with the property owner to gain access to the most recent testing and other related data, as well as coordinate all excavation sites and the storage and staging of equipment, to ensure compliance with the plan and to minimize any risk of exposing any contaminated soils during Project construction.	During Construction	Construction Inspection documentation				

Impact/Threshold	Project Mitigation Measures	Monitoring/ Timing Frequency	Compliance Action	Monitoring Party	Verification		
					Initials	Date	Remarks
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**MM HAZ-3**	Same as MM HAZ-3					
NOISE							
Project will generate a substantial temporary or periodic increase in ambientnoise levels in the vicinity ofthe project in excess of standards established in thelocal general plan or noise ordinance, or applicable standards of other agencies	**MM NOI-1**: Implement Caltrans' Standard Specifications in Section 14-8.02, "Noise Control". Section 14-8.02 which states: "Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler."	During construction	Verification by City of incorporation of requirement in the contractor contracts; Periodic Monitoring Reports	City of Corona Public Works Division			

6 REFERENCES

California Department of Transportation, April 2020. *Transportation and Construction Vibration Guidance Manual*.

City of Corona, December 2019 (COC, 2019a). *Draft Environmental Impact Report State Clearinghouse No. 2018081039, Corona General Plan Technical Update.*

City of Corona, December 2019 (COC, 2019b). *City of Corona General Plan*.

California Dept of Water Resources, Groundwater Level Data, https://wdl.water.ca.gov/WaterDataLibrary/GroundWaterLevel.aspx

Federal Transit Administration, September 2018. *Transit Noise and Vibration Impact Assessment*.

Fehrs & Peers, January 11, 2019. *Memorandum, Draft City of Corona CEQA Assessment – VMT Analysis Guidelines.*

Appendix A
Air Quality Report

Appendix B
Biological Resources and MSHCP Compliance

Appendix C
Historical Property Survey Report

Appendix D
Energy Analysis Memorandum

Appendix E
Materials Report

Appendix E-1
Geotechnical Design Report

Appendix F
Phase I Environmental Site Assessment

Appendix F-1
Aerially Deposited Lead and Limited Phase II Subsurface Investigation Report

Appendix G
Water Quality Assessment Report

Appendix H
Noise Study Report

Appendix I
Traffic Impact Study Report