

Initial Study

1. PROJECT NAME: El Camino Real Roadway Improvements Project

2. PROJECT NO: 6072

3. LEAD AGENCY:

City of Carlsbad Planning Division
1635 Faraday Avenue
Carlsbad, CA 92008

4. PROJECT APPLICANT:

City of Carlsbad Department of Public Works
1635 Faraday Avenue
Carlsbad, CA 92008

5. LEAD AGENCY CONTACT PERSON: Christina Bustamante, Associate Planner (760) 602-4644, christina.bustamante@carlsbadca.gov

6. PROJECT LOCATION: El Camino Real between Poinsettia Lane and Camino Vida Roble, City of Carlsbad, California.

7. GENERAL PLAN LAND USE DESIGNATION: Major Street

8. ZONING: Major Street

9. PROJECT DESCRIPTION:

The City of Carlsbad (City), in coordination with the California Department of Transportation (Caltrans), proposes to widen the northbound segment of El Camino Real for approximately 1500 feet from Cinnabar Way to Camino Vida Roble as part of the El Camino Real Roadway Improvements Project (Project) (See **Figures 1-3**). Improvements would also include restriping El Camino Real from Poinsettia Lane to Camino Vida Roble to provide a consistent 6 lane arterial roadway facility consistent with the Mobility Element of the City of Carlsbad's General Plan.

Purpose

The purpose of the Project is to:

- Improve current and future traffic operations by adding an additional northbound travel lane to accommodate additional future traffic and a sidewalk on the east side of the street; and
- Provide sidewalk connectivity on the east side of El Camino Real.

Need

The Project is needed to:

- Maintain acceptable levels of service as set by the City's General Plan; and
- Fill the gap for pedestrian travel mode that currently exists on the east side of the street between Camino Vida Roble and Cinnabar Way.

Alternatives

Two alternatives are being considered for this Project—the Build Alternative (see **Figure 3**) and the No-Build Alternative.

Build Alternative

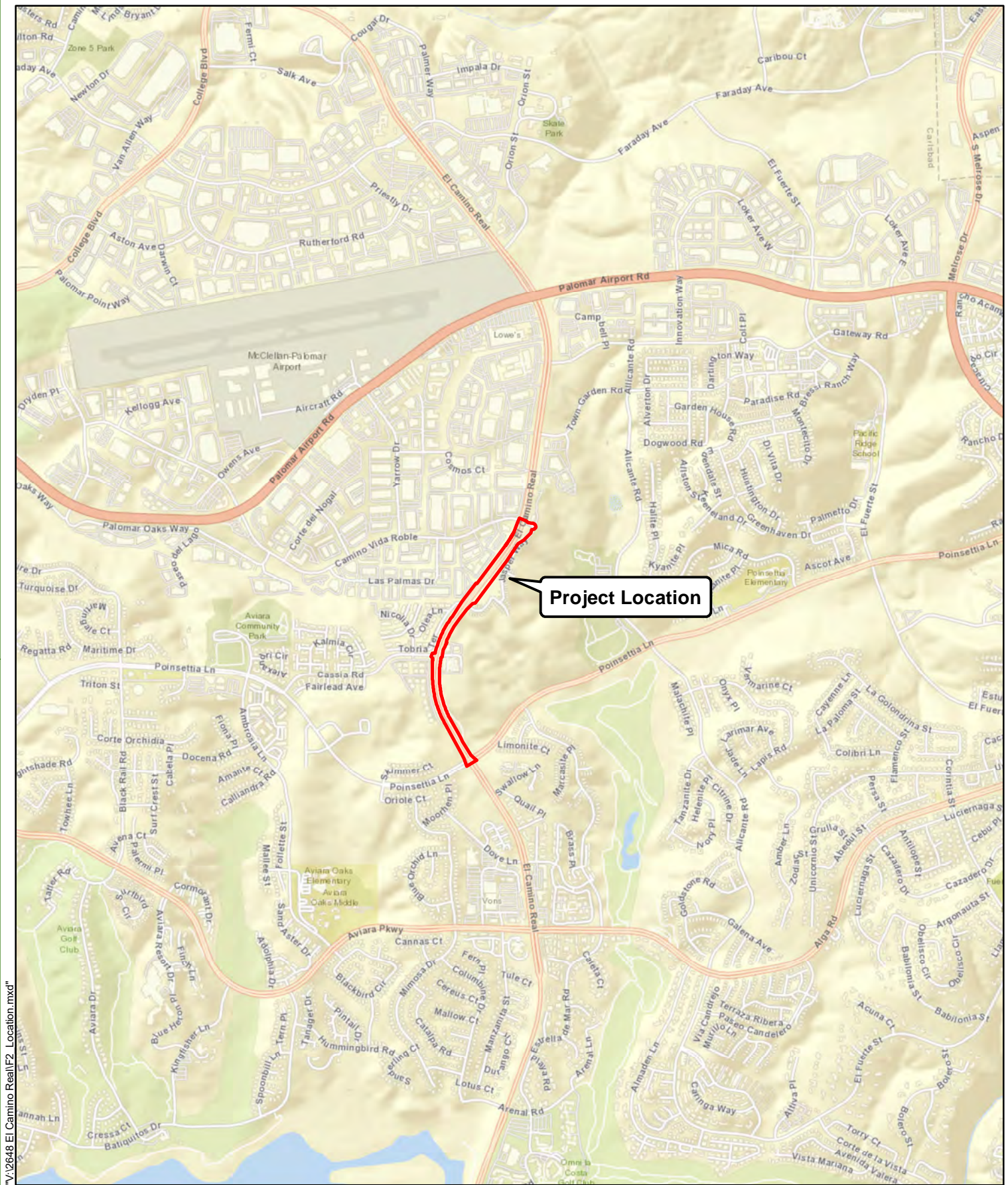
Between Cinnabar Way and Camino Vida Roble, the northbound side of El Camino Real would be widened from two travel lanes with a buffered bike lane to three travel lanes with a buffered bike lane and sidewalk. El Camino Real, from Poinsettia Lane to Cinnabar Way, would be restriped to accommodate three northbound travel lanes and a buffered bike lane. Four light poles spaced 350 feet apart would be installed on the widened portion of the roadway. The median would receive streetscape and landscape improvements to match the existing segments for approximately 900 feet and a portion of the widening would require a fill embankment to minimize impacts to adjacent private properties. Additionally, the Project would include biofiltration stormwater facilities along the sidewalk to treat stormwater runoff from El Camino Real.

Right-of-way is expected to be needed at key locations along the Project alignment. The roadway widening would require 18 feet of right-of-way acquisition of the parcel along El Camino Real from Cinnabar Way to Camino Vida Roble. The new right-of-way would match the ultimate right-of-way to the north and south of the Project limits. Traffic would be accommodated during construction to allow movement through the area. Construction is expected to last approximately six months.

Utility relocations may be needed to accommodate the proposed improvements to the roadway corridor. Of note, there are dual high-pressure petroleum lines running underneath the median and high-pressure gas line running parallel to the Project. In addition, sewer manholes would be adjusted to grade and fire hydrants and water meters relocated. All utility relocations would occur within the Project area.

No-Project Alternative

Under the No-Build, or “Do Nothing” Alternative, El Camino Real would not be widened to accommodate three northbound travel lanes, a buffered bike line, or sidewalk. Existing and future traffic operations will not improve, and El Camino Real would continue to be inconsistent with the Mobility Element of the City of Carlsbad’s General Plan.



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Source: ESRI World Street Maps Online; Dokken Engineering 1/12/2021; Created By: kchen

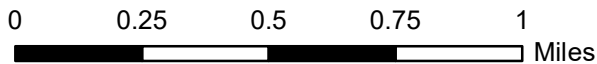
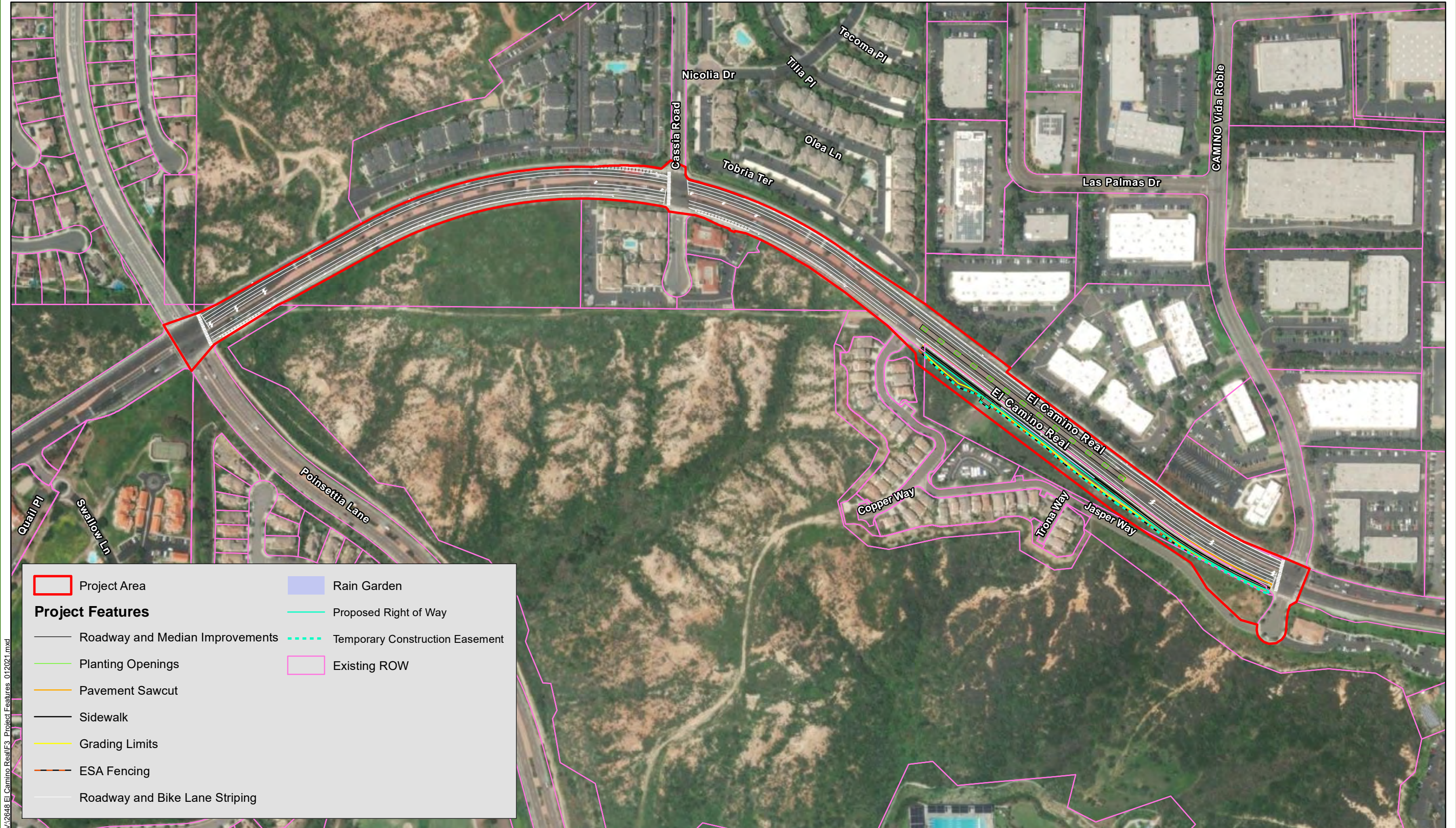


FIGURE 2
Project Location

FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California



Project Area

Rain Garden

Proposed Right of Way

Temporary Construction Easement

Existing ROW

Project Features

Roadway and Median Improvements

Planting Openings

Pavement Sawcut

Sidewalk

Grading Limits

ESA Fencing

Roadway and Bike Lane Striping

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Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen



0 250 500 750 1,000 Feet



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Project Area

Rain Garden

Roadway and Median Improvements

Planting Openings

Pavement Sawcut

Sidewalk

Grading Limits

ESA Fencing

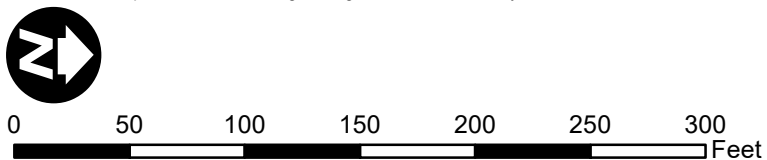
Roadway and Bike Lane Striping

Proposed Right of Way

Temporary Construction Easement

Existing ROW

Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen



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Project Area

Rain Garden

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Planting Openings

Pavement Sawcut

Sidewalk

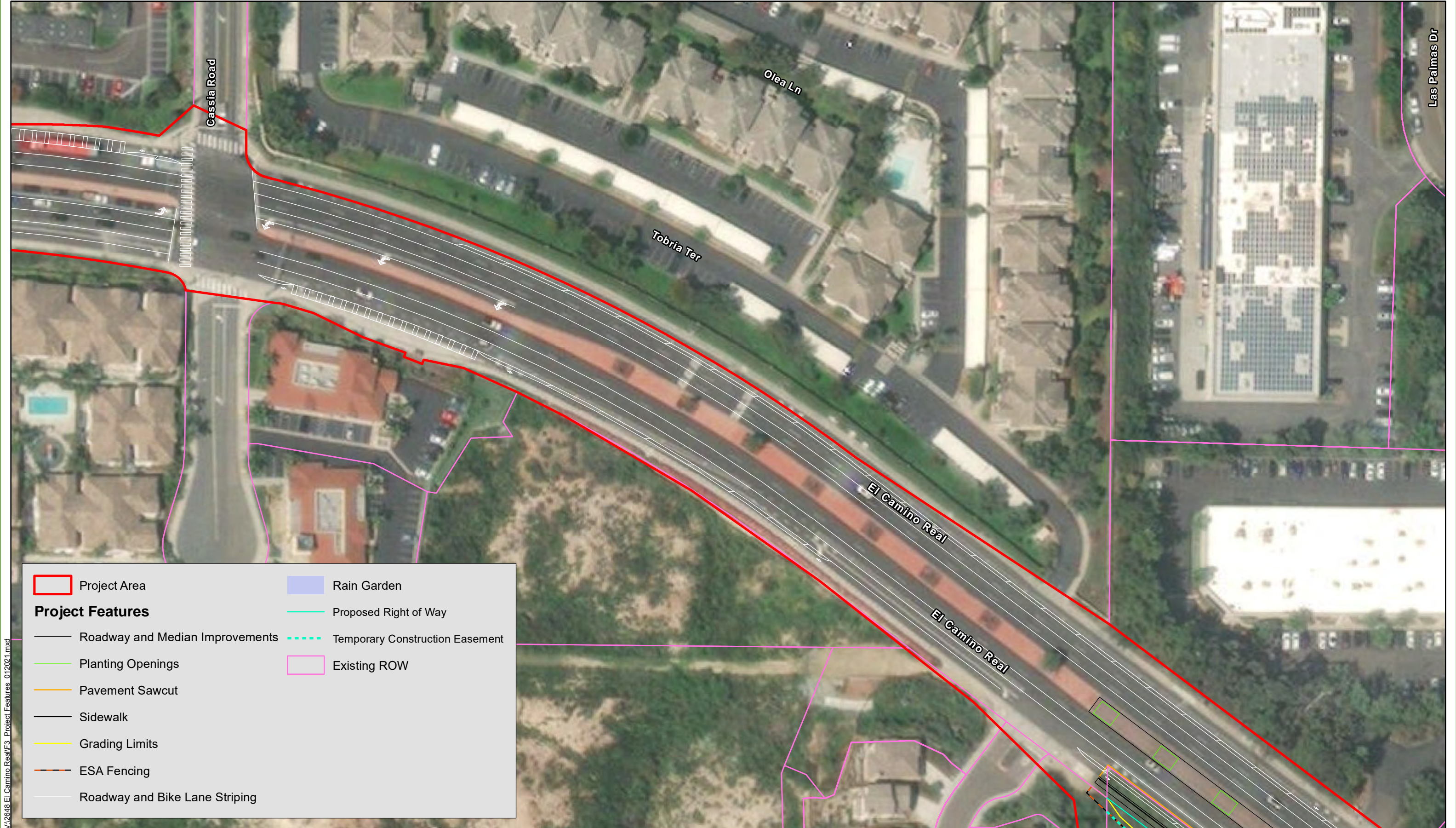
Grading Limits

ESA Fencing

Roadway and Bike Lane Striping

Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen

Figure 3
Project Features
Page 3 of 6
FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California



Project Area

Rain Garden

Project Features

Roadway and Median Improvements

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Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen

Figure 3

Project Features

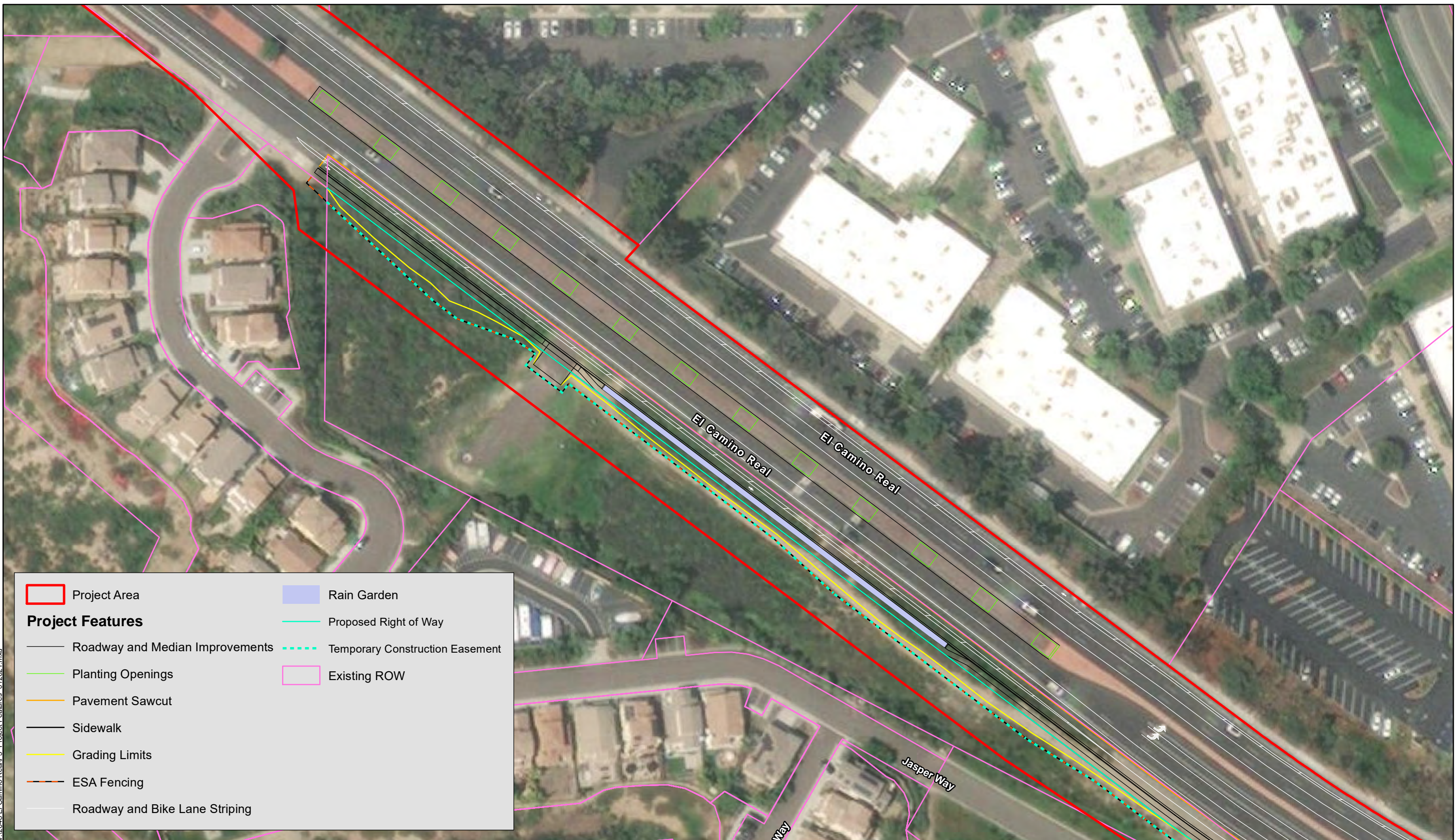
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FERPL 5308(021)

El Camino Real Roadway Improvements Project

City of Carlsbad, San Diego County, California

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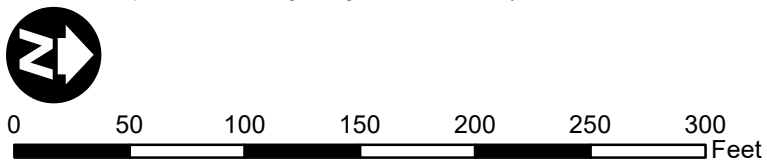


Figure 3
Project Features
Page 5 of 6
FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California



Project Area

Rain Garden

Project Features

Roadway and Median Improvements

Proposed Right of Way

Planting Openings

Temporary Construction Easement

Pavement Sawcut

Existing ROW

Sidewalk

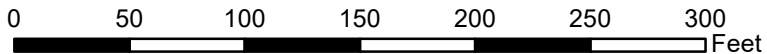
Grading Limits

ESA Fencing

Roadway and Bike Lane Striping

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Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen



10. ENVIRONMENTAL SETTING/SURROUNDING LAND USES: The Project area is largely developed with a mix of both commercial and residential development on the east and west side of El Camino Real. Segments of El Camino Real to the east are undeveloped and contain chaparral and coastal sage scrub between Cassia Road and Copper Way. The topography of the roadway is largely flat, and varies between 300 and 320 feet above mean sea level (amsl).

11. OTHER REQUIRED AGENCY APPROVALS (e.g., permits, financing approval or participation agreements): The Project requires a National Pollutant Discharge Elimination System 402 General Permit for Storm Water Discharges Associated with Construction Activity. The Project would potentially require a grading permit, minor Habitat Management Plan (HMP) permit, and a Special use Permit to comply with the City's Habitat Management Plan.

12. CALIFORNIA NATIVE AMERICAN TRIBES CONSULTATION.

- a. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to public resources code section 21080.3.1?

☒ **Yes** ☐ **No**

- b. If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On October 26, 2020, initial consultation letters were mailed to the following California Native American tribal governments who had previously requested to be notified of all City projects:

- Mesa Grande Band of Mission Indians
- Rincon Band of Luiseño Indians
- San Luis Rey Band of Mission Indians
- Torres Martinez Desert Cahuilla Indians

Cheryl Madrigal, Tribal Historic Preservation Officer of the Rincon Band of Luiseño Indians, requested to consult on the Project and has provided the following recommendations:

- Tribal monitoring for all ground disturbing activities within non-fill/native soil
- Preparation of a monitoring report
- Development of cultural material and human remains discovery protocols.

The Rincon Band of Luiseño Indians requested the City keep them informed of the Project's schedule, any changes to the proposed Project plans, and requested the opportunity to provide the recommended tribal monitoring services. Last, the Rincon Band of Luiseño Indians requested the City provide the proposed cultural/tribal cultural mitigation measures so that they could review and make recommendations. The City provided draft measures on February 22, 2021. The Rincon Band of Luiseño Indians responded with their preferred mitigation measures to the City, which have been incorporated into the Project.

☒ **Yes** ☐ **No**

13. PREVIOUS ENVIRONMENTAL DOCUMENTATION: N/A

14. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The summary of environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact,” or “Less Than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture & Forestry Resources | <input checked="" type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use & Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population & Housing | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

15. PREPARATION: The Initial Study for the subject project was prepared by:

<u>Dokken Engineering</u>	<u>7-1-2021</u>
“Planner – Name, title, or consultant”	Date

16. DETERMINATION: *(to be completed by Lead Agency)*

On the basis of this initial evaluation:

- ☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described herein have been added to the Project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed Project MAY have a "potentially significant impact(s)" on the environment, but at least one potentially significant impact 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 herein. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project. Therefore, nothing further is required.

17. ENVIRONMENTAL DETERMINATION: The initial study for this Project has been reviewed and the environmental determination, indicated above, is hereby approved.

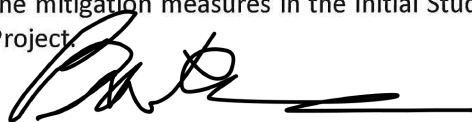


Don Neu, City of Carlsbad City Planner

7-23-2021

Date

18. APPLICANT CONCURRENCE WITH MITIGATION MEASURES: This is to certify that I have reviewed the mitigation measures in the Initial Study and concur with the addition of these measures to the Project.



Brandon Miles, P.E., City of Carlsbad Department of Public Works

7.27.2021

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.
9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

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Appendix B: CNDDDB, USWS, and CNPS Special Status Species Database Results
Appendix C: Roadway Construction Emissions Model and CT-EMFAC Modeling Results
Appendix D: Vehicle Miles Traveled Analysis Memorandum
Appendix E: Mitigation and Monitoring and Reporting Program
Appendix F: Distribution List

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

REGULATORY SETTING

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with...enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA Public Resources Code Section 21001[b])."

a) No Impact: El Camino Real is not a designated Scenic Highway in the National Scenic Byways Program nor is it a State Scenic Highway (Caltrans 2017). There are no Wild and Scenic Rivers within the Project corridor. **No Impact** to a scenic vista would result from the Project.

b) No Impact: Although the Project area is located approximately two miles east of a segment of Interstate 5 that is eligible to be a State Scenic Highway location, the site is not visible from the highway. Therefore, **No Impact** to scenic resources within a State Scenic Highway would result from development of the Project, and no mitigation is required.

c) Less than Significant Impact with Mitigation Incorporated: Carlsbad does not have any areas that are considered non-urbanized. All areas are considered urbanized. Refer to the El Camino Real Corridor Standards and the Scenic and Visual Resources Regulations in Carlsbad Municipal Code Chapter 21.40. The widening of El Camino Real will result in similar visual conditions compared with a no project scenario. The road widening would continue along the current alignment of the existing facility and remain consistent with the existing visual character. The median would receive streetscape and landscape improvements to match the existing segments for approximately 900 feet. Since the Project does not substantially change the existing land uses and adds a minor amount of new paved surfaces, the visual character would not change substantially. The Project would not change the surrounding character, because the Project would stay on the existing alignment.

Construction of the proposed Project would temporarily change views experienced by drivers, pedestrians, and other people in the Project area since construction equipment would be visible from

neighboring areas; however these impacts are temporary, and therefore not considered substantial. Overall visual impacts as a result of the proposed Project are anticipated to be low, as the viewer response would be low for residents, businesses and motorists. With the implementation of **VIS-1** through **VIS-3** the proposed Project would have a **Less than Significant Impact with Mitigation Incorporated**. In addition, with implementation of measures **BIO-14** and **BIO-15** in **Section IV** the impacts would be further minimized.

d) Less than Significant Impact: The Project would result in the installation of four light poles spaced 350 feet apart on the widened portion of the roadway. While these streetlights would be considered a new permanent source of nighttime light, these are not being considered an adverse significant impact to nighttime views in the area. Construction activities would temporarily introduce equipment and vehicles to the Project area; however, work would take place during daylight hours and no construction lighting is anticipated. The Project would not result in substantial additional light or glare that would adversely affect day or nighttime views in the Project area; therefore, the Project would result in a **Less than Significant Impact** to day or nighttime views in the area.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the Project. Also, the inclusion of aesthetic features in the Project design previously discussed can help generate public acceptance of a project. This section describes additional avoidance and/or minimization measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The following measures to avoid or minimize visual impacts will be incorporated into the Project:

- VIS-1:** Caltrans Standard Specifications (2018) "Erosion Control" will be followed during construction. At the conclusion of construction, areas of bare soil shall be hydroseeded with native seed mix to prevent or at least minimize erosion.
- VIS-2:** Vegetation clearing would only occur within the delineated Project boundaries in an effort to minimize the impacts.
- VIS-3:** All disturbed areas including staging of vehicles and equipment will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native species.

FINDINGS

The Project would have a **Less than Significant Impact with Mitigation Incorporated** to aesthetics. In addition, measures **BIO-14** and **BIO-15** discussed in **Section IV** would reduce impacts even further.

II. AGRICULTURAL AND FORESTRY RESOURCES*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* 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 (LESA) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. There are no lands present in Carlsbad that meet the state's definition of forest land (Public Resources Code section 12220(g)), timberland (Public Resources Code section 4526), or production (Government Code 51104(g)). Therefore, questions related to forestry resources will have no impacts.

a) No Impact: There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occurring within the Project area. The farmlands mapper of the California Important Farmland Finder website was used to identify Prime and Unique Farmland within the Project area and is shown on **Figure 4**. As shown, the Project area primarily consists of Urban and Built-Up Land and Other land. The California Department of Conservation maps vacant and nonagricultural land surrounded on all sides by urban development as "Other Land". Therefore, the Project would have **No Impact** to conversion of agricultural resources.

b) No Impact: The Project would not conflict with existing zoning for agriculture use, and there is no Williamson Act contract land within the Project area. The Project would have **No Impact** to existing zoning or agricultural uses.

c) No Impact: Carlsbad is devoid of any lands that meet the definition of forest land, timberland, or timberland production zone. Therefore, the Project will have **No Impact** to existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

d) No Impact: Carlsbad is devoid of any lands that meet the definition of forest land, timberland, or timberland production zone. Therefore, no forestry impacts will occur as a result of any project. Therefore,

the Project will have **No Impact** to existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

e) No Impact: There are no forests or forest resources located within the Project area; therefore the Project would have **No Impact** in the additional conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Project will have no impacts related to agricultural and forestry resources; therefore, no avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have **No Impact** to agriculture and forest resources.

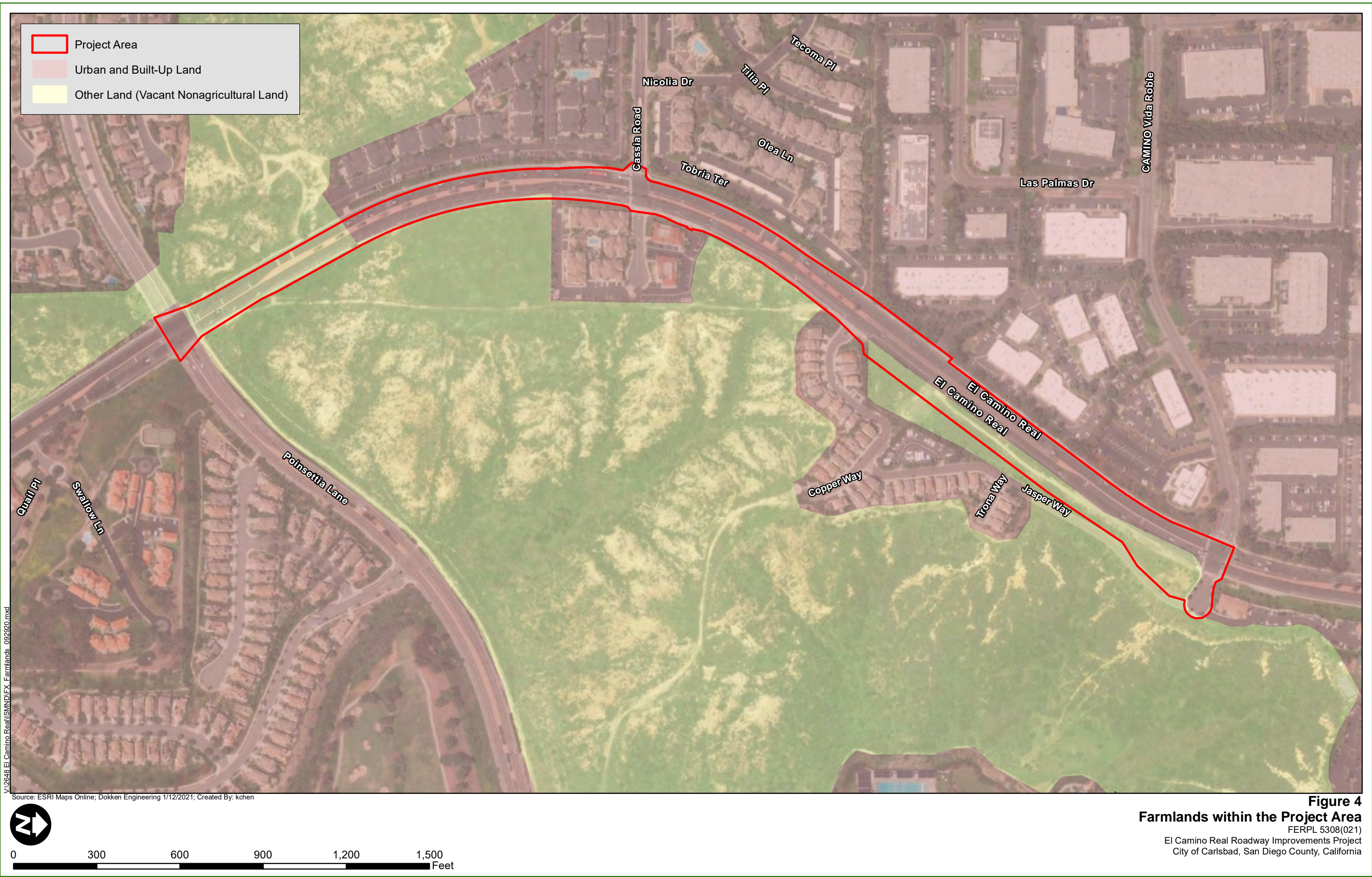


Figure 4
Farmlands within the Project Area
FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California

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III. AIR QUALITY*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations in this section.

AFFECTED ENVIRONMENT

The Project is located within the City of Carlsbad, which falls within the San Diego Air Basin (SDAB). The SDAB includes all jurisdictions within San Diego County. Air quality regulation in SDAB is administered by the San Diego County Air Pollution Control District (SDAPCD).

The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified for any state standard. An “attainment” designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A “non-attainment” designation indicates that a pollutant concentration violated the standard at least once within a calendar year.

REGULATORY SETTING

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) (federal) and/or California Ambient Air Quality Standards (CAAQS) (state). These standards are set by the Environmental Protection Agency or the California Air Resources Board for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. The criteria pollutants of primary concern that are considered in an air quality assessment include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM₁₀, and PM_{2.5}), lead and toxic air contaminants. Volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), are precursors to the formation of ground-level O₃.

The following table shows the SDAB designations for criteria pollutants:

Table 1: NAAQS and CAAQS Attainment Status for SDAB

Criteria Pollutant	Federal Designation (NAAQS)	State Designation (CAAQS)
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment ¹	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM ₁₀	Unclassifiable ²	Nonattainment
PM _{2.5}	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

As of November 2017, the SDAB is designated in attainment for all criteria pollutants under the NAAQS with the exception of O₃ (8-Hour) and PM₁₀, which is listed as unclassifiable. The SDAB is currently designated nonattainment for O₃ and particulate matter, PM₁₀ and PM_{2.5}, under the CAAQS. It is designated as attainment under CAAQS for CO, NO₂, SO₂, lead and sulfates.

San Diego County Air Pollution Control District (SDAPCD) Rules and Regulations

The thresholds listed in Table 2 represent screening-level thresholds that can be used for CEQA purposes to evaluate whether project-related emissions could cause a significant impact on air quality. The thresholds are based on SDAPCD's Rule 20.2 and were also used as thresholds of significance for air quality in the City of Carlsbad General Plan Update EIR, adopted in June 2015.

Table 2: SDAPCD Air Quality Significance Thresholds

Construction Emissions	
Pollutant	Total Emissions (Pounds per Day)
Respirable Particulate Matter (PM ₁₀)	100
Fine Particulate Matter (PM _{2.5})	55
Oxides of Nitrogen (NO _x)	250
Oxides of Sulfur (SO _x)	250
Carbon Monoxide (CO)	350
Volatile Organic Compounds (VOC)	137
Source: Air Quality significance thresholds based on those used in the City of Carlsbad General Plan Update EIR (June 2015).	

¹ The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

² At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

SOURCE: SDAPCD, 2018 (<https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html>).

a) *No Impact:* The Project area is located in the SDAB. The periodic violations of (NAAQS) in the SDAB, particularly for O₃ in inland foothill areas, requires that a plan be developed outlining the pollution controls that will be undertaken to improve air quality. In San Diego County, this attainment planning process is embodied in the Regional Air Quality Strategies (RAQS) developed by the San Diego County Air Pollution Control District (APCD) with regional growth projections provided by San Diego Association of Governments (SANDAG). The RAQS outlines the APCD's plans and regulatory control measures designed to attain state air quality standards for ozone. The RAQS, which was adopted by the San Diego County Air Pollution Control Board in 1992, is updated on a triennial basis with the most recent revision prepared in December 2016.

The APCD has also developed the SDAB's input into the State Implementation Plan (SIP) which is required under the Federal Clean Air Act (CAA) for pollutants that are designated as being in nonattainment of national air quality standards for the air basin. The SIP relies on the same information from SANDAG to develop emission inventories and emission control strategies that are included in the attainment plan for the air basin.

The proposed Project relates to the SIP and/or RAQS through the land use and growth assumptions that are incorporated into the air quality planning document. These growth assumptions are based on each city's and the county's general plan. The Project is within the scope of development that was anticipated in Carlsbad's General Plan used to develop the RAQS and SIP. Operation of the Project will result in emissions that were considered as a part of the RAQS growth projections. As such, the proposed Project is not anticipated to conflict with either the RAQS or the SIP. Additionally, as the Project is intended to improve current and future traffic operations, operational emissions are anticipated to be lower with the proposed Project.

Regional Conformity

The proposed Project is listed in the San Diego Association of Governments (SANDAG) financially constrained 2019 SANDAG Federal Regional Transportation Plan (SANDAG 2019). The Project is also included in the SANDAG financially constrained 2018 Regional Transportation Improvement Program (RTIP) as part of Amendment No. 14 (SANDAG 2020). The Project would not conflict with any applicable air quality plan and would therefore have **No Impact**.

b) *Less than Significant Impact:* All construction impacts to air quality would be short-term and intermittent. The emission of pollutants during construction would not contribute significantly to a net increase of any criteria pollutant. No long-term, operational impacts are anticipated. Therefore, impacts are anticipated to result in a **Less than Significant Impact**.

Grading and Construction:

Site preparation and roadway construction will involve excavation, grading, improving existing roadways, constructing new sidewalks, and paving roadway surfaces. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NOX, VOCs, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities are expected to slightly increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area

surrounding the construction site. Additionally, the Project will be implementing best available control measures to reduce dust and particulate spreading.

The Project's construction is anticipated to take six months. The Project's construction emissions were estimated using the Roadway Construction Emissions Model by the Sacramento Metropolitan Air Quality Management District (SMAQMD 2018), which is the accepted model for all CEQA roadway projects throughout California. The Roadway Construction Emissions Model results are compared with the SDAPCD Air Quality Significance Thresholds shown in **Table 2**. As summarized in **Table 3**, construction activities from the Project would not exceed emission thresholds established by the SDAPCD.

Table 3: SDAPCD Air Quality Significance Thresholds

Pollutant	Maximum Daily Construction Emissions (Pounds per Day)	SDAPCD Construction Emissions Threshold (Pounds per Day)
Respirable Particulate Matter (PM₁₀)	11.69	100
Fine Particulate Matter (PM_{2.5})	3.56	55
Oxides of Nitrogen (NO_x)	41.87	250
Oxides of Sulfur (SO_x)	0.07	250
Carbon Monoxide (CO)	25.68	350
Volatile Organic Compounds (VOC)	3.62	137
Source: Air Quality significance thresholds based on those used in the City of Carlsbad General Plan Update EIR.		

Adherence to applicable SDAPCD rules and regulations and standard Caltrans Best Management Practices would be sufficient to ensure construction emissions would result in a **Less Than Significant Impact**.

Operations:

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, No-Build, and all Build alternatives. **Table 4** below contains a summary of all long-term operational emissions associated with the proposed Project.

Table 4. Summary of Comparative Emissions Analysis during Peak Hour

Scenario/ Analysis Year	CO (tons)	PM ₁₀ (tons)	PM _{2.5} (tons)	NO _x (surrogate for NO ₂) (tons)
Baseline (Existing Conditions) 2020	0.013 tons	<0.001 tons	<0.001 tons	0.004 tons
No Build Future (2040)	0.003 tons	<0.001 tons	<0.001 tons	<0.001 tons
Future + Project (2040)	0.004 tons	<0.001 tons	<0.001 tons	<0.001 tons
Source: CT-EMFAC2014				

As shown in **Table 4**, as the Project is intended to improve current and future traffic operations, operational emissions are anticipated to be lower with the proposed Project. Therefore, operation of the Project would not result in a cumulatively considerable net increase in any criteria pollutant for which the Project region is in non-attainment. According to the CEQA Guidelines Section 15064(h)(3), the proposed Project's incremental contribution to the cumulative effect is not cumulatively considerable, and would result in a **Less Than Significant Impact**.

c) Less than Significant Impact: As discussed above and shown in **Table 4**, operational emissions are anticipated to be lower with the proposed Project. Furthermore, as discussed above and shown in **Table 3**, construction activities from the Project would not exceed emission thresholds established by the SDAPCD. Adherence to applicable SDAPCD rules and regulations and standard Caltrans Best Management Practices would be sufficient to ensure sensitive receptors would not be exposed to substantial pollutant concentrations and that impacts are **Less than Significant**.

d) Less than Significant Impact: The proposed Project could generate emissions resulting in objectionable odors from construction, vehicles and/or equipment exhaust from volatile organic compounds, ammonia, carbon dioxide, hydrogen sulfide, methane, alcohols, disulfides, dusts or other pollutants during the construction or operation of the Project. Such exposure would be in trace amounts, localized in the immediate area, temporary and would generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction or operation would be considered **Less than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Project will have a less than significant impact to air quality; therefore, no avoidance, minimization, and/or mitigation measures are required.

FINDINGS

The Project would have a **Less than Significant Impact** to air quality.

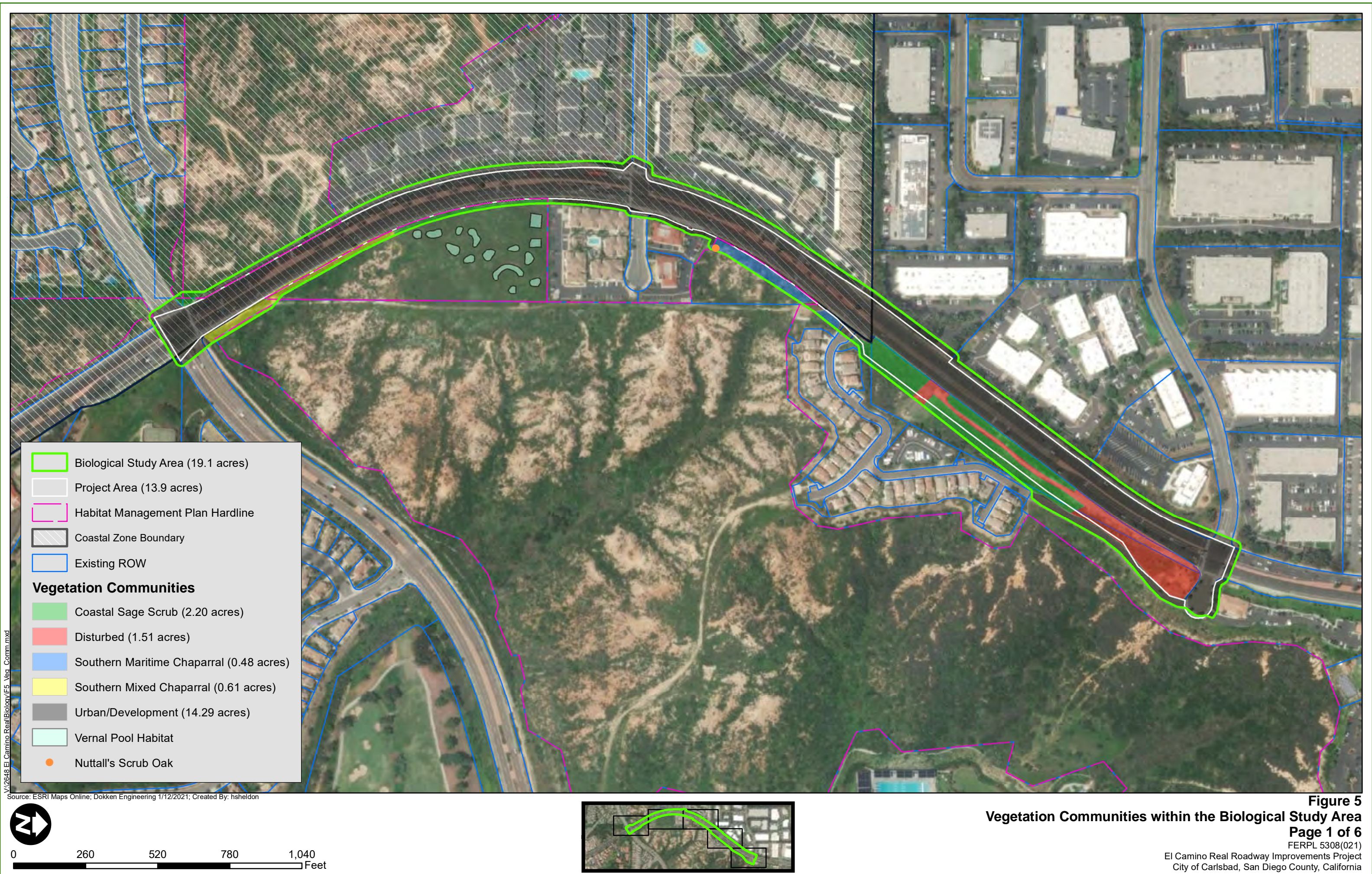
IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian, aquatic or wetland habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

This section describes the Federal, State, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA) (See **Figure 5**).

Federal Regulations**National Environmental Policy Act**

NEPA provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies whenever a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans, under delegation from the Federal Highway Administration (FHWA), is the NEPA lead agency for the Project.



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Figure 5
Vegetation Communities within the Biological Study Area
Page 2 of 6
FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California

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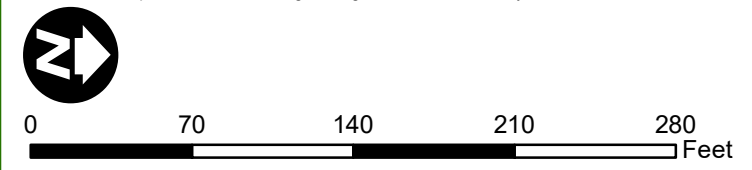


Figure 5
Vegetation Communities within the Biological Study Area
Page 5 of 6
FERPL 5308(021)
El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California

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Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by United States Fish and Wildlife Services (USFWS) or National Marine Fisheries Service (NMFS).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the U.S. CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations, and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool. The Project will require a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit regulated by the EPA.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U. S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate 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 may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;

- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as “the action of or attempt to pursue, hunt, shoot, capture, collect, or kill” (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

State Regulations

California Environmental Quality Act

California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The City of Carlsbad is the CEQA lead agency for the Project.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game (CFG) Code Section 2050 et seq.) requires the California Department of Fish and Wildlife (CDFW) to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires the CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the Project or activity for which the application was submitted may have on the environment. CDFW’s CEQA obligations include consultation with other public agencies which have jurisdiction over the Project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species [CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)].

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Local Regulations**Multiple Habitat Conservation Plan and Habitat Management Plan**

The Multiple Habitat Conservation Plan (MHCP) is a comprehensive plan addressing the conservation needs for multiple species and habitats within the northwestern portion of San Diego County. This program for the incorporated North County region was developed by the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista, as part of the Natural Community Conservation Planning Act (NCCP) of 1991. The MHCP Subregional Plan was adopted and approved by the San Diego Association of Governments (SANDAG) Board of Directors in March 2003. Each entity must adopt a Subarea Plan for the portions of the MHCP that are within their jurisdiction. In 2004 the Carlsbad City Council adopted the Habitat Management Plan for Natural Communities (HMP), encompassing the special status species and associated habitat that is within the City's jurisdiction outlined in the MHCP. To date, the City of Carlsbad is the only Subarea Plan to be adopted.

The HMP is intended to act as a framework for conserving and managing land uses and implementing protective measures to preserve the City's diversity of natural habitats and rare and unique biological resources, while also allowing for development and economic growth as outlined in the City's General Plan. For the HMP to act as a formal regulatory tool, the City coordinated with wildlife agencies including CDFW and USFWS to execute an agreement regarding potential impacts to wildlife species and habitat within the agencies' jurisdiction. The HMP constitutes a habitat conservation plan (HCP), pursuant to Section 10(a)(1)B of the Federal Endangered Species Act and NCCP Plan pursuant to Section 2835 of the California Endangered Species Act as part of the NCCP Program. The City has been issued a Section 10(a) Permit by USFWS and an NCCP Permit by CDFW, which allows Incidental Take of species covered by the HMP for City-approved projects in accordance with the Implementing Agreement. The HMP program consequently streamlines the permitting process in exchange for a citywide mitigation program for HMP covered species and their habitats.

Through implementation of the HMP, the City will establish a preserve system of approximately 6,478 acres, consisting of hardline preserve areas, proposed hardline preserve areas and standard areas, defined as an area containing "preservation and development standards [...] which must be complied with when a development project is submitted for the property". Total conservation within Carlsbad is currently estimated at 6,189 acres (City of Carlsbad 2020). The Project is not within a hardline preserve area or a Standards Area and would not conflict with the establishment of the preserve system. However, the Project must comply with the mitigation requirements set forth in the HMP, Table 11.

City of Carlsbad Community Forest Management Plan

The City of Carlsbad Community Forest Management Plan is used as a framework for long term forest planning. To achieve this, the City's Parks & Recreation Department has the goal of planting two street trees, from an approved street tree species list, for every one street tree removed.

AFFECTED ENVIRONMENT

Online databases from the USFWS, NMFS, California Natural Diversity Database (CNDDDB), and the California Rare Plant Society (CNPS) were used to generate a list of special status species with potential off occurring in the vicinity of the Project area.

Prior to field surveys, the BSA was defined as the proposed Project impact area and an approximately 20-foot buffer to capture adjacent habitat communities (approximately 19.1 acres). The BSA is shown in **Figure 5**. The Project impact area includes all temporary and permanent impacts related to the Project including, staging, access, and right-of-way (approximately 13.9 acres). There is a canyon directly east of the BSA; however, this canyon was not included in the BSA buffer because indirect and direct impacts to habitat communities within the canyon are not anticipated due to the steep drop in terrain, typical of the canyon. Project activities throughout the majority of the BSA, from Poinsettia Lane to Copper Way, include restriping the existing roadway to accommodate a third travel lane and a bike lane. No grading or ground disturbing activities will occur in this segment of the Project. The BSA spans approximately 145-300 feet from west to east, and approximately 4,430 feet from north to south. The BSA was created around all areas that will be temporarily or permanently impacted by the Project and includes the portion of El Camino Real that will be striped and right-of-way acquisition on the east side of the north bound road. Much of the Project area is adjacent to Existing HMP Hardline Preserves.

Field surveys, habitat assessments and analysis of special status species occurrences were conducted to determine the potential for species to occur within the BSA. Field surveys were conducted on June 4, 2020 and included walking meandering transects through the entire BSA, observing and mapping vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. Vegetation classification follows Holland (1986), revised by Oberbauer et al. (2008).

Physical Conditions

The elevation within the BSA ranges from approximately 275 to 317 feet above mean sea level. In the vicinity of the BSA, annual temperatures range from a high of 75 degrees Fahrenheit to a low of 47 degrees Fahrenheit, and the average annual rainfall is 11.84 inches (U.S. Climate Data 2020). The topography within the Project limits is a gentle slope, ranging from 2 to 9 percent, however the BSA is adjacent to a canyon creating slopes from 2 to 50 percent. Soil within the BSA consists of Huerhuero loam, 2 to 9 percent (44.2% of the Project area) and Loamy alluvial land-Huerhuero complex, 9 to 50 percent (55.8% of the Project area).

Biological Conditions

Vegetation communities within the BSA were identified during biological surveys and utilizing relevant figures and habitat descriptions within the City's HMP for Natural Communities (**Figure 5**. Vegetation Communities within the Biological Study Area).

Urban/Development

Urban and development areas within the BSA include sidewalks, one paved area south of El Camino Real and El Camino Real. No vegetation is present within this habitat type. Approximately 14.29 acres (75.2%) of the BSA is classified as urban/development.

Disturbed

Disturbed habitat occurs as generally unvegetated areas or unpaved landscaped areas. Disturbed habitat within the BSA consists of compacted dirt walking paths and a landscaped area in the northern portion of the BSA. Vegetation consists of non-native sparse forbs and grasses and ornamental plantings within the landscaped area. The dominant vegetative species include bristly ox tongue (*Helminthotheca echinoides*), Creeping myoporum (*Myoporum parvifolium*), field mustard (*Brassica rapa*), spotted spurge (*Euphorbia maculata*) and Brisbane box (*Lophostemon confertus*). Approximately 1.51 acres (7.9%) of the BSA is classified as disturbed.

Southern Maritime Chaparral

Southern maritime chaparral occurs east of El Camino Real directly north of a residential development. This vegetation community occurs on sandstone and is the most limited chaparral type in distribution and is characterized by several endemic shrubs, including Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), wart-stemmed ceanothus (*Ceanothus verrucosus*), coast spice bush (*Cneoridium dumosum*), and Nuttall's scrub oak (*Quercus dumosa*). The dominant plant species observed within southern maritime chaparral within the BSA include chamise, black sage and toyon. Furthermore, Nuttall's scrub oak was observed within this patch of southern maritime chaparral. Nuttall's scrub oak is a special status plant listed as a 1B.1 rare plant through CNPS. Southern maritime chaparral is identified as a sensitive habitat in the HMP. The BSA contains approximately 0.48 acres (2.5%) of southern maritime chaparral.

Southern Mixed Chaparral

Southern mixed chaparral is a fire and drought adapted community composed of a variety of woody shrubs, many of which are stump sprouters that regenerate rapidly from underground undamaged tissues following fires or other ecological perturbation (City of Carlsbad 2004). Dominant shrubs vary from site to site depending on the microclimate at each site. In general, dominant shrubs include chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), and toyon (*Heteromeles arbutifolia*). Understory plants include rush-rose (*Helianthemum scoparium*), deerweed (*Lotus scoparius*), wreathplant (*Stephanomeria* spp.), and a variety of aster and daisy relatives (*Asteraceae*). The dominant plant species observed within this habitat type include coyote brush, chamise and California buckwheat. No special-status plant species were observed within the patch of southern mixed chaparral within the Project limits. The BSA contains approximately 0.61 acres (3.1%) of southern mixed chaparral habitat, located in the northern portion of the BSA, east of El Camino Real.

Coastal Sage Scrub

Coastal sage scrub habitat occurs primarily in dry but foggy areas along the Pacific coastal zone. Dominant species in this habitat community include coyote brush (*Baccharis pilularis*), sagebrush (*Artemisia californica*) and black sage (*Salvia mellifera*) with subdominant species including coastal goldenbush (*Isocoma menziesii*). These dominant species were observed within the BSA during biological surveys, including California buckwheat and lemonade berry. Under California regulations and policies, coastal sage scrub is considered a sensitive habitat by CDFW. The coastal sage scrub habitat within the BSA is isolated from contiguous coastal sage scrub habitat, bordered by traffic on El Camino Real to the west and by a housing development on the east. Furthermore, there are disturbed areas and invasive plant species interspersed in this habitat community. Presence of invasive species include field mustard (*Brassica rapa*),

wild oat (*Avena fatua*), sweet fennel (*Foeniculum vulgare*) and fountaingrass (*Pennisetum setaceum*). The BSA includes approximately 2.20 acres (11.5%) of coastal sage scrub located in the southeast portion of the BSA.

a) *Less Than Significant Impact with Mitigation Incorporated:* The following is a discussion on special status plant and animal species that were determined have potential of occurring with the Project area, potential impacts, and avoidance, minimization, and mitigation measures that when incorporated will reduce impacts to a less than significant impact.

Special-Status Plants

Preliminary literature research was conducted to determine the special status plant species with the potential to occur in the vicinity of the Project. A review of IPac, CNDDDB, CNPS and online databases concluded that 70 special status plant species had the potential to occur within the Project vicinity.

One special status plant species, Nuttall's scrub oak, was identified within the BSA during biological surveys conducted on June 4, 2020. One individual was identified within the southern maritime chaparral habitat within the BSA, just east of El Camino Real, approximately 36 feet from El Camino Real. The Jepson Herbarium Key to California Plant Families, was utilized to positively identify the species (Jepson Herbarium 2020). However, no impacts to southern maritime chaparral habitat are anticipated and therefore the Project would have no impacts on any special status plant species.

Special-Status Animals

Prior to field surveys, a list of regional special status wildlife species with potential to occur within the Project vicinity was compiled from database searches.

Based on the results of the June 4, 2020 biological surveys and literature review, one special status wildlife species, the CAGN, is presumed present within the BSA.

Coastal California Gnatcatcher

The CAGN is listed as federally threatened under FESA and is covered by the HMP. This sub-species is a small, non-migratory songbird that occurs along the Pacific coastal regions of California and down into the northern region of Baja California (USFWS 2010). The CAGN inhabits arid washes, mesas, and slopes of coastal hills dominated by dense, low-growing, drought-deciduous shrubs and subshrubs of coastal sage scrub. May also use chaparral, grassland, and riparian communities when adjacent to or intermixed with sage scrub vegetation. Breeds February through August (sea level-2,500 feet). The main threats contributing to the CAGN's decline are habitat destruction due to housing development, shopping malls, and farmlands. In addition, nesting attempts often fail, partly because of cowbird parasitism, wildfire, and grazing.

Coastal California Gnatcatcher Survey Results

CAGN was not identified during the June 4, 2020 biological survey, and USFWS protocol surveys were not conducted; however, due to the likeliness of use of coastal sage scrub within the BSA by CAGN, the habitat is presumed to be occupied by the species. The nearest designated Critical Habitat for this species is located immediately southwest of the Project in a canyon containing coastal sage scrub habitat.

Project Impacts to Coastal California Gnatcatcher

Potential temporary impacts to the species include noise and dust generated from construction activities. Typical roadway construction includes clearing and grubbing, grading, paving and striping. Commonly used construction equipment for roadway construction may include a backhoe, excavator, cement truck,

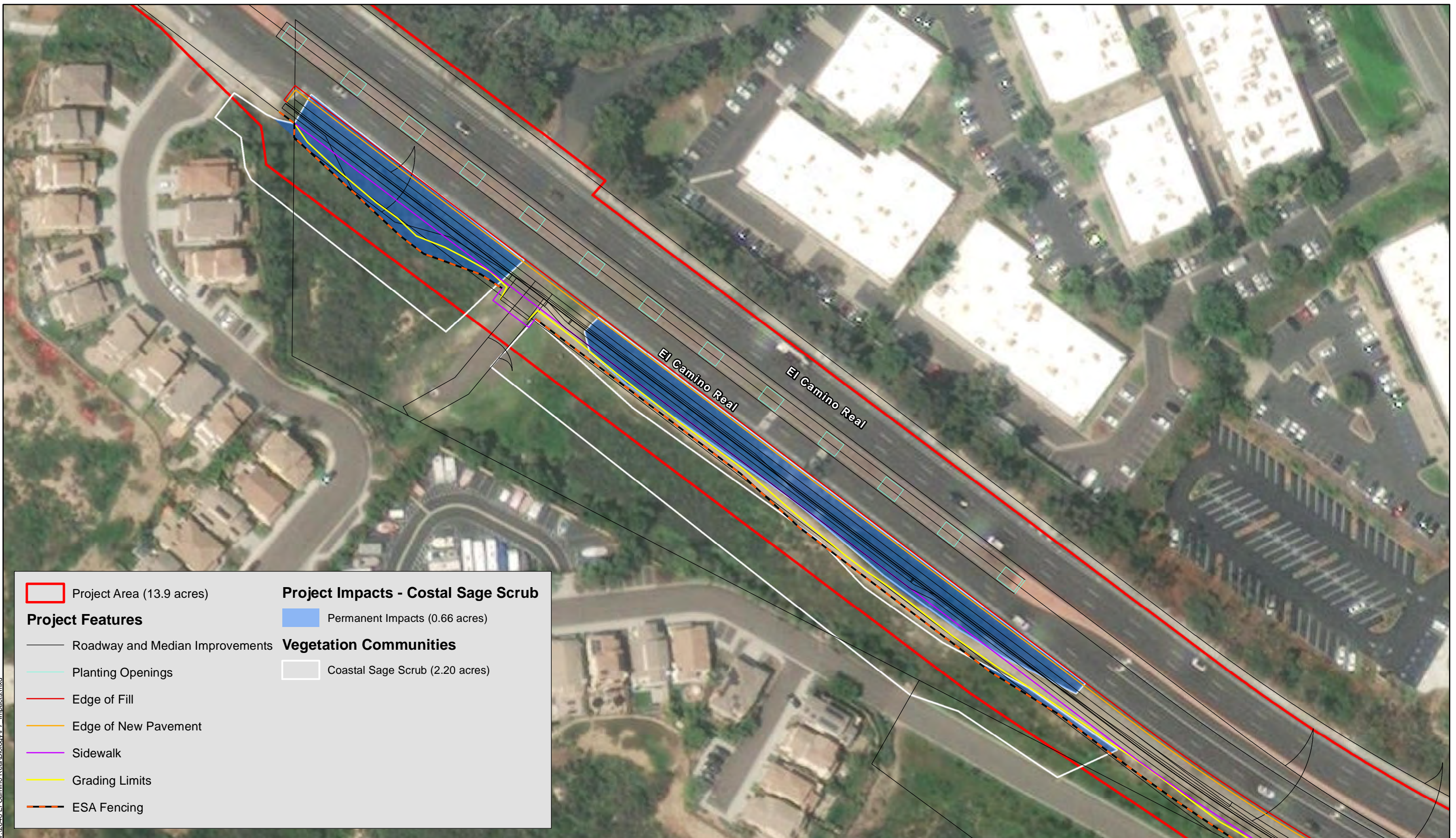
paver, rollers, motor grader, dump truck and light hand tools. Noise and dust impacts will be short-term, approximately 6 months, and are not anticipated to substantially impact the species with the implementation of BMPs. The Project would adhere to all local and state noise ordinances.

The Project will require the removal of approximately 0.66 acres of coastal sage scrub habitat, that potentially could provide nesting habitat for the species (**Figure 6**). The removal of this vegetation will not cause a fragmentation of habitat, since this patch of habitat is already fragmented by two roads: El Camino Real to the west and Jasper Way to the east. Furthermore, this patch of coastal sage scrub is heavily disturbed by human activity due to a walking path that is regularly used by pedestrians and bicyclists that traverses through this patch of habitat. There have been no recent documented occurrences of the species nesting within the Project limits and no nests or nesting activity was observed during the general biological survey conducted for this Project.

However, as stated above, the coastal sage scrub onsite is presumed to be occupied by CAGN and therefore, there is potential that the Project may result in take of the species. The Project's Section 7 determination for the CAGN is **May Affect, Likely to Adversely Affect** the species. Project impacts and mitigation to CAGN will be covered under the City's HMP. Mitigation measures **BIO-11** and **BIO-12** will be implemented into the Project to ensure the Project will have a **Less Than Significant Impact with Mitigation Incorporated** to special-status species.

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V:\2648 El Camino Real\Biology\FZ Impacts.mxd



Source: ESRI Maps Online; Dokken Engineering 4/27/2021; Created By: amyd



0 100 200 300 Feet

Figure 6

Impacts to Sensitive Natural Habitats

FERPL 5308(021)

El Camino Real Roadway Improvements Project
City of Carlsbad, San Diego County, California

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Coastal California Gnatcatcher Avoidance and Minimization Efforts

Measures **BIO-11** and **BIO-12** shall be implemented to avoid and minimize the potential for impacting CAGN.

Compensatory Mitigation for Coastal California Gnatcatcher

The inclusion of general measures **BIO-1** through **BIO-8**, mitigation measure **BIO-9** for the loss of coastal sage scrub habitat and measures **BIO-11** and **BIO-12** specific to CAGN, will minimize direct impacts to the species. Anticipated Project related permanent impacts will be mitigated for in compliance with the HMP and in coordination with USFWS and the City. Compensatory mitigation specific to this species is covered with the mitigation for sensitive habitat communities. Therefore, impacts related to special status wildlife would be **Less Than Significant Impact with Mitigation Incorporated**.

b) Less Than Significant with Mitigation Incorporated: The BSA lacks riparian habitat. However, three sensitive habitats occur within the BSA including southern maritime chaparral, coastal sage scrub and southern mixed chaparral (**Figure 5**). These habitats were identified and mapped during biological surveys conducted for this Project. The southern maritime chaparral and coastal sage scrub are sensitive habitats under the California regulations and policies, regulated by CDFW. The southern mixed chaparral habitat is not considered a sensitive habitat community under CDFW, however it is identified in the city's HMP as a vegetation community that provides habitat for a variety of locally special status species, and therefore any impacts to this habitat require mitigation. The Project would not result in impacts to southern maritime chaparral habitat or southern mixed chaparral; however, the Project would permanently impact approximately 0.66 acres of coastal sage scrub (**Figure 6**). There will be no temporary impacts.

Under the HMP, mitigation is required for the loss of coastal sage scrub habitat. Permanent impacts to coastal sage scrub requires a 1:1 mitigation ratio if it is unoccupied by CAGN and a 2:1 mitigation ratio if it is occupied by CAGN. Assuming presence of CAGN, the Project will mitigate at a 2:1 ratio for impacts to coastal sage scrub in accordance with the HMP's mitigation ratios for impacts to HMP habitats. With the incorporation of avoidance, minimization and mitigation measures **BIO-1** through **BIO-8**, the Project will have a **Less Than Significant Impact with Mitigation Incorporated**.

c) No Impact: According to National Wetlands Mappers and the EPA's Google Earth Water Layer, there are no wetlands or waters present within the Project BSA (NWI 2020, EPA 2020). This determination was confirmed during the biological surveys conducted on June 4, 2020. The Project would have **No Impact** to state or federal protected wetlands.

d) No Impact: Critical habitat linkages are identified in the City's Habitat Management Plan (HMP) for Natural Communities. Biological core and linkage areas are identified to assist local jurisdictions and special districts as one element to be considered in identifying their portion of the MSCP preserve and/or preserve design criteria. Sixteen core biological resource areas and associated habitat linkages, totaling approximately 202,757 acres of habitat, have been identified. Subarea plans with specific preserve boundaries maximize inclusion of unfragmented core areas and linkages in their preserve design to the extent possible. Six linkages have been identified in between habitat cores. The Project area is within Core 6 and is linked to Cores 4, 5, 7, and 8 through link D, E, and F.

The Project would not impact any wildlife migratory corridors, linkages or other habitat connectivity for birds, fish, or small and medium terrestrial wildlife. The Project will not reduce habitat connectivity for large terrestrial wildlife. No loss of habitat connectivity is anticipated; therefore, there is **No Impact**.

e) *Less Than Significant Impact with Mitigation Incorporated:* As discussed above, the Project would permanently impact approximately 0.66 acres of coastal sage scrub. There will be no temporary impacts. Southern mixed chaparral habitat is identified in the city's HMP as a vegetation community that provides habitat for a variety of locally special status species, and therefore any impacts to this habitat require mitigation. Assuming presence of CAGN, the Project will mitigate at a 2:1 ratio for impacts to coastal sage scrub in accordance with the HMP's mitigation ratios for impacts to HMP habitats. With the incorporation of avoidance, minimization and mitigation measures **BIO-1** through **BIO-8**, the Project will have a **Less Than Significant Impact with Mitigation Incorporated** to local policies or ordinances that protect biological resources in the City of Carlsbad.

f) *Less Than Significant Impact with Mitigation Incorporated:* As discussed above, the Project is located in Core 6 of the MHCP area. Much of the Project area is adjacent to Existing Hardline Preserves known to support coastal California gnatcatcher (*Poliophtila californica californica*) (CAGN), a federally threatened species and HMP covered species, Del Mar manzanita (*Arcostaphylos glandulosa* ssp. *crassifolia*), a federally endangered species, and summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), a species with California Rare Plant Rank (CRPR) of 1B.2. These species were not observed within the BSA during biological surveys.

Southern maritime chaparral is identified as a sensitive habitat in the HMP. The BSA contains approximately 0.48 acres (2.5%) of southern maritime chaparral. However, the Project would not result in impacts to southern mixed chaparral.

The Project will comply with the HMP, including all applicable permit conditions, MHCP, the NCCP and 10(a) 1(B) permit conditions. With the incorporation of avoidance, minimization and mitigation measures **BIO-1** through **BIO-8**, the Project will have a **Less Than Significant Impact with Mitigation Incorporated** to adopted habitat conservation plans.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following avoidance, minimization, and mitigation measures along with Best Management Practices have been incorporated into the Project design to minimize impacts to Special Status Species and natural communities to the greatest extent practicable:

BIO-1: Prior to the start of construction activities, the Project limits in the vicinity of coastal sage scrub and southern mixed chaparral, near the HMP Hardline Preserve, shall be marked with high visibility ESA fencing or staking to ensure construction will not further encroach into these habitats. The fencing shall be inspected by the Contractor before the start of each workday and maintained by the Contractor until completion of the Project. The Project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-2: Every individual working on the Project construction must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding special status species, including the coastal California gnatcatcher and sensitive habitats within the BSA.

The training shall include species identification characteristics, Best Management Practices (BMPs) to be implemented, Project-specific avoidance measures that must be followed, and the

steps necessary if the species is encountered at any time. Personnel would attend biological awareness training prior to working within the Project area.

BIO-3: Project activities would not encroach into any adjacent habitat designated as Hardline Preserve areas within the HMP.

BIO-4: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect regional water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- Soil exposure must be minimized through the use of temporary BMPs, groundcover, and stabilization measures
- The contractor must conduct periodic maintenance of erosion and sediment-control measures

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: If nighttime work must occur, any nighttime lighting must be shielded down and away from preserve areas.

BIO-7: Where feasible, native vegetation will be trimmed rather than fully removed in areas where vegetation removal is required. Furthermore, invasive plant species must not be used within any landscaped areas.

BIO-8: The Project biologist (qualified/pre-approved by USFWS) will periodically monitor construction within the vicinity of sensitive habitats to ensure that vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly constructed and followed.

BIO-9: Permanent impacts to approximately 0.66 acres of coastal sage scrub habitat outside of the coastal zone shall be mitigated at a 2:1 mitigation ratio through use of credits at the City's Lake Calavera Mitigation Parcel. Although protocol level surveys for CAGN were not conducted, the impacted habitat is presumed to be occupied.

BIO-10: During the spring blooming season immediately prior to initial ground disturbing activities, a focused botanical clearance survey will be conducted within the patch of coastal sage scrub habitat that will be impacted by the Project. If a special status plant species is identified within this habitat community and cannot be feasibly avoided during construction, the Project team, in coordination with the appropriate regulatory agencies, will then identify appropriate measures to minimize adverse effects to special status plant species.

BIO-11: If a CAGN is identified nesting directly in or within 300 feet of Project limits all work must stop in that vicinity until the appropriate buffer and sound restrictions, determined in coordination with the city, are established. The established buffer and other restriction must remain until the Project

biologist determined that the juveniles have fledged. Clearing of occupied CAGN habitat cannot occur during the breeding season of CAGN, from March 1- August 15.

BIO-12: If vegetation is being removed from within CAGN habitat during the nesting season, a biologist must inspect the vegetation immediately prior to removal and monitor for the duration of initial vegetation clearing.

BIO-13: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-14: If hydroseed and plant mixes are used during or post-construction, plant species must consist of a biologist approved plant palette seed mix of native species sourced locally to the Project area.

BIO-15: The construction contractor shall avoid removing vegetation within the mixed chaparral habitat during the nesting bird season (February 15 –August 31). If vegetation must be removed within the breeding season, a pre-construction nesting bird survey must be conducted by a qualified/approved biologist no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey.

A no-disturbance buffer will be established around any active nest of migratory birds (width to be determined by a qualified biologist in coordination with the City) and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the city) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the city.

BIO-16: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction personnel must not feed or attract wildlife to the Project area.

BIO-17: The contractor must not apply rodenticide or herbicide within the BSA during construction.

FINDINGS

The Project would have a **Less Than Significant Impact with Mitigation Incorporated** to biological resources.

V. CULTURAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

CEQA established statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines

In 1990, the City developed the Cultural Resource Guidelines for the treatment of cultural resources consistent with federal, state, and local laws, as well as the Secretary of Interior's Standards for Archaeology and Historic Preservation. The City's guidelines establish procedures for resource investigation which include reviewing the City's confidential sensitivity model, conducting a records search and literature review of applicable materials, conducting a field survey, and reaching out to California Native American Tribes so that they have the opportunity to participate in field surveys, review of the project, and creation of recommended cultural resource mitigation measures. The guidelines also present a systemic method of preserving identified resources. The guidelines are applicable to cultural resources from the prehistoric through historic periods and are implemented during CEQA compliance.

Since 1990, the guidelines have been updated to address updates to the CEQA guidelines, AB 52, Section 106 of the National Historic Preservation Act, other changes to regulations and policy, and best practices in cultural resources management. The guidelines have since been renamed the Tribal, Cultural, and Paleontological Resources Guidelines, which were developed in consultation with the San Luis Rey Band of Mission Indians, cultural and paleontological resources professionals, City staff, and the public.

AFFECTED ENVIRONMENT

An Area of Potential Effects (APE) was established as the area of direct and indirect effects which encompasses an approximately 14.5 acre area. The APE includes the potential staging areas, construction areas, vegetation/tree removal, temporary construction easements, and utility relocation. The approximate limits of the APE include the entire segment of El Camino Real from Poinsettia Lane to Camino Vida Roble to accommodate all roadway improvements, which includes the 1500-foot long segment of roadway between Cassia Road and Camino Vida Roble which will be widened (**See Figure 3**). Efforts to identify potential cultural resources in the APE included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System South Coastal Information Center (SCIC), consultation with the Native American Heritage Commission (NAHC), consultation with Native American tribes, and a pedestrian ground surface survey.

The SCIC records search did not identify any cultural resources within the Project APE, but did note that 55 cultural resources have been recorded within a half-mile of the Project, none of which would be impacted by the Project. The NAHC conducted a search of the Sacred Lands File and also did not locate any Native American cultural resources within the Project APE. Archaeologists Michelle Campbell, M.A. and Namat Hosseinion, M.A. conducted an archaeological field survey of the APE on June 1, 2020. The pedestrian survey was conducted at roughly 2-meter transect intervals. All APE conditions were fully recorded in the field notes. Exposed soils were inspected for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits. The field survey did not identify any archaeological or cultural resources within the APE.

Project notification letters were mailed to the following California Native American tribal governments who had previously requested to be notified of all City projects: Mesa Grande Band of Mission Indians, Rincon Band of Luiseño Indians, San Luis Rey Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians. The letters provided a summary of the Project and requested information regarding comments or concerns the tribal governments might have about the Project and whether any Native American cultural resources would be affected by implementation of the Project.

The Rincon Band of Luiseño Indians responded to the letter stating that they would like to consult on the Project and requested copies of existing documents pertaining to the Project, including all cultural documentation, geotechnical reports, and grading plans. All requested documents were sent to the Rincon Band of Luiseño Indians for their review. A meeting was later held between the Rincon Band of Luiseño Indians and the City to discuss the Project and the results of the archaeological survey. While the Rincon Band of Luiseño Indians did not know of any known Native American resources within the Project area, they stated that they believe the proposed Project activities have the potential to impact subsurface Native American cultural resources. The Rincon Band of Luiseño Indians recommended tribal monitoring for all ground disturbing activities within non-fill/native soil, preparation of a monitoring report, and development of cultural material and human remains discovery protocols. The Rincon Band of Luiseño Indians requested the City keep them informed of the Project's schedule, any changes to the proposed Project plans, and requested the opportunity to provide the recommended tribal monitoring services. Last, the Rincon Band of Luiseño Indians requested the City provide the proposed cultural/tribal cultural mitigation measures so that they could review and make recommendations. The City provided draft measures and met again with the Rincon Band of Luiseño Indians to review the measures and discuss the cultural report. The Rincon Band of Luiseño Indians again confirmed they knew of no existing Native American resources, but stated that there was concern for potential subsurface resources. The Rincon Band of Luiseño Indians stated that they would send their preferred mitigation measures to the City for use in the environmental document. These measures were sent via email following the meeting and are included in **Section XVIII, Tribal Cultural Resources**.

While results from the records search indicate that the area surrounding the Project APE has high sensitivity for archaeological resources, the pedestrian survey and map research revealed that the Project APE and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments, which means the potential for archaeological resources to be present with the APE is low. Further, a review of the geological formations and soils within and adjacent the APE revealed that Pleistocene and Eocene-aged geology and soils are present, which predate human presence in the area. The lack of younger soils in this area combined with the hilltop topography indicates that the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity; therefore, if archaeological resources are present, there should have been visible on the ground surface during the pedestrian survey. As no archaeological resources were identified within the APE as a result of these identification efforts and as the APE has been extensively modified in modern times, the APE has a low potential both for archaeological and buried archaeological resources.

a) *Less Than Significant with Mitigation Incorporated:* A records search for completed surveys and previously recorded resources within the APE and a half-mile radius was obtained from the SCIC, California State University, San Diego on March 10, 2020. The search examined the OHP Historic Properties Directory, Office of Historic Preservation (OHP) Determinations of Eligibility, California Inventory of Historical Resources, Historical Literature and Maps, Caltrans Bridge Inventory, General Land Office (GLO) and/or Rancho Plat Maps, Local Inventories, and Soil Survey Maps. No cultural resources have been documented within the APE. Furthermore, the pedestrian survey and Native American consultation did not identify any cultural resources; however, with any project, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of Mitigation Measures **CR-1** through **CR-3** detailed below and, if Native American resources are discovered, Mitigation Measure **TCR-1** discussed in **Section XVIII, Tribal Cultural Resources**, potential impacts from the Project would be **Less than Significant Impact with Mitigation Incorporated**.

b) *Less Than Significant with Mitigation Incorporated:* In an effort to identify archaeological resources that might be affected by the undertaking, a pedestrian survey, background research, and consultation with individuals and organizations were conducted. The SCIC record search disclosed 55 cultural resources within the half-mile record search boundary, but no resources within the APE. The City also consulted with the NAHC, asking them to review the Sacred Land Files for any Native American cultural resources that might be affected by the Project. The NAHC search of the Sacred Lands File did not identify any Native American resources within the APE. The pedestrian survey also did not observe any cultural resources within the APE. Review of the geological formations and soils within and adjacent the APE revealed that Pleistocene and Eocene-aged geology and soils are present, which predate human presence in the area. The lack of younger soils in this area combined with the hilltop topography indicates that the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity; therefore, if archaeological resources are present, they should have been visible on the ground surface during the pedestrian survey.

As the records search, Sacred Lands File search, and pedestrian survey did not identify any archaeological resources, the Project is not anticipated to impact any archaeological resources; however, with any project, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of Mitigation Measures **CR-1** through **CR-3** detailed below and, if Native American resources are discovered, Mitigation Measure **TCR-1** discussed in **Section XVIII**, Tribal Cultural Resources, potential impacts from the Project would be **Less than Significant Impact with Mitigation Incorporated**.

c) *Less Than Significant Impact With Mitigation Incorporated:* The pedestrian survey and map research revealed that the Project APE and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments, which means the potential for archaeological resources to be present with the APE is low. As the records search, Sacred Lands File search, and pedestrian survey did not identify any archaeological resources, the Project is not anticipated to impact any archaeological resources. In addition, due to the lack of younger soils in this area combined with the hilltop topography, the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity. However, with any project, there is always the possibility that unmarked burials may be unearthed during construction. This impact is considered potentially significant. Implementation of Mitigation Measure **CR-3** detailed below and, if the burials are determined to be Native American in origin, Mitigation Measure **TCR-1** discussed in **Section XVIII**, Tribal Cultural Resources, would reduce this impact to a **Less than Significant Impact with Mitigation Incorporated**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

- CR-1:** Cultural awareness and sensitivity training shall be provided to construction crews working within the Project area. In addition, the City will inform the Rincon Band of Luiseño Indians of the construction schedule to ensure the tribe is afforded the opportunity to monitor Project ground disturbing activities.
- CR-2:** If previously unidentified cultural materials are unearthed during construction, work shall be halted within 50 feet of the area until a qualified archaeologist/Tribal Monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Additional archaeological survey will be needed if Project limits are extended beyond the present survey

limits. If cultural materials are prehistoric in nature, the Rincon Band of Luiseño Indians shall be consulted regarding appropriate treatment protocol.

CR-3: Section 7050.50 of the California Health and Safety Code establishes the intentional disturbance, mutilation, or removal of interred human remains a misdemeanor. This code also requires that upon the discovery of human remains outside of a dedicated cemetery excavation or disturbance of land cease until a county Medical Examiner makes a report. If the Medical Examiner determines the remains are not the result of a crime scene and are not Native American, a qualified archaeologist shall be consulted to assess the significance of the find and develop a plan for documentation and removal. Should the remains be determined to Native American, then **TCR-1** shall be implemented.

FINDINGS

The Project would have a **Less Than Significant Impact with Mitigation Incorporated** related to cultural resources.

VI. ENERGY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Less than Significant Impact: The proposed Project would require fuel for construction equipment. All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation administered by the California Air Resources Board (CARB, 2016). The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. As another benefit of these restrictions, off-road diesel-powered vehicles would consume less fuel and combust fuel more efficiently. The Project would also be subject to mandates on portable diesel generators and the California Environmental Protection Agency's (EPA) strict on-road emissions standards for heavy-duty engines. These regulations contain strict air emissions standards that result in efficient engine fuel consumption rates (compared to previous standards). As such, temporary energy use during construction of the proposed Project would not result in a significant increase in peak or base demands on regional energy supplies or require additional capacity from local or regional energy supplies. As such, project construction activities would not result in a wasteful, inefficient, or unnecessary consumption of energy resources.

Following construction, the only additional energy expenditures would be for occasional maintenance. According to the El Camino Real Widening Transportation Impact Analysis Report (STC Traffic, Inc.,

December 2020) the Project is not anticipated to attract more traffic due to the roadway widening. Furthermore, the construction of new sidewalk on the east side of the street would provide connectivity to pedestrians between Camino Vida Roble and Cinnabar Way, which currently does not exist, and would promote pedestrian and bicycle movement. As the Project would facilitate more efficient transportation along El Camino Real, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. Therefore, the Project would have a **Less than Significant Impact**.

b) No Impact: In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions that the city will undertake to achieve its proportional share of state greenhouse gas (GHG) emissions reductions. According to the City of Carlsbad's *Guidance to Demonstrating Consistency with the Climate Action Plan* (February 2020), projects that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the City of Carlsbad CAP. In May 2020, CAP Amendment No. 1 was adopted. This amendment revised the GHG inventory and reduction targets and forecast.

As the Project is intended to improve current and future traffic operations, operational emissions are anticipated to be lower with the proposed Project. The Project would result in a temporary increase of 337 tons of GHG emissions during construction, which is below the 900 MTCO₂e annual screening threshold for construction emissions set by the City of Carlsbad CAP.

Furthermore, Goal 9.G-3 of the City of Carlsbad General Plan Sustainability Element promotes energy efficiency and conservation in the community. As discussed above, the Project would facilitate more efficient transportation along El Camino Real, which in turn promotes efficient energy use. Therefore, the Project would not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. Therefore, the Project will have **No Impact**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Project will have a less than significant impact to energy; therefore, no avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have a **Less Than Significant Impact** to energy.

VII. GEOLOGY AND SOILS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soils, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the CEQA.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and Project design. Earthquakes are prime considerations in the design and retrofit of structures.

a) Less than Significant Impact: The Project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. There are no active faults that run directly through Carlsbad. Additionally, the California Geologic Survey does not include the City of Carlsbad on its list of cities affected by Alquist-Priolo Earthquake Fault Zones. The nearest fault to the city is the Newport-Inglewood-Rose Canyon Fault, which runs offshore of the western edge of the city (approximately 5 miles) and is considered active.

The topography within the Project limits is a gentle slope, ranging from 2 to 9 percent, however the Project area is adjacent to a canyon creating slopes from 2 to 50 percent. According to the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan, landslide susceptibility does not occur within or near where the proposed Project vicinity. Seismic-related failure, including liquefaction, is also not anticipated to occur within or near the proposed Project vicinity, according to the City of Carlsbad General Public Plan Safety Element. Design and construction in accordance with Caltrans' seismic design criteria will ensure that substantial impacts due to seismic forces and displacements are avoided or minimized to the extent feasible. The Project is not on a geologic unit or soil that is unstable or that would become unstable as a result of the Project. On-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is not anticipated. Therefore, the Project would have a **Less than Significant Impact**.

b) *Less Than Significant Impact:* According to the Natural Resource Conservation Service, soils within the Project area are classified as Huerhuero loam, 2 to 9 percent slopes and Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded (NRCS 2020). The proposed roadway improvements would involve minimal ground disturbance during construction, include a fill embankment as part of the road widening to minimize impacts to adjacent private properties, and construction of biofiltration stormwater facilities (rain garden) along the proposed sidewalk.

Potential impacts to soils would be minimized through soil stabilization measures covered within the required General Construction MS4 Permit and implementation of the Storm Water Pollution Prevention Plan (SWPPP). Erosion control practices outlined in a SWPPP. In addition, measures **BIO-4** and **BIO-5** in **Section IV** of this document would further reduce impacts to erosion of soil. Therefore, the Project would have a **Less than Significant Impact**.

c) *No Impact:* As stated in discussion **a)**, the Project is not located on soil that is known to be unstable, or would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **No Impact** would occur due to the Project.

d) *Less Than Significant Impact:* According to the Natural Resource Conservation Service, soils within the Project area are classified as Huerhuero loam, 2 to 9 percent slopes and Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded (NRCS 2020). These soils are considered to have high shrink-swell behavior, which indicate expansive soils. However, the Project would be constructed compliance with the City roadway design guidelines and standard construction specifications. The Project would include biofiltration stormwater facilities (rain garden) along the proposed sidewalk that would prevent water from collecting on or adjacent to pavements, thereby discouraging soil saturation along the roadway. Therefore, the Project would have a **Less than Significant Impact** relating to expansive soils.

e) *No Impact:* The Project would include construction of biofiltration stormwater facilities (rain garden) along the proposed sidewalk. The Project would not utilize septic tanks or an alternative waste water disposal system on the site. Therefore, the Project would have **No Impact** due to soils incapable of adequately supporting septic systems, and no mitigation is required.

f) *Less Than Significant With Mitigation Incorporated:* According to the Carlsbad Tribal, Cultural, and Paleontological Guidelines (City of Carlsbad, September 2017), the geologic formations beneath the Project area primarily consist of very old paralic deposits of the middle to early Pleistocene. Based on the sensitivity model included in the Carlsbad Tribal, Cultural, and Paleontological Guidelines, these paralic deposits have been determined to have "Low Paleontological Sensitivity" and are highly unlikely to yield

any paleontological resources. Further, environmental surveys conducted for the Project and map research revealed that the Project area and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments. These previous disturbances further reduce the potential that an intact and unique geologic feature is present within the Project area. However, with any project, there is always the possibility that undiscovered fossils may be unearthed during construction. If fossils are present in the Project area, they could be damaged by earth-disturbing activities (i.e., excavation and grading) during construction. Implementation of mitigation measures **GEO-1** through **GEO-3** would reduce potential impacts to unique paleontological resources to a **Less than Significant Impact with Mitigation Incorporated**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

GEO-1: Educate Construction Personnel in Recognizing Fossil Material

All construction personnel must receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that construction personnel can recognize fossil materials in the event that any are discovered during construction.

GEO-2: Stop Work if Substantial Fossil Remains are Encountered during Construction

If substantial fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities, activities will stop immediately until a State-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may include preparation of a report for publication describing the finds. The Project proponent will ensure that recommendations regarding treatment and reporting are implemented.

GEO-3: Resource Stewardship Measures

The following will be added to the Project's standard specification.

If paleontological resources are discovered at the job site, do not disturb the material and immediately:

1. Stop all work within a 60-foot radius of the discovery
2. Protect the area
3. Notify the Resident Engineer

The Project proponent investigates and modifies the dimensions of the protected area if necessary.

Do not take paleontological resources from the job site. Do not resume work within the specified radius of the discovery until authorized. A specification alerting the construction contractor that paleontological monitoring will occur during activities that will disturb native sediments will also be added to the Project's specifications.

Please refer to **Section IV** Biological Resources for measures **BIO-4** and **BIO-5** with regards to soil erosion.

FINDINGS

The Project would have a **Less Than Significant Impact with Mitigation Incorporated** to geology and soils.

VIII.GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and certain hydro-fluorocarbons. These gases, known as greenhouse gases (GHGs), allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Emissions of GHGs in excess of natural ambient concentrations are thought to be responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming," the trend of warming of the Earth's climate from anthropogenic activities. Global climate change impacts are by nature cumulative; direct impacts cannot be evaluated because the impacts themselves are global rather than localized impacts.

California Health and Safety Code Section 38505(g) defines GHGs to include the following compounds: CO₂, CH₄, N₂O, ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO₂e) units for comparison. The CO₂e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHGs related to the project are those primarily related to energy usage: CO₂, CH₄, and N₂O.

In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions that the city will undertake to achieve its proportional share of state greenhouse gas (GHG) emissions reductions. The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. The CAP Amendment No.1 was adopted in May 2020 to revise the greenhouse gas inventory, reduction targets and forecast, updated reductions from existing measures, and incorporated Community Choice Energy as a new reduction measure. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

In March 2019, the City Council adopted several ordinances aimed at reducing GHG in new construction and alterations to existing buildings. Projects requiring building permits will be subject to these ordinances, which address the following:

- Energy efficiency (Ord. No. CS-347)

- Solar photovoltaic systems (Ord. No. CS-347)
- Water heating systems using renewable energy (Ord. Nos. CS-347 and CS-348)
- Electric vehicle charging (Ord. No. CS-349)
- Transportation demand management (Ord. No. CS-350)

The CAP established a screening threshold of 900 metric tons carbon dioxide equivalent (MTCO₂e) per year for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the Consistency Checklist and/or a self-developed GHG emissions reduction program (Self-developed Program). Projects that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the CAP. Regardless of this screening threshold, all projects requiring building permits are subject to the above-referenced CAP ordinances. Such projects are therefore required to show compliance with the ordinances through submittal of a completed Consistency Checklist and shown on site plans and building plans.

For a proposed project that requests a land use change through a General Plan amendment, master plan/specific plan amendment, and/or zone change, a project-specific GHG emissions analysis as described in Section 4 of the P-31 GHG Guidance must be submitted as part of the discretionary permit application. If the study reveals the project to be more GHG-intensive as compared to that assumed for the existing land use designation, and the project's emissions would be at or above the screening threshold of 900 MTCO₂e, the project applicant would need to demonstrate compliance with the CAP ordinances through completion of a CAP Consistency Checklist and identify additional mitigation measures to offset the increase in emissions resulting from the land use change.

The City's CAP contains a baseline inventory of GHG emissions for 2005, an updated baseline inventory for 2011, a projection of emissions to 2035 (corresponding to the General Plan horizon year), a calculation of the city's targets based on a reduction from the 2005 baseline, and emission reductions with implementation of the CAP.

The City emitted a total of 630,310 MTCO₂e in 2005 and 705,744 MTCO₂e in 2011. Accounting for future population and economic growth, the city projects GHG emissions of 1,007,473 MTCO₂e in 2035. The CAP set a target to achieve a 15 percent reduction from the 2005 baseline by 2020 based on the recommendation by the California Air Resources Board (ARB). The CAP also includes a reduction target to reduce emissions below the 2005 baseline by 49 percent by 2035. Therefore, the city must implement strategies that reduce emissions to 535,763 MTCO₂e in 2020 and 321,458 MTCO₂e in 2035. By meeting the 2020 and 2035 targets, the city will meet the 2030 state goal identified in Senate Bill 32 and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05.

a) *Less than Significant Impact:* Greenhouse gas (GHG) emissions can be divided into those produced during operations and those produced during construction. GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds. As the Project is intended to improve current and future traffic operations, operational emissions are anticipated to be lower with the proposed Project. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. The Project would result in a temporary increase of 337 tons of GHG emissions during construction activities (maximum emissions of 6,903 lbs/day during grading/excavation). However, work would be short-term in duration and is not anticipated to result in significant adverse

construction GHG emissions. The emission of GHGs during construction of the proposed Project would be negligible and would have a **Less Than Significant Impact**.

b) *Less than Significant Impact:* As stated above, the City of Carlsbad adopted a CAP (last amended in May 2020) that outlines actions that the city will undertake to achieve its proportional share of state greenhouse gas (GHG) emissions reductions. The CAP demonstrates that, with implementation of applicable General Plan goals and policies, coupled with state and federal actions, and execution of CAP measures and actions, the city will reduce GHG emissions in alignment with state goals established by Assembly Bill 32 and Senate Bill 32, and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05.

As the Project is intended to improve current and future traffic operations, operational emissions are anticipated to be lower with the proposed Project. As discussed above, the Project would result in a temporary increase of 337 tons of GHG emissions during construction, which is below the 900 MTCO₂e annual screening threshold for construction emissions set by the City of Carlsbad CAP. Therefore, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emission. The Project would have a **Less Than Significant Impact**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have a **Less Than Significant Impact** to greenhouse gas emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during Project construction.

AFFECTED ENVIRONMENT

This section presents results of an Initial Site Assessment (ISA) of the Project. The purpose of the ISA is to evaluate the Subject Properties within one mile of the Project study area for the presence of Recognized Environmental Conditions (RECs) and/or Activity and Use Limitations (AULs), which are:

REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."

AUL: "...an explicit recognition by a federal, tribal, state, or local agency that residual levels of hazardous substances or petroleum hydrocarbons may be present on the property, and that unrestricted use of the property may not be acceptable."

The properties assessed for this ISA (Subject Properties) includes El Camino Real, existing roadway right-of-way, private property right-of-way, and existing open space and/or vacant and undeveloped land adjacent to the Project area.

A summary of the published lists of known hazardous substance sites was provided by Environmental Data Resources (EDR). EDR reviewed standard federal, state, and local listings of known sites within a one-mile radius. A total of 74 sites were identified within a one-mile radius of the Project area. The 74 sites are presented on **Table 5**. There are 18 sites within the Project area that have been listed on known hazardous substance sites; however, none of the hazardous sites associated with these businesses would be disturbed by the Project as they are largely related to the industry practices associated with the business type (e.g. pet stores, greenhouses, industrial manufacturing, etc.).

Table 5: Known Hazardous Substance Sites within 1 Mile of Study Area

Known Hazardous Substance Site	Listing Acronym
<u>All Cats Hospital</u> <u>2010 Cassia Rd Ste 100</u>	<u>SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS, FINDS</u>
<u>Carlsbad Family Dentistry</u> <u>2010 Cassia</u>	<u>SAN DIEGO CO. HMMD, FINDS</u>
<u>Greys River, LLC</u> <u>6405 El Camino Real</u>	<u>HWTS, HAZNET</u>
<u>Carlsbad Kingdom Hall</u> <u>Camino Vida Roble At El Camino Real</u>	<u>NPDES, CIWQS</u>
<u>Ontogen Corporation</u> <u>6451 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Ponto Floral Inc</u> <u>6515 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Bird Rock Tropicals</u> <u>6523 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>La Costa Greens Neighborhood 1 3</u> <u>Se Of Camino Vida Roble & El Camino Real</u>	<u>CIWQS</u>
<u>6451 El Camino Real</u> <u>6451 El Camino Real</u>	<u>CIWQS</u>

<u>First Industrial Realty</u> <u>6451 El Camino Real</u>	<u>HWTS, HAZNET</u>
<u>Vicente Tabares Greenhouse</u> <u>6500 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Victoria Fernandez Green House</u> <u>6502 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Republic Tool & Manufacturing</u> <u>6451 El Camino Real</u>	<u>HWTS, HAZNET</u>
<u>Meadowlark Peroxide Station</u> <u>6450 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Evon Gardens</u> <u>6525 El Camino Real</u>	<u>SAN DIEGO CO. HMMD</u>
<u>Us Microbics Inc</u> <u>6451 El Camino Real Ste C</u>	<u>HWTS, HAZNET</u>
Darton International Inc 2380 Camino Vida Roble Ste J-L	CERS HAZ WASTE, CERS
At And T Systems Leasing Corp 2375 Camino Vida Roble	RCRA NONGEN / NLR, FINDS, ECHO
Strata Skin Sciences Inc 2375 Camino Vida Roble Ste B	RCRA NONGEN / NLR
E G Electro Graph Inc 2365 Camino Vida Roble	HWTS, RCRA-SQG, SAN DIEGO CO. HMMD, FINDS, ECHO, HAZNET
Well Being Medical Clinic 6260 El Camino Real Ste 105	RCRA NONGEN / NLR
La Costa Ranch Co 6670 El Camino Real	SAN DIEGO CO. SAM, CPS-SLIC, SAN DIEGO CO. HMMD, CERS
Cisco Systems Inc 2320 Camino Vida Roble Ste 100	RCRA NONGEN / NLR
Luxtera, Inc. 2320 Camino Vida Roble Ste 100	CERS HAZ WASTE, CERS, RCRA NONGEN / NLR
Callaway Hickory Stick 2345 Camino Vida Roble	RCRA-SQG, FINDS, ECHO
Esw Clean Tech 2345 Camino Vida Roble	RCRA NONGEN / NLR
Custopharm Development Company Inc 2325 Camino Vida Roble	RCRA-SQG, SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS, RCRA NONGEN / NLR
Ontogen Corp 2325 Camino Vida Roble	HWTS, RCRA-SQG, FINDS, ECHO, HAZNET
Electro Surface Technologies 2221 Las Palmas Dr Ste B	HWTS, RCRA NONGEN / NLR, FINDS, ECHO, HAZNET
Palomar Laundry 2221 Las Palmas Drive	HWTS, RCRA-SQG, SAN DIEGO CO. HMMD, CERS HAZ WASTE, HAZNET, CERS

Pacific Valet Cleaners 2221 Las Palmas Dr	EDR HIST CLEANER
Palomar Technologies Inc 6305 El Camino Real	RCRA NONGEN / NLR
Viasat Inc 6305 El Camino Real	RCRA NONGEN / NLR
Intl Robomation/Intelligence 2281 Las Palmas Drive	RCRA NONGEN / NLR, FINDS, ECHO
Electro Surface Technologies, Inc 2281 Las Palmas Dr	SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS
Microprobe Inc/Astria Semiconductor Holdings Inc 2281 Las Palmas Dr	HWTS, SAN DIEGO CO. HMMD, CERS HAZ WASTE, HAZNET, CERS
Electro Surface Technologies Inc 2281 Las Palmas Dr Ste 101	RCRA NONGEN / NLR
Formfactor Inc 2281 Las Palmas Dr Ste 102	RCRA NONGEN / NLR
Leslie Dean 1941 Swallow Lane	RCRA NONGEN / NLR
Oceanside Glasstile Co 2293 Cosmos Ct	HWTS, RCRA-SQG, HAZNET
Hughes Lightvalve Prod Inc 2310 Camino Vida Roble	RCRA-SQG, FINDS, ECHO
Biocept Inc 2151 Las Palmas Dr Ste C	HWTS, RCRA-SQG, HAZNET
Turbo International 2151 Las Palmas Dr Ste E	HWTS, SAN DIEGO CO. HMMD, CERS HAZ WASTE, HAZNET, CERS, RCRA NONGEN / NLR
Seacoast Science Inc 2151 Las Palmas Dr Ste C	RCRA NONGEN / NLR
Mikron Instruments 2151 Las Palmas Dr Ste D	HWTS, SAN DIEGO CO. HMMD, CERS HAZ WASTE, HAZNET, CERS
Microprobe 2280 Las Palmas Dr Ste 102	RCRA NONGEN / NLR
Sprint Carlsbad Switch Cacbda 2160 Las Palmas Dr	AST, SAN DIEGO CO. HMMD, CERS TANKS, CERS
Pacific Stone Floor Inc 2270 Camino Vida Roble	RCRA NONGEN / NLR, FINDS, ECHO
Uc Santa Barbara 2270 Camino Vida Roble Ste D	RCRA NONGEN / NLR
Jordan & Company 2270 Camino Vida Roble Ste F	RCRA NONGEN / NLR, CERS HAZ WASTE, CERS

Southwest Assembly Company 2265 Camino Vida Roble	HWTS, RCRA NONGEN / NLR, HAZNET
Sgi Carlsbad 2265 Camino Vida Roble	RCRA-SQG, FINDS, ECHO
Viasat Inc 2290 Cosmos Ct	RCRA NONGEN / NLR, SAN DIEGO CO. HMMD, CERS HAZ WASTE, CHMIRS, CERS
Naturemaker Inc 6225 El Camino Real Ste 110	RCRA NONGEN / NLR, SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS
Carlsbad Unified School District 6225 El Camino Real	RCRA NONGEN / NLR, SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS
Watkins Manufacturing Corp 6225 El Camino Real	HWTS, RCRA-SQG, FINDS, ECHO, EMI, HAZNET, CIWQS
Michael Carpenter 6919 Quail Place Unit F	RCRA NONGEN / NLR
Ek Properties 6905 Quail Place	RCRA NONGEN / NLR
Vista Biologicals Corp 2120 Las Palmas Dr A-D	SAN DIEGO CO. HMMD, CERS HAZ WASTE, CERS, RCRA NONGEN / NLR
Creative Nail Design Inc 2270 Cosmos Court	RCRA NONGEN / NLR, FINDS, ECHO
Philips/Respironics 2271 Cosmos Ct	RCRA NONGEN / NLR, SAN DIEGO CO. HMMD, CERS HAZ WASTE, NPDES, CIWQS, CERS
Pacific Bell Telephone Co Dba At&T Calif 2175 Camino Vida Robles	RCRA-LQG, HIST UST, FINDS, ECHO, UST, SAN DIEGO CO. HMMD, CERS HAZ WASTE, SWEEPS UST, CERS TANKS, CERS
At&T California - Db412 2175 Camino Vida Roble	AST
Pacific Recorders & Engineerin 2080 Las Palmas Dr	SAN DIEGO CO. SAM, CPS-SLIC, CERS
Facility 13600 Tank #2 6350 Yarrow	SAN DIEGO CO. HMMD, CHMIRS, HIST CORTESE
Hawthorne Machinery Inc 2065 Camino Vida Roble	SAN DIEGO CO. SAM, UST, AST, SAN DIEGO CO. HMMD, SWEEPS UST, CORTESE, SAN DIEGO CO LOP, CERS, RCRA-SQG, LUST, FINDS, ECHO, LUST
Cal Bond Inc 6110 Yarrow Dr	SAN DIEGO CO. SAM, CPS-SLIC, SAN DIEGO CO. HMMD, CERS
Hughes-Jvc Technology Corp 6155 El Camino Real	SAN DIEGO CO. SAM, SAN DIEGO CO. HMMD, CHMIRS, CORTESE, HIST CORTESE, SAN DIEGO CO LOP, CERS
Industrial Products Devision 6155 El Camino Real	LUST, CPS-SLIC, HIST UST
Hughes Air Co/Ind. Prod. Div. 6155 El Camino Real	LUST, SWEEPS UST, EMI, HWP, CERS

Southeast Elementary School Poinsettia Lane	ENVIROSTOR, SCH
Poinsettia Elementary School 2445 Mica Rd	HWTS, ENVIROSTOR, SCH, SAN DIEGO CO. HMMD, CERS
Ocean Air Flight Services Palomar Airport	NOTIFY 65
Melles Griot Laser Division 2251 Rutherford Rd	HWTS, RCRA-SQG, ENVIROSTOR, SAN DIEGO CO. HMMD, ICIS, FINDS, ECHO, HAZNET
Bold and <u>underline</u> indicates a subject property within the Project study area	

a) Less than Significant with Mitigation Incorporated: The Project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within the designated staging area for the Project as defined in **Section IV** of this document in biological measures **BIO-5**. The use of hazardous materials would be temporary, and the Project would not include a permanent use or source of hazardous materials. By complying with Mitigation Measure **HAZ-1** the Project would have a **Less Than Significant Impact with Mitigation Incorporated** from temporary construction equipment and activities.

b) Less Than Significant with Mitigation Incorporated: Potential hazardous materials during construction activities can occur due to upset within the Project area. Potentially hazardous materials identified adjacent to the Project area include: high-pressure gas and petroleum lines, heavy metals in pavement striping and transformers, and aerially-deposited lead (ADL), which are discussed below.

High-Pressure Gas and Petroleum Lines

There are dual high-pressure petroleum lines running underneath the median and high-pressure gas line running parallel to the Project that could present a significant environmental impact if impacted during construction. Landscaping and streetscape improvements along the median would not disturb the ground deep enough to impact high-pressure petroleum lines underneath the median. The proposed Project would potentially involve utility relocations to accommodate the proposed improvements to the roadway corridor. In addition, ground disturbance activities that would occur near the high-pressure gas lines include construction of a fill embankment as part of the road widening to minimize impacts to adjacent private properties, and construction of biofiltration stormwater facilities along the proposed sidewalk. Preliminary potholing to locate the gas lines and coordination with San Diego Gas & Electric was conducted to ensure excavation during construction would not impact any gas lines. No impacts to high-pressure gas and petroleum lines are anticipated.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) can occur in serpentine rock. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. A review of the "General Location Guide for Ultramafic Rocks in California – Areas likely to Contain Naturally Occurring Asbestos" (CGS Open-file Report 2000-19, 2000) indicated that NOA was not mapped on, or in the near vicinity of the Project area, or in San Diego County. No impacts from asbestos containing materials are anticipated.

Aerially Deposited Lead

An ADL Report was prepared on June 17, 2020 that included a field and laboratory investigation of soils in the Project area. Based on the field and testing results, while on-site soils down to 3 feet below grade are considered “Non-Designated” for ADL and can be reused, one 4-foot boring sample taken from the Project area included soils classified as “Type R1”. The recommendations for “Type R1” soils based on the June 17, 2020 ADL Report are included under Mitigation Measure **HAZ-5**. Implementation of Mitigation Measure **HAZ-5** would ensure impacts related to release of ADL are Less than Significant with Mitigation Incorporated.

With any project that involves excavation, there is a possibility of encountering unknown hazardous contamination during construction. With the implementation measure **HAZ-2** through **HAZ-5**, Project impacts from upset or accident conditions will be reduced to a **Less Than Significant Level with Mitigation Incorporated**.

c) *Less Than Significant Level with Mitigation Incorporated:* The nearest school, Aspirations Pre-school, is approximately 0.25 miles north of the Project area along El Camino Real. However, as discussed above, with the implementation measure **HAZ-1** through **HAZ-5**, impacts related to potential handling or emissions of hazardous materials will be reduced to a **Less Than Significant Level with Mitigation Incorporated**.

d) *No Impact:* Based on the EDR records search conducted for the Project ISA, there are 18 subject properties within the Project area that have been listed on known hazardous substance sites; however, none of the hazardous associated with these businesses would be disturbed by the Project as they are largely related to the industry practices associated with the business type (e.g. pet stores, greenhouses, industrial manufacturing, etc.). There are no open/active cases of hazardous waste remediation within the Project area; therefore, the Project does not have potential to encounter hazardous wastes associated with the listings on the known hazardous substance sites. Therefore, the Project would have **No Impact**.

e) *Less Than Significant Impact:* The McClellan-Palomar Airport is less than one mile northwest of the Project area, and the proposed Project is within the McClellan-Palomar Airport Influence Area (Review Area 1). As the Project includes widening El Camino Real with an additional travel lane and providing sidewalk connectivity on the east side of El Camino Real, the Project would not result in a safety hazard for people residing in the Project area. Impacts related to excessive noise are Less than Significant and further discussed in **Section VIII, Noise**. Impacts would be **Less Than Significant**.

f) *Less Than Significant Impact:* The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan as traffic would be accommodated during construction to allow movement through the area. As the Project is intended to accommodate and relieve future congestion, the Project would improve future traffic conditions for emergency response or emergency evacuation. Impacts would be **Less than Significant**, and no mitigation is required.

g) *Less Than Significant Impact:* The City’s 2012 Landscape Manual requires all projects that contain or are bounded by hazardous vegetation and/or within an area bounded by a Very High Fire Severity Zone as determined by the Fire Code Official to prepare a fire protection plan. The plan is required to demonstrate how potential fire hazards will be addressed, including fuel modification zones. Since the Project is located within a “Very High Threat” fire hazard severity zone, a fire protection plan would be prepared in accordance with the City’s 2012 Landscape Manual. Furthermore, the Carlsbad HMP also requires projects with potential impacts to CAGN to prepare and implement a fire management program

for preserve areas as part of the detailed management plan. Since CAGN is presumed to be present within the Project area, a fire management program would be prepared in accordance with the Carlsbad HMP. With adherence to the 2012 Landscape Manual and Carlsbad HMP, the Project would not exacerbate wildfire risks; therefore, impacts would be **Less than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

HAZ-2: As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. If soil contaminated by hazardous waste is discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed.

HAZ-3: If any yellow pavement striping is to be removed during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provisions for REMOVE TRAFFIC STRIPE AND PAVEMENT MARKINGS.

HAZ-4: Any leaking transformers observed during the course of the Project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this Phase I Environmental Site Assessment. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

HAZ-5: Based on the Statewide Soil Management Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils (DTSC, 2016), the on-site soils down to 3 feet below grade can be reused with no minimum cover requirement. However, the soils below 3 feet can be reused with a minimum of 1-foot of soil cover. Contractors excavating, transporting, or stockpiling soil should prepare a Lead Compliance Plan in accordance with the Caltrans Code of Safety Practices, California Code of Regulations and Cal-OSHA standards addressing the presence of ADL in the soils within the Project area. Lead content testing results contained herein should be given to contractors handling the soils during construction.

FINDINGS

The Project would have a **Less Than Significant Impact with Mitigation Incorporated** to hazards and hazardous materials.

X. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with ground water recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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: <ul style="list-style-type: none"> i. Result in substantial erosion or siltation on- or offsite; ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv. Impede or redirect flood flows? 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States. The Project does not impact waters of the U.S. and does not require a Section 401 or 404 permit.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

Local Regulations: City of Carlsbad

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the

Statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects over 1 acre require a SWPPP to be prepared and implemented during construction. Caltrans activities less than 1 acre require a Water Pollution Control Program.

The San Diego RWQCB adopted the Municipal Storm Water Permit Order No. R9-2013-0001, NPDES No. CA50109266 (Permit), on May 8, 2013, to control waste discharges in urban runoff from the Municipal Separate Storm Sewer Systems (MS4s), also known as storm drain system, draining the watersheds in the County of San Diego, the incorporated cities of San Diego County and the San Diego Unified Port District, collectively known as Copermittees.

The Permit requires Responsible Agencies or Copermittees, in each of the region's Watershed Management Areas (WMAs) to develop Water Quality Improvement Plans (WQIPs). Through the WQIP, highest priority water quality conditions within the WMA are identified and strategies are implemented through the Copermittees' Jurisdictional Runoff Management Programs (JRMPs) to progress toward improvements in water quality. The WQIPs contain an adaptive planning and management process and a public participation component. The Permit and the WQIP process allow Copermittees to focus JRMPs on particular areas or water quality issues of concern.

The purpose of the City of Carlsbad JRMP is to implement strategies that effectively prohibit non-storm water discharges to the MS4 and reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP). This involves improving existing programs and developing new programs intended to minimize or eliminate the effects of jurisdictional runoff from the city on receiving water bodies. Improving the quality of the discharge from the MS4 may have beneficial effects on the local receiving water bodies.

For stormwater management during construction, the City follow the City's Storm Water Management and Discharge Control Ordinance (Chapter 15.12 City Municipal Code), and intends to obtain a Section 402 Construction General Permit from the State Water Resources Control Board (required for all projects with larger than 1 acre of disturbance). This permit will include a wide range of best management practices to be implemented by the contractor throughout construction. These measures will be documented in a SWPPP. The City will be responsible for ensuring the 402 Construction General Permit is obtained prior to construction, as well as monitoring the construction contractor to ensure SWPPP BMPs are implemented.

AFFECTED ENVIRONMENT

The proposed Project area does not contain any surface water features. The Project area is located in an urban environment and consists primarily of impermeable surfaces and urban landscaping. The nearest water source is an unnamed intermittent drainage located 800 feet south of Poinsettia Lane.

According to the Federal Emergency Management Agency (FEMA), the Project is located within an area of minimal flood hazard.

a) *Less than Significant with Mitigation Incorporated:* The Project will completely avoid direct impacts any surface waters, including streams and wetlands. With any construction project, indirect effects to receiving water may occur due to construction site soil disturbance and stormwater runoff. The Project's compliance with City and State water quality and stormwater best management practices will ensure the Project avoids and/or minimizes potential water quality impacts to the greatest extent practicable.

Implementation of Mitigation Measure **BIO-4** and **BIO-5** described in **Section IV** will ensure that Project impacts water quality standards or water discharger requirements will be **Less than Significant with Mitigation Incorporated**.

b) No Impact: The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. Therefore, there would be **No Impact** related to depletion of groundwater supplies or interference with groundwater recharge.

c) Less Than Significant with Mitigation Incorporated: With any construction project, indirect effects to receiving water may occur due to construction site soil disturbance and stormwater runoff. The Project's compliance with City and State water quality and stormwater best management practices will ensure the Project avoids and/or minimizes impacts related to erosion or surface runoff. The proposed Project would result in a net increase of 0.83 acres of new impermeable surface. However, the proposed Project would include biofiltration stormwater facilities along the sidewalk to treat stormwater runoff from El Camino Real. The change will not impede or redirect flood flows. Implementation of Mitigation Measure **BIO-4** and **BIO-5** described in **Section IV** will ensure that Project impacts to alteration of existing drainages and new impervious surface will be **Less than Significant with Mitigation Incorporated**.

d) Less than Significant Impact: According to the Federal Emergency Management Agency (FEMA), the Project is located within an area of minimal flood hazard. Impacts related to release of hazardous pollutants and associated mitigation measures are addressed in **Section IX**, Hazards and Hazardous Materials. Impacts related to pollutants from surface runoff would be reduced to a less than significant level with implementation of Mitigation Measure **BIO-4** and **BIO-5** described in **Section IV** and incorporation of biofiltration stormwater facilities as part of the proposed roadway improvements. Therefore, the Project would not risk release of pollutants in a flood hazard zone. According to the City of Carlsbad General Plan Public Safety Element, the Project area is not located within a dam inundation or tsunami risk area. The Project would not create a potential situation for inundation by seiche, tsunami, or mudflow. Impacts would be **Less than Significant**.

e) Less Than Significant with Mitigation Incorporated: The Project may have short-term impacts associated with sediment and runoff during grading and construction. Material imported during this process will be kept in piles of staged soil, and/or re-graded and distributed within the Project area. As noted above, the Project is subject to NPDES regulations since these improvements will exceed one acre. Compliance with existing regulations and implementation of BMPs would reduce potentially significant impacts associated erosion or siltation on- or offsite to levels less than significant. Implementation of Mitigation Measure measures **BIO-4** and **BIO-5** as described in **Section IV** will ensure that Project impacts to water quality will be **Less than Significant with Mitigation Incorporated**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Implementation of biological avoidance, minimization, and mitigation measures **BIO-4** and **BIO-5** as described in **Section IV** will reduce the water quality impacts to **Less Than Significant with Mitigation Incorporated**.

FINDINGS

The Project would have **Less Than Significant Impact with Mitigation Incorporated** to hydrology and water quality.

XI. LAND USE AND PLANNING	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

REGULATORY SETTING**City of Carlsbad Land Use and Community Design Plan**

The Land Use and Community Design Element presents the desirable pattern for the ultimate development of the city for the General Plan horizon (Year 2035). Land use within the Project area according to the City of Carlsbad General Plan Land Use Map is shown in **Figure 7**.

City of Carlsbad Local Coastal Program

The City of Carlsbad Local Coastal Program regulates all development within the state-designated Coastal Zone within the city boundaries. The City of Carlsbad Local Coastal Program consists of six geographic segments: the Agua Hedionda Lagoon LCP segment comprised of (all acreage figures are approximate) 1,100 acres; the Carlsbad Mello I segment with 2,000 acres; the Carlsbad Mello II segment with 5,250 acres; the West Batiquitos Lagoon/Sammis Properties segment with 200 acres; the East Batiquitos Lagoon/Hunt Properties segment with 1,000 acres; and the Village-Barrio segment with 150 acres. The area immediately adjacent west of El Camino Real is located within the Mello I and Mello II Segment boundaries.

a) No Impact: The Project would not divide an established community. The roadway widening would require 18 feet of right-of-way acquisition of the parcel along El Camino Real from Cinnabar Way to Camino Vida Roble. The new right-of-way would match the ultimate right-of-way to the north and south of the Project limits. There would be **No Impact** to established communities.

b) No Impact: The southern portion of the Project area is within the coastal zone and therefore must comply with the HMP Coastal Zone Standards, including regulations, impacts and mitigation. However, Project activities within the coastal zone portion of the Project area include the re-striping of El Camino Real. The re-striping would be confined to the roadway and would not encroach on adjacent habitat within the Hardline Preserve areas. Measures **BIO-1** through **BIO-8**, discussed in Section IV, Biological Resources, incorporate applicable coastal zone conservation standards and Adjacency Standards from the HMP. The Project would be consistent with all HMP Coastal Zone Standards. No impacts and no new Project features are anticipated to occur within the coastal zone within the Project area.

The roadway widening would require the acquisition of 18 feet of right-of-way from a parcel along the east side of El Camino Real from Cinnabar Way to Camino Vida Roble. The right-of-way acquisition would not result in a significant environmental impact or conflict any City of Carlsbad Land Use and Community

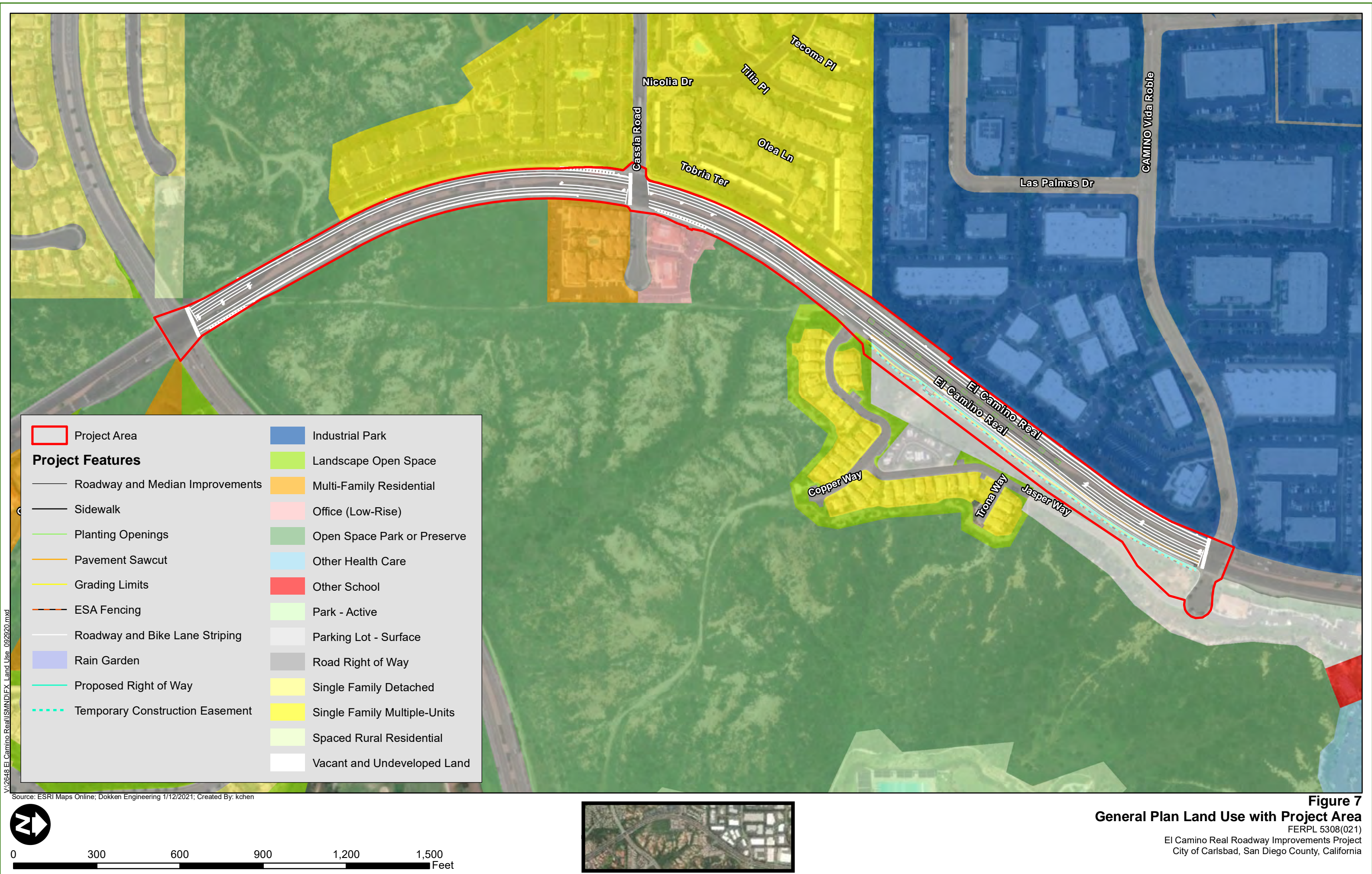
Design Element or Local Coastal Program policy or regulation. There would be **No Impact** to any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have **No Impact** to land use and planning.



V:\2648 El Camino Real\SMNDEX Land Use 092920.mxd

Source: ESRI Maps Online; Dokken Engineering 1/12/2021; Created By: kchen

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XII. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AFFECTED ENVIRONMENT

According to the City of Carlsbad General Plan Update, no mineral resources of economic value to the region and the residents of the state have been identified in Carlsbad. Carlsbad has not been delineated as a locally important mineral recovery site.

a-b) No Impact: Carlsbad is devoid of any non-renewable energy resources of economic value to the region and the residents of the State. Mineral resources within the city are no longer being utilized and extracted as exploitable natural resources. Therefore, no mineral resource impacts will occur as a result of any project. (EIR 13-02, page 3.15-1).

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have **No Impact** related to mineral resources.

XIII. NOISE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 2 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING**City of Carlsbad Residential Exterior Noise Standard**

It is the policy of the City that 60 decibel dB(A) CNEL is the exterior noise level to which residential units must be mitigated, except that for areas impacted by McClellan-Palomar Airport shall be mitigated at 65 dB(A) CNEL.

As the Project area falls within the McClellan-Palomar Airport Influence Area (Review Area 1) shown in Figure 2-1 of the City of Carlsbad General Plan Land Use & Community Design Element, exterior noise levels to residences within the Project area shall be subject to a 65 dB(A) CNEL exterior noise threshold.

City of Carlsbad Residential Interior Noise Standard

Interior noise levels for residential units shall be mitigated to 45 dB(A) CNEL when openings to the exterior of the residence are closed. If openings are required to be closed to meet the interior noise standard then mechanical verification shall be required.

City of Carlsbad Noise Guidelines Manual

The process used by the City of Carlsbad for evaluating potential noise impacts of a project includes considering if a proposed project would increase existing noise levels by more than 3 dB(A) CNEL.

In general, a 3 dB increase in noise level is barely detectable by the human ear (FHWA 2017). Therefore, for this Project, a permanent noise increase of more than 3 dB is considered a substantial noise increase. The Project would result in a significant noise impact if a substantial noise increase occurred where existing noise levels already exceed the City of Carlsbad Residential Exterior and Interior Noise Standards or if a substantial noise increase would result in exceedance of City thresholds as a result.

AFFECTED ENVIRONMENT

Land uses in the Project vicinity consist of residential, office, and open space parcels. The noise environment near the Project is dominated by traffic on El Camino Real.

Short-term measurements were conducted on July 20th, 2020 using a Larson Davis Model 824 Type 1 sound level meter. Measurements were taken over a 30-minute period at each site. **Table 6** summarizes the results of the short-term noise monitoring conducted in the Project area. Short-term noise measurements ST1 and ST2 were used to calibrate the noise model.

Table 6: Summary of Short-Term Measurements

Position	Address	Land Uses	Start Time	Duration (minutes)	Measured Leq
ST-1	Southeast corner of Cassia Road and El Camino Real	Residential	11:42 a.m.	30	69.5
ST-2	North of intersection of Trona Way and Jasper Way	Open Space	10:56 a.m.	30	56.5

Traffic noise levels were predicted using the FHWA Traffic Noise Model Version 2.5 (TNM 2.5). Loudest-hour traffic volumes, vehicle classification percentages, and traffic speeds under existing and design year (2040) conditions were provided by the El Camino Real Widening Transportation Impact Analysis Report (STC Traffic, Inc., December 2020) for input into the traffic noise model. The locations of the analyzed noise receivers are shown on **Figure 8**.

Table 7 shows the estimated existing exterior and interior noise levels in the Project area. For interior noise, it was assumed that standard residential design (with windows closed) would provide no more than 25 dBA of attenuation. **Table 7** also lists the location and type of development for each modeled receiver location.

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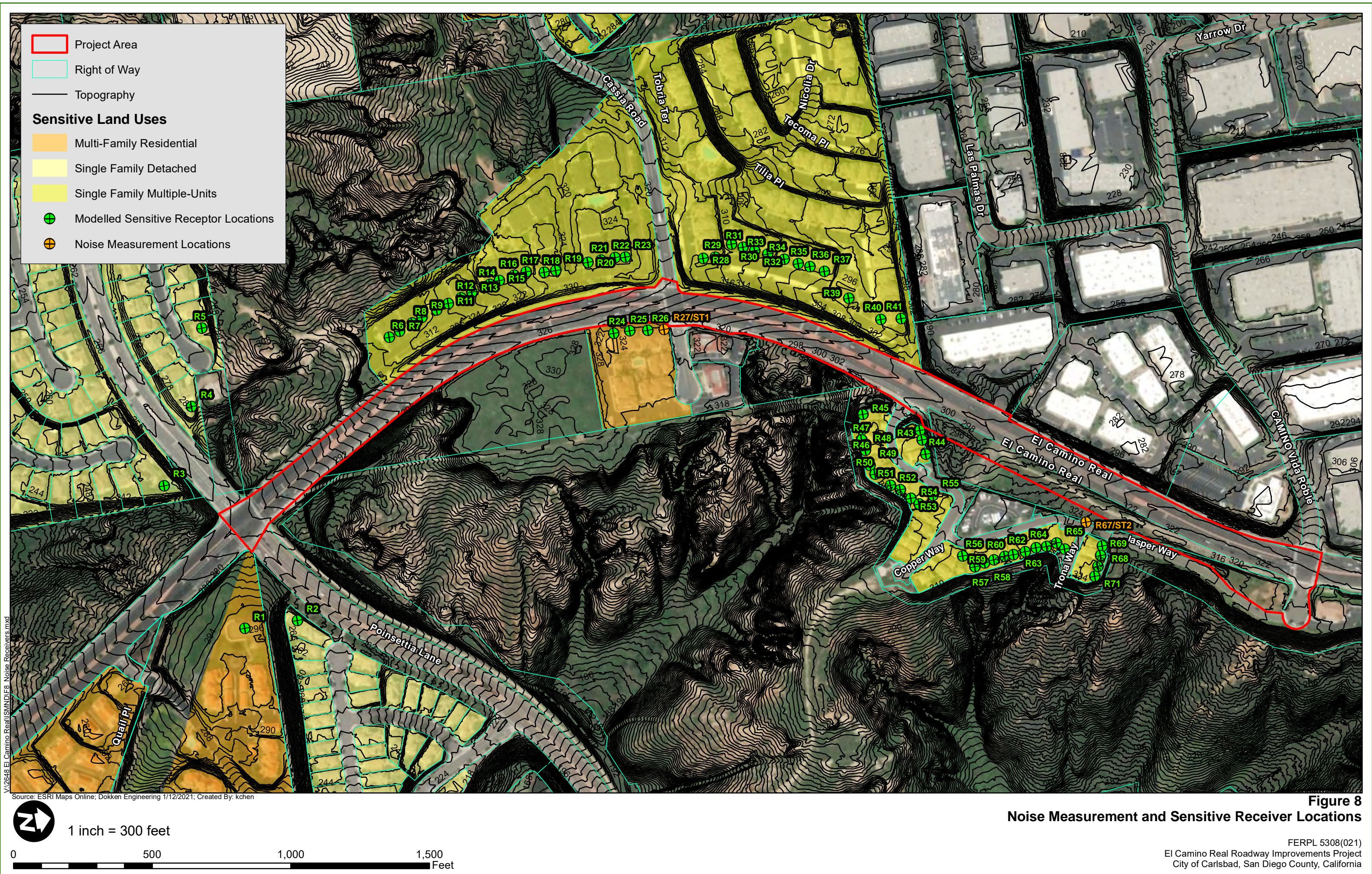


Figure 8
Noise Measurement and Sensitive Receiver Locations

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Table 7. Existing Exterior and Interior Noise Levels

Receiver No.	Location	Type of Land Use	Modeled Existing Exterior Noise Level (CNEL)	Modeled Existing Interior Noise Level (CNEL)
R1	1997-1999 Swallow Lane	Tennis Court	56.4	-
R2	6701 Limonite Court	SFR	56.4	31.4
R3	6814 Moorhen Place	SFR	56.1	31.1
R4	1777 Skimmer Court	SFR	58.2	33.2
R5	1764 Skimmer Court	SFR	54.2	29.2
R6	1901 Cassia Road	MFR	<u>67.9</u>	42.9
R7		MFR	<u>68.8</u>	43.8
R8		MFR	<u>68.5</u>	43.5
R9		MFR	<u>67.9</u>	42.9
R10		MFR	<u>68.0</u>	43.0
R11		MFR	<u>68.3</u>	43.3
R12		MFR	<u>68.3</u>	43.3
R13		MFR	<u>67.7</u>	42.7
R14		MFR	<u>67.7</u>	42.7
R15		MFR	<u>68.0</u>	43.0
R16		MFR	<u>67.9</u>	42.9
R17		MFR	<u>67.5</u>	42.5
R18		MFR	<u>68.8</u>	43.8
R19		MFR	<u>69.0</u>	44.0
R20		MFR	<u>68.3</u>	43.3
R21		MFR	<u>68.0</u>	43.0
R22		MFR	<u>67.7</u>	42.7
R23		MFR	<u>67.6</u>	42.6
R24	2005 Cassia Road	MFR	<u>74.3</u>	<u>49.3</u>
R25		MFR	<u>74.7</u>	<u>49.7</u>
R26		MFR	<u>74.1</u>	<u>49.1</u>
R27/ST1		MFR	<u>72.3</u>	<u>47.3</u>
R28	6401 – 6419 Tobria Terrace	MFR	62.4	37.4
R29		MFR	62.6	37.6
R30		MFR	59.7	34.7
R31		MFR	62.1	37.1
R32		MFR	62.4	37.4
R33		MFR	60.7	35.7
R34		MFR	60.3	35.3

Receiver No.	Location	Type of Land Use	Modeled Existing Exterior Noise Level (CNEL)	Modeled Existing Interior Noise Level (CNEL)
R35		MFR	62.6	37.6
R36		MFR	63.0	38.0
R37		MFR	61.5	36.5
R38		MFR	60.9	35.9
R39		MFR	61.7	36.7
R40		MFR	63.9	38.9
R41		MFR	64.0	39.0
R42	6449 Cinnabar Way	SFR	62.7	37.7
R43	6445 Cinnabar Way	SFR	58.5	33.5
R44	6441 Cinnabar Way	SFR	57.5	32.5
R45	6456 Cinnabar Way	SFR	65.3	40.3
R46	6452 Cinnabar Way	SFR	60.7	35.7
R47	6448 Cinnabar Way	SFR	59.0	34.0
R48	6444 Cinnabar Way	SFR	57.2	32.2
R49	6436 Cinnabar Way	SFR	54.9	29.9
R50	6440 Cinnabar Way	SFR	52.4	27.4
R51	2413 Copper Way	SFR	47.4	22.4
R52	6428 Cinnabar Way	SFR	46.2	21.2
R53	2417 Copper Way	SFR	46.1	21.1
R54	6420 Cinnabar Way	SFR	45.9	20.9
R55	Copper and Cinnabar Way	SFR	56.4	31.4
R56	Copper and Jasper Way	SFR	47.3	22.3
R57	6536 Jasper Way	SFR	34.1	9.1
R58	6428 Jasper Way	SFR	38.5	13.5
R59	2410 Copper Way	SFR	37.3	12.3
R60	6424 Jasper Way	SFR	38.6	13.6
R61	6420 Jasper Way	SFR	35.9	10.9
R62	6416 Jasper Way	SFR	35.5	10.5
R63	6412 Jasper Way	SFR	36.0	11.0
R64	6408 Jasper Way	SFR	36.8	11.8
R65	6404 Jasper Way	SFR	36.3	11.3
R66	6400 Jasper Way	SFR	44.8	19.8
R67/ST2	Trail along El Camino Real and Jasper Way	Nonresidential	66.6	-
R68	Trona Way	SFR	57.3	32.3

Receiver No.	Location	Type of Land Use	Modeled Existing Exterior Noise Level (CNEL)	Modeled Existing Interior Noise Level (CNEL)
R69	Trona Way	SFR	56.2	31.2
R70	Trona Way	SFR	58.9	33.9
R71	Trona Way	SFR	59.2	34.2

Bold and underlined indicates in exceedance of City thresholds. Shaded cells indicate nonresidential receivers where City thresholds don't apply.

Please note TNM 2.5 estimates noise generated solely by traffic, and does not account for other influences in the ambient noise environment. Noise levels analyzed further away from the roadway may be higher in reality than predicted by TNM 2.5

As shown in **Table 7**, exterior noise levels at R6 through R27 along El Camino Real within the Project area are currently exposed to noise levels exceeding the City of Carlsbad Residential Exterior Noise Standards. In addition, residents of the Cassia Heights Apartment complex located at 2005 Cassia Road, represented by R24 through R27, are currently potentially subject to interior noise levels in exceedance of the City of Carlsbad Residential Interior Noise Standard of 45 dBA CNEL.

a) Less than Significant Impact:

Permanent Increase in Ambient Noise Levels (Operational Noise)

The future 2040 traffic noise modeling results are summarized in **Tables 8 and 9**. As shown in **Tables 8 and 9**, noise levels would increase less than 1 dB CNEL over the next twenty years in the Project area due to traffic growth. Noise levels at R6 through R27 would continue to be in exceedance of City of Carlsbad Residential Exterior Noise Standards in 2040 without the Project. Noise levels at R24 through R27 would continue to be subject to interior noise levels in exceedance of the City of Carlsbad Residential Interior Noise Standard of 45 dBA CNEL.

With construction of the Project, the widened roadway would place traffic noise closer to adjacent residents. As summarized in **Tables 8 and 9**, noise levels would increase up to 1 to 5 dB CNEL over the next twenty years as a result of the Project.

Although residences along El Camino Real, including R6 through R29, R40, and R41 would be in exceedance of City noise thresholds in 2040 with the Project, the permanent noise increase would not exceed 3 dB. Because this is not considered a substantial noise increase, no significant impact would occur. At receivers R5, R62, R66, R68, and R69, where the noise increase would exceed 3 dB, the resulting noise levels would not exceed City thresholds. As the Project would not generate a substantial permanent increase in ambient noise levels in excess of standards established in the City of Carlsbad General Plan, impacts would be **Less than Significant**.

Table 8. Comparison of Existing and Future Exterior Noise Levels

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R1	1997-1999 Swallow Lane	Tennis Court	56.4	56.8	0.4	58.1	1.7
R2	6701 Limonite Court	SFR	56.4	56.9	0.5	57.6	1.2
R3	6814 Moorhen Place	SFR	56.1	56.5	0.4	57.6	1.5
R4	1777 Skimmer Court	SFR	58.2	58.6	0.4	59.8	1.6
R5	1764 Skimmer Court	SFR	54.2	54.6	0.4	55.3	1.1
R6	1901 Cassia Road	MFR	67.9	68.4	0.5	68.9	1.0
R7		MFR	68.8	69.2	0.4	69.9	1.1
R8	1901 Cassia Road	MFR	68.5	68.9	0.4	69.5	1.0
R9		MFR	67.9	68.3	0.4	68.7	0.8
R10		MFR	68.0	68.4	0.4	68.7	0.7
R11		MFR	68.3	68.7	0.4	69.2	0.9
R12		MFR	68.3	68.7	0.4	69.2	0.9
R13		MFR	67.7	68.1	0.4	68.3	0.6
R14		MFR	67.7	68.1	0.4	68.4	0.7
R15		MFR	68.0	68.4	0.4	68.9	0.9
R16		MFR	67.9	68.3	0.4	69.0	1.1
R17		MFR	67.5	67.9	0.4	68.2	0.7
R18		MFR	68.8	69.2	0.4	69.8	1.0
R19		MFR	69.0	69.4	0.4	70.0	1.0
R20		MFR	68.3	68.7	0.4	69.4	1.1
R21		MFR	68.0	68.4	0.4	69.2	1.2
R22		MFR	67.7	68.1	0.4	69.0	1.3
R23		MFR	67.6	68.0	0.4	69.0	1.4
R24	2005 Cassia Road	MFR	74.3	74.7	0.4	76.2	1.9

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R25		MFR	74.7	75.1	0.4	76.6	1.9
R26		MFR	74.1	74.5	0.4	76.2	2.1
R27/ST1		MFR	72.3	72.8	0.5	74.7	2.4
R28	6401 – 6419 Tobria Terrace	MFR	62.4	62.8	0.4	65.3	2.9
R29		MFR	62.6	63.0	0.4	65.3	2.7
R30		MFR	59.7	60.1	0.4	62.7	3.0
R31		MFR	62.1	62.5	0.4	64.5	2.4
R32		MFR	62.4	62.8	0.4	64.8	2.4
R33		MFR	60.7	61.1	0.4	63.4	2.7
R34		MFR	60.3	60.7	0.4	63.0	2.7
R35		MFR	62.6	63.0	0.4	64.7	2.1
R36		MFR	63.0	63.5	0.5	64.9	1.9
R37		MFR	61.5	61.9	0.4	63.5	2.0
R38		MFR	60.9	61.3	0.4	63.0	2.1
R39		MFR	61.7	62.1	0.4	63.4	1.7
R40		MFR	63.9	64.3	0.4	65.1	1.2
R41		MFR	64.0	64.4	0.4	65.1	1.1
R42	6449 Cinnabar Way	SFR	62.7	63.1	0.4	63.7	1.0
R43	6445 Cinnabar Way	SFR	58.5	58.9	0.4	59.8	1.3
R44	6441 Cinnabar Way	SFR	57.5	57.9	0.4	59.1	1.6
R45	6456 Cinnabar Way	SFR	65.3	65.8	0.5	66.3	1.0
R46	6452 Cinnabar Way	SFR	60.7	61.1	0.4	62.4	1.7
R47	6448 Cinnabar Way	SFR	59.0	59.4	0.4	60.9	1.9
R48	6444 Cinnabar Way	SFR	57.2	57.6	0.4	59.3	2.1
R49	6436 Cinnabar Way	SFR	54.9	55.3	0.4	57.5	2.6

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R50	6440 Cinnabar Way	SFR	52.4	52.8	0.4	55.7	3.3
R51	2413 Copper Way	SFR	47.4	47.9	0.5	48.8	1.4
R52	6428 Cinnabar Way	SFR	46.2	46.6	0.4	47.6	1.4
R53	2417 Copper Way	SFR	46.1	46.5	0.4	47.5	1.4
R54	6420 Cinnabar Way	SFR	45.9	46.3	0.4	47.7	1.8
R55	Copper and Cinnabar Way	SFR	56.4	56.9	0.5	58.5	2.1
R56	Copper and Jasper Way	SFR	47.3	47.7	0.4	49.7	2.4
R57	6536 Jasper Way	SFR	34.1	34.5	0.4	37.0	2.9
R58	6428 Jasper Way	SFR	38.5	38.9	0.4	40.5	2.0
R59	2410 Copper Way	SFR	37.3	37.7	0.4	39.5	2.2
R60	6424 Jasper Way	SFR	38.6	39.1	0.5	40.8	2.2
R61	6420 Jasper Way	SFR	35.9	36.3	0.4	38.8	2.9
R62	6416 Jasper Way	SFR	35.5	35.9	0.4	38.6	3.1
R63	6412 Jasper Way	SFR	36.0	36.4	0.4	38.8	2.8
R64	6408 Jasper Way	SFR	36.8	37.3	0.5	39.8	3.0
R65	6404 Jasper Way	SFR	36.3	36.7	0.4	39.4	3.1
R66	6400 Jasper Way	SFR	44.8	45.3	0.5	48.8	4.0
R67/ST2	Trail along El Camino Real and Jasper Way	Nonresidential	66.6	67.0	0.4	71.2	4.6
R68	Trona Way	SFR	57.3	57.7	0.4	61.5	4.2
R69	Trona Way	SFR	56.2	56.6	0.4	60	3.8
R70	Trona Way	SFR	58.9	59.3	0.4	61.9	3.0
R71	Trona Way	SFR	59.2	59.6	0.4	62.2	3.0

Table 9. Comparison of Existing and Future Interior Noise Levels

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R1	1997-1999 Swallow Lane	Tennis Court	-	-	-	-	-
R2	6701 Limonite Court	SFR	31.4	31.9	0.5	32.6	1.2
R3	6814 Moorhen Place	SFR	31.1	31.5	0.4	32.6	1.5
R4	1777 Skimmer Court	SFR	33.2	33.6	0.4	34.8	1.6
R5	1764 Skimmer Court	SFR	29.2	29.6	0.4	30.3	1.1
R6	1901 Cassia Road	MFR	42.9	43.4	0.5	43.9	1.0
R7		MFR	43.8	44.2	0.4	44.9	1.1
R8	1901 Cassia Road	MFR	43.5	43.9	0.4	44.5	1.0
R9		MFR	42.9	43.3	0.4	43.7	0.8
R10		MFR	43.0	43.4	0.4	43.7	0.7
R11		MFR	43.3	43.7	0.4	44.2	0.9
R12		MFR	43.3	43.7	0.4	44.2	0.9
R13		MFR	42.7	43.1	0.4	43.3	0.6
R14		MFR	42.7	43.1	0.4	43.4	0.7
R15		MFR	43.0	43.4	0.4	43.9	0.9
R16		MFR	42.9	43.3	0.4	44.0	1.1
R17		MFR	42.5	42.9	0.4	43.2	0.7
R18		MFR	43.8	44.2	0.4	44.8	1.0
R19		MFR	44.0	44.4	0.4	45.0	1.0
R20		MFR	43.3	43.7	0.4	44.4	1.1
R21		MFR	43.0	43.4	0.4	44.2	1.2
R22		MFR	42.7	43.1	0.4	44.0	1.3
R23		MFR	42.6	43.0	0.4	44.0	1.4
R24	2005 Cassia Road	MFR	49.3	49.7	0.4	51.2	1.9

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R25		MFR	49.7	50.1	0.4	51.6	1.9
R26		MFR	49.1	49.5	0.4	51.2	2.1
R27/ST1		MFR	47.3	47.8	0.5	49.7	2.4
R28	6401 – 6419 Tobria Terrace	MFR	37.4	37.8	0.4	40.3	2.9
R29		MFR	37.6	38.0	0.4	40.3	2.7
R30		MFR	34.7	35.1	0.4	37.7	3.0
R31		MFR	37.1	37.5	0.4	39.5	2.4
R32		MFR	37.4	37.8	0.4	39.8	2.4
R33		MFR	35.7	36.1	0.4	38.4	2.7
R34		MFR	35.3	35.7	0.4	38.0	2.7
R35		MFR	37.6	38.0	0.4	39.7	2.1
R36		MFR	38.0	38.5	0.5	39.9	1.9
R37		MFR	36.5	36.9	0.4	38.5	2.0
R38		MFR	35.9	36.3	0.4	38.0	2.1
R39		MFR	36.7	37.1	0.4	38.4	1.7
R40		MFR	38.9	39.3	0.4	40.1	1.2
R41		MFR	39.0	39.4	0.4	40.1	1.1
R42	6449 Cinnabar Way	SFR	37.7	38.1	0.4	38.7	1.0
R43	6445 Cinnabar Way	SFR	33.5	33.9	0.4	34.8	1.3
R44	6441 Cinnabar Way	SFR	32.5	32.9	0.4	34.1	1.6
R45	6456 Cinnabar Way	SFR	40.3	40.8	0.5	41.3	1.0
R46	6452 Cinnabar Way	SFR	35.7	36.1	0.4	37.4	1.7
R47	6448 Cinnabar Way	SFR	34.0	34.4	0.4	35.9	1.9
R48	6444 Cinnabar Way	SFR	32.2	32.6	0.4	34.3	2.1
R49	6436 Cinnabar Way	SFR	29.9	30.3	0.4	32.5	2.6

Receiver No.	Location	Type of Land Use	Modeled Existing Noise Level (CNEL)	Modeled Future 2040 No Build Noise Level (CNEL)	Existing to Future No Project Noise Increase	Modeled Future 2040 Build Noise Level (CNEL)	Existing to Future with Project Noise Increase
R50	6440 Cinnabar Way	SFR	27.4	27.8	0.4	30.7	3.3
R51	2413 Copper Way	SFR	22.4	22.9	0.5	23.8	1.4
R52	6428 Cinnabar Way	SFR	21.2	21.6	0.4	22.6	1.4
R53	2417 Copper Way	SFR	21.1	21.5	0.4	22.5	1.4
R54	6420 Cinnabar Way	SFR	20.9	21.3	0.4	22.7	1.8
R55	Copper and Cinnabar Way	SFR	31.4	31.9	0.5	33.5	2.1
R56	Copper and Jasper Way	SFR	22.3	22.7	0.4	24.7	2.4
R57	6536 Jasper Way	SFR	9.1	9.5	0.4	12.0	2.9
R58	6428 Jasper Way	SFR	13.5	13.9	0.4	15.5	2.0
R59	2410 Copper Way	SFR	12.3	12.7	0.4	14.5	2.2
R60	6424 Jasper Way	SFR	13.6	14.1	0.5	15.8	2.2
R61	6420 Jasper Way	SFR	10.9	11.3	0.4	13.8	2.9
R62	6416 Jasper Way	SFR	10.5	10.9	0.4	13.6	3.1
R63	6412 Jasper Way	SFR	11.0	11.4	0.4	13.8	2.8
R64	6408 Jasper Way	SFR	11.8	12.3	0.5	14.8	3.0
R65	6404 Jasper Way	SFR	11.3	11.7	0.4	14.4	3.1
R66	6400 Jasper Way	SFR	19.8	20.3	0.5	23.8	4.0
R67/ST2	Trail along El Camino Real and Jasper Way	Nonresidential	-	-	-	-	-
R68	Trona Way	SFR	32.3	32.7	0.4	36.5	4.2
R69	Trona Way	SFR	31.2	31.6	0.4	35.0	3.8
R70	Trona Way	SFR	33.9	34.3	0.4	36.9	3.0
R71	Trona Way	SFR	34.2	34.6	0.4	37.2	3.0

Temporary Increase in Ambient Noise Levels (Construction Noise)

During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Public Works Construction (Greenbook) 3-12.3 and the City of Carlsbad Municipal Code. Chapter 8.48 of the specifies construction hours limitations as the following:

"It shall be unlawful to operate equipment or perform any construction in the erection, demolition, alteration, or repair of any building or structure or the grading or excavation of land during the following hours, except as hereinafter provided: (1) After six p.m. on any day, and before seven a.m., Monday through Friday, and before eight a.m. on Saturday; (2) All day on Sunday; and (3) On any federal holiday."

Construction noise would be short-term and intermittent. The Project will have **Less Than Significant Impact**, and the implementation of measure **NOI-1** will reduce impacts even further.

b) Less Than Significant Impact: Site preparation and roadway construction will involve excavation, grading, improving existing roadways, constructing new sidewalks, and paving roadway surfaces. These temporary construction activities within the Project vicinity are anticipated to create groundborne vibration. Groundborne vibration or noise levels as a result of construction would be short-term and intermittent. The Project will have **Less Than Significant Impact**, and the implementation of measure **NOI-1** will reduce impacts even further.

c) Less Than Significant Impact: The McClellan-Palomar Airport is less than one mile northwest of the Project area, and the proposed Project within the McClellan-Palomar Airport Influence Area (Review Area 1). As discussed above, the Project would not generate a substantial permanent increase in ambient noise levels in excess of standards established in the City of Carlsbad General Plan, impacts would be **Less than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

NOI-1: To minimize the construction-generated noise, abatement measures from Public Works Construction (Greenbook) 3-12.3 must be followed:

- Do not operate construction equipment or run the equipment engines.
 - After six p.m. on any day, and before seven a.m., Monday through Friday, and before eight a.m. on Saturday
 - All day on Sunday
 - On any federal holiday.
- 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.

A variance from these requirements may be provided by request at the discretion of City of Carlsbad.

FINDINGS

The Project would have a **Less Than Significant Impact** to noise.

XIV. POPULATION AND HOUSING	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) No Impact: There is no planned development along El Camino Real as part of the proposed Project. The Project would not induce population growth in the area, either directly or indirectly; therefore, the Project would have **No Impact** related to population growth.

b) No Impact: The Project will not displace any number of existing housing or necessitate the construction of replacement housing. The Project will have **No Impact** related to displacement of housing or businesses.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have **No Impact** to population and housing.

XV. PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, a need for new or physically altered government 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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

AFFECTED ENVIRONMENT

The nearest fire station, City of Carlsbad Fire Station 2, is located 1.5 miles south of the Project area. The Carlsbad Police Department is located approximately 2 miles north of the Project area. The nearest school, Aspirations Pre-school, is approximately 0.25 miles north of the Project area along El Camino Real. The nearest park, Alta Norte Community Park, is approximately 0.5 miles east of the Project area.

a-e) Less than Significant Impact: As the roadway improvements associated with the Project are relatively minor, including adding an additional northbound travel and construction of new sidewalk on the east side of El Camino Real, the Project would not impact any existing buildings, nor would it result in the need for new or physically altered governmental facilities, including additional fire and/or police stations, schools, parks, or other public facilities. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan as traffic would be accommodated during construction to allow movement through the area. As the Project is intended to accommodate and relieve future congestion, the Project would improve future traffic conditions for emergency response or emergency evacuation. Fire and/or police protection services, response times, or other performance objectives would not be impacted. Impacts would be **Less than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have a **Less than Significant Impact** to public services.

XVI. RECREATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

AFFECTED ENVIRONMENT

As stated in the previous section, the nearest public park, Alga Norte Community Park, is approximately 0.4 miles east of the Project area within the City of Carlsbad.

a) No Impact: The proposed roadway improvements would not 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. Traffic would be accommodated during construction to allow movement through the area; therefore, **No Impact** would occur.

b) No Impact: As the roadway improvements associated with the Project are relatively minor, including adding an additional northbound travel and construction of new sidewalk on the east side of El Camino Real, the Project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities; therefore, **No Impact** would occur.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No impact to recreation facilities would occur; therefore, no avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have **No Impact** related to recreation.

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

REGULATORY SETTING**General Plan Mobility Element**

The General Plan Mobility Element promotes a livable streets strategy for mobility within the city. The objective of this strategy is to create a ‘multi-modal’ street network that balances the mobility needs of pedestrians, bicyclists, transit users, and vehicles.

Vehicle Miles Traveled (VMT) Analysis Guidelines

The City’s VMT Analysis Guidelines provides direction regarding the methodologies and thresholds to be used for VMT analysis in the City of Carlsbad. The guidelines generally follow state guidance provided in the Office of Planning and Research’s (OPR) Technical Advisory but add detail that is specific to the San Diego region and the City of Carlsbad.

As recommended in OPR’s Technical Advisory, the City of Carlsbad has decided to use VMT as the performance measure for transportation projects. Per OPR’s Technical Advisory, certain types of transportation projects are presumed to have a less than significant impact on transportation. The proposed project does not meet any of the project types that would be screened out based on both City and statewide guidelines. Therefore, a VMT analysis is necessary.

There were several methodologies considered for conducting the VMT analysis, including the following:

- Quantitative analysis using the SANDAG regional travel demand model
- Quantitative analysis using the National Centers for Sustainable Transportation’s (NCST) Induced Travel Calculator
- Use of existing studies as suggested by the California Governor’s OPR suggests in its December 2018 Technical Advisory (Technical Advisory on Evaluating Transportation Impacts in CEQA, OPR, 2018)
- Use of a manual analysis as suggested in the City of Carlsbad’s VMT Analysis Guidelines
- Qualitative analysis

The City’s VMT Analysis Guidelines note the SANDAG model is inappropriate for smaller projects as the small increases or decreases in VMT would be indistinguishable in a model that includes a population of

over three million people and thousands of miles of roadways. The NCST calculator was also not used as it is not recommended for non-state highway facilities. Additionally, all the studies used in the development of the NCST calculator used geographic areas that were beyond the scale and size of the proposed project. Due to the recent implementation of SB 743, there are currently no completed existing studies for the size and scale of the proposed project; therefore, no existing study was utilized. A manual analysis was also not used as there are no methodologies available for this type of analysis. A qualitative analysis was ultimately selected as the other methodologies did not fit the small scope of the proposed Project, which involves less than a mile of minor improvements. Use of qualitative VMT analysis for roadway projects is supported by Section 15064.3 of the CEQA Guidelines (Association of Environmental Professionals, 2021). The guidance includes the following “If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project’s vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc.” Please see Appendix D for more information.

Carlsbad Trails Master Plan

The updated Trails Master Plan was adopted in August 2019. The Trails Master Plan outlines strategies to make it safer, more convenient, and more enjoyable for people to walk, hike and bike in Carlsbad, whether for recreation or transportation. The plan reflects new trails and incorporates change in the City’s trail system. The Trails Master Plan also includes design guidelines, identifies priority projects and updates the citywide trails map.

Carlsbad Bicycle Master Plan

The City adopted the Carlsbad Bicycle Master Plan in 2007, which guides the future development of the City’s bicycle facilities and enhancement of the existing bikeway network. The master plan identifies existing and planned bicycle facilities and addresses gaps, constrained areas, and improvements at intersections. The master plan complies with the requirements of the Bicycle Transportation Account, which is an annual program providing state funds for the bicycle facilities improvements.

Carlsbad Pedestrian Master Plan

The City’s Pedestrian Master Plan was completed in August 2008. The City’s Pedestrian Master Plan identifies the location of pedestrian facilities and guides the future development and enhancement of pedestrian facilities to ensure that walking becomes an integral mode of transportation in Carlsbad.

Carlsbad Active Transportation Strategy (CATS)

The CATS includes strategies to identify and construct livable streets solutions for the City’s street system. The CATS aims to enhance infrastructure connections to promote travel choices for people who want to walk and bicycle.

AFFECTED ENVIRONMENT

El Camino Real currently exists as a six-lane roadway through much of its length in the City of Carlsbad. The proposed project would improve the segment of El Camino Real between Poinsettia Lane and Camino Vida Roble, a distance of approximately 5,000 feet, by enhancing bicycle facilities, pedestrian facilities, signing, and pavement striping. In addition, within the project length is a segment of El Camino Real between Poinsettia Lane and Camino Vida Roble that currently has only five lanes, three southbound lanes and two northbound lanes. Through a combination of roadway widening and pavement restriping, the

project will widen the segment to provide for three northbound through lanes from Poinsettia Lane to Camino Vida Roble.

As described above, pedestrian and bicycle improvements will be provided throughout the length of the project. In the southbound direction, the existing pedestrian and bicycle facilities include a sidewalk and a striped bicycle lane. In the northbound direction, bicycle lanes exist but they vary in width. A sidewalk exists in the northbound direction between Poinsettia Lane and Cinnabar Way, but there is no sidewalk between Cinnabar Way and Camino Vida Roble. The project will provide a new sidewalk between Cinnabar Way and Camino Vida Roble and will also include improvements to the bicycle lane in the northbound direction.

a) *Less than Significant Impact:* The construction of new sidewalk and bike lanes on the east side of the street would provide connectivity to pedestrians and bicyclists between Camino Vida Roble and Cinnabar Way, which currently does not exist. As the proposed Project would address a gap in connectivity in pedestrian and bicycle facilities, thereby promoting access to alternative modes of transportation, the proposed Project would be consistent with the goals and objectives of the City of Carlsbad General Plan Mobility Element, City of Carlsbad CATS, Trails Master Plan, Pedestrian Master Plan, and Bicycle Master Plan.

It is anticipated that the Project will not attract more traffic due to the roadway widening; therefore, the Project will not cause a significant impact on any of the study intersections and turning movement lane storage capacity. Therefore, the Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Impacts would be **Less than Significant**.

b) *Less than Significant Impact:* The proposed Project involves addition of roadway capacity on a 6-lane arterial street that would also substantially improve conditions for pedestrians and cyclists by providing sidewalk connectivity on the east side of El Camino Real. According to the Vehicle Miles Traveled Analysis (VRPA Technologies, Inc., June 2021), the Project would have the following impacts related to VMT:

- The Project supports automobile and truck traffic by removing a gap in the northbound lanes of El Camino Real where the roadway narrows from three lanes to two. This would tend to cause a slight increase in VMT since it would facilitate travel by the automobile mode.
- With respect to transit, the benefits described above for roadway traffic would also apply to transit vehicles. This would tend to cause a slight decrease in VMT since it would facilitate travel by transit. The Project area is currently served by North County Transit District's Route 309 which provides service along El Camino Real.
- The project supports bicycle travel by improving pavement striping for bicycle facilities in the northbound direction between Poinsettia Lane and Camino Vida Roble and by providing a sidewalk which would tend to decrease usage of the existing bicycle lane by pedestrians. This would tend to cause a slight decrease in VMT since it would facilitate bicycle travel.
- For pedestrian traffic, the Project adds new sidewalk where no sidewalk exists in the northbound direction between Cinnabar Way and Camino Vida Roble. This would tend to cause a slight decrease in VMT since it would facilitate pedestrian travel.

Based on the city's VMT Analysis Guidelines, the significance thresholds for transportation projects is the following:

- A significant transportation impact occurs if the project results in a net increase in VMT

In a quantitative analysis, the determination of whether the threshold for significance is met would be determined based on the numerical increase or decrease in VMT associated with the Project. In a qualitative analysis, the determination of whether the threshold is met would be based on whether the Project would be expected to result in an increase in VMT without establishing a numerical value to the VMT increase or decrease. In the case of the proposed Project, the analysis indicates a qualitative increase in VMT with respect to the automobile mode and a qualitative decrease in VMT with respect to the transit, bicycle, and pedestrian modes. The VMT analysis indicates both increases and decrease in VMT. On a qualitative basis, this indicates that the Project would not result in a net increase in VMT. As there is no net increase in VMT, the Project does not meet the significance threshold and would not conflict or be inconsistent with section 15064.3 (b)(2). Therefore, the Project is considered to have a **Less than Significant Impact**.

c) No Impact: As the Project will not be making substantial changes to the roadway alignment, the roadway improvements and widening would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); therefore, **No Impact** would occur.

d) Less than Significant Impact: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan as traffic would be accommodated during construction to allow movement through the area. As the Project is intended to accommodate and relieve future congestion, the Project would improve future traffic conditions for emergency response or emergency evacuation. Impacts would be **Less than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Project will have less than significant impacts related to transportation/traffic; therefore, no avoidance, minimization, and/or mitigation measures will be required.

FINDINGS

The Project would have a **Less than Significant** to transportation/traffic.

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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REGULATORY SETTING

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a “project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment” (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe’s request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is

exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term “tribal cultural resource” refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines

In 1990, the City developed the Cultural Resource Guidelines for the treatment of cultural resources consistent with federal, state, and local laws, as well as the Secretary of Interior’s Standards for Archaeology and Historic Preservation. The City’s guidelines establish procedures for resource investigation which include a reviewing the City’s confidential sensitivity model, conducting a records search and literature review of applicable materials, conducting a field survey, and reaching out to California Native American Tribes so that they have the opportunity to participate in field surveys, review of the project, and creation of recommended cultural resource mitigation measures. The guidelines also present a systemic method of preserving identified resources. The guidelines are applicable to cultural resources from the prehistoric through historic periods and are implemented during CEQA compliance.

Since 1990, the guidelines have been updated to address updates to the CEQA guidelines, AB 52, Section 106 of the National Historic Preservation Act, other changes to regulations and policy, and best practices in cultural resources management. The guidelines have since been renamed the Tribal, Cultural, and Paleontological Resources Guidelines which were developed in consultation with the San Luis Rey Band of Mission Indians, cultural and paleontological resources professionals, City staff, and the public.

AFFECTED ENVIRONMENT

An Area of Potential Effects (APE) was established as the area of direct and indirect effects which encompasses an approximately 14.5 acre area. The APE includes the potential staging areas, construction areas, vegetation/tree removal, temporary construction easements, and utility relocation. The approximate limits of the APE include the entire segment of El Camino Real from Poinsettia Lane to Camino Vida Roble to accommodate all roadway improvements, which includes the 1500-foot long segment of roadway between Cassia Road and Camino Vida Roble which will be widened (See Figure 3). Efforts to identify potential cultural resources in the APE included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System South Coastal Information Center (SCIC), consultation with the Native American Heritage Commission (NAHC), consultation with Native American tribes, and a pedestrian ground surface survey.

The SCIC records search did not identify any cultural resources within the Project APE, but did note that 55 cultural resources have been recorded within a half-mile of the Project, none of which would be impacted by the Project. The NAHC conducted a search of the Sacred Lands File and also did not locate any Native American cultural resources within the Project APE. Archaeologists Michelle Campbell, M.A. and Namat Hosseinion, M.A. conducted an archaeological field survey of the APE on June 1, 2020. The pedestrian survey was conducted at roughly 2-meter transect intervals. All Project area conditions were fully recorded in the field notes. Exposed soils were inspected for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits. The field survey did not identify any archaeological or cultural resources within the APE.

On October 26, 2020, initial consultation letters were mailed to the following California Native American tribal governments who had previously requested to be notified of all City projects: Mesa Grande Band of Mission Indians, Rincon Band of Luiseño Indians, San Luis Rey Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians. The letters provided a summary of the Project and requested information regarding comments or concerns the tribal governments might have about the Project and whether any TCRs would be affected by implementation of the Project.

The Rincon Band of Luiseño Indians responded on November 19, 2020 stating that they would like to consult on the Project and requested copies of existing documents pertaining to the Project, including all cultural documentation, geotechnical reports, and grading plans. All requested documents were sent to the Rincon Band of Luiseño Indians for their review. A meeting was held on December 14, 2020 between the Rincon Band of Luiseño Indians and the City to discuss the Project and the results of the archaeological survey. After the meeting and after reviewing the provided Project documents, the Rincon Band of Luiseño Indians sent a letter on December 17, 2020 stating that they believe the proposed Project activities have the potential to impact subsurface TCRs. The letter did not state that the Rincon Band of Luiseño Indians were aware of any known TCRs within the Project area. The Rincon Band of Luiseño Indians recommended tribal monitoring for all ground disturbing activities within non-fill/native soil, preparation of a monitoring report, and development of cultural material and human remains discovery protocols. The Rincon Band of Luiseño Indians requested the City keep them informed of the Project's schedule, any changes to the proposed Project plans, and requested the opportunity to provide the recommended tribal monitoring services. Last, the Rincon Band of Luiseño Indians requested the City provide the proposed cultural/tribal cultural mitigation measures so that they could review and make recommendations. The City provided draft measures and met again with the Rincon Band of Luiseño Indians on February 22, 2021 to review the measures and discuss the cultural report. The Rincon Band of Luiseño Indians again confirmed they knew of no existing Native American resources, but stated that there was concern for potential subsurface resources. The Rincon Band of Luiseño Indians stated that they would send their preferred mitigation measures to the City for use in the environmental document. These measures were sent via email following the meeting and are included below.

While results from the records search indicate that the area surrounding the Project APE has high sensitivity for archaeological resources, the pedestrian survey and map research revealed that the Project APE and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments, which means the potential for archaeological resources to be present with the APE is low. Further, a review of the geological formations and soils within and adjacent the APE revealed that Pleistocene and Eocene-aged geology and soils are present, which predate human presence in the area. The lack of younger soils in this area combined with the hilltop topography indicates that the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity; therefore, if archaeological resources are present, there should have

been visible on the ground surface during the pedestrian survey. As no archaeological resources were identified within the APE as a result of these identification efforts and as the APE has been extensively modified in modern times, the APE has a low potential both for archaeological and buried archaeological resources.

a) *Less than Significant with Mitigation Incorporated:* The Project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). No cultural resources were identified during the survey, the record search, or by the Native American tribal governments contacted. Furthermore, the pedestrian survey and map research revealed that the Project APE and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments, which means the potential for archaeological resources to be present with the APE is low. Last, review of the geological formations and soils within and adjacent the APE revealed that Pleistocene and Eocene-aged geology and soils are present, which predate human presence in the area. The lack of younger soils in this area combined with the hilltop topography indicates that the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity; therefore, if archaeological resources are present, there should have been visible on the ground surface during the pedestrian survey.

As the records search, Sacred Lands File search, and pedestrian survey did not identify any TCRs, the Project is not anticipated to impact any TCRs; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of Mitigation Measures **TCR-1** through **TCR-10** detailed below and **CR-1** through **CR-2** discussed in **Section V**, Cultural Resources, would result in **Less Than Significant Impact with Mitigation Incorporated**.

b) *Less than Significant with Mitigation Incorporated:* The Project is not anticipated to cause a substantial adverse change to a TCR pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. No cultural resources were identified during the survey, the record search, or by the Native American tribal governments contacted. In addition, due to the lack of younger soils in this area combined with the hilltop topography, the Project vicinity is not subject to soil depositional actions which could deeply bury old land surfaces and evidence of human activity, therefore evidence of any cultural resources should be present on the current ground surface. Furthermore, the pedestrian survey and map research revealed that the Project APE and vicinity has been extensively modified to construct and maintain the roadway, buried utilities, and adjacent residential developments, which means the potential for archaeological resources to be present with the APE is low. As the records search, Sacred Lands File search, and pedestrian survey did not identify any TCRs, the Project is not anticipated to impact any TCRs. However, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of Mitigation Measures **TCR-1** through **TCR-10** detailed below and **CR-1** through **CR-2** discussed in **Section V**, Cultural Resources, would result in **Less Than Significant Impact with Mitigation Incorporated**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following measures, in addition to **CR-1** through **CR-2** within **Section V**, will be implemented for any impacts related to Tribal Cultural Resources.

TCR-1: Prior to the commencement of any ground-disturbing activities, including but not limited to

exploratory geotechnical investigations/borings for contractor bidding purposes, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with a consulting Traditionally and Culturally Affiliated Luiseño tribe ("TCA Tribe"). This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement shall outline the roles and powers of the Luiseño Native American monitors and the archaeologist, and may include the following provisions. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

- a) A Luiseño Native American monitor, associated with a TCA Tribe, shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.
- b) Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect in accordance with the TCA Tribe's cultural and spiritual traditions and reburied on-site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.
- c) The tribal representative shall be present at the project's preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as to consult with the archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.
- d) Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.
- e) If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground-disturbing activities for this project, consulting TCA Tribes shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If, however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, or other culturally-appropriate mitigation measure, is authorized by the City of Carlsbad as the lead agency, and the TCA Tribes that consulted with the City for this project shall be consulted regarding the drafting and finalization of any such recovery plan.
- f) When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground

disturbing activities, the Luiseño Native American monitor shall follow the procedures in TCR-1b.

- g) If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5(b) states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the “Most Likely Descendant” about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.
- h) In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. Commercial sources of fill material are already permitted as appropriate and will be culturally sterile. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.
- i) No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the consulting tribes.
- j) Prior to the approval of final inspection, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor’s notes and comments, to the City of Carlsbad for approval. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for general public distribution; however, a copy of the final monitoring report shall be provided to each consulting tribe upon request to the Planning Division.

FINDINGS

The Project would have **Less Than Significant Impact with Mitigation Incorporated** to Tribal Cultural Resources.

XIX. UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) *Less Than Significant Impact:* The proposed road widening and median improvements would result in relocation of underground telecommunications and power lines that exist underneath. The Project would also result in relocation of pullboxes, pedestals, water meters, and a fire hydrant. The Project would not include the construction of any wastewater-generating uses, nor electric power, petroleum, natural gas, or telecommunication facilities. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities.

There are dual high-pressure petroleum lines running underneath the median and a high-pressure gas line running parallel to the Project. Landscaping and streetscape improvements along the median would not disturb the ground deep enough to impact high-pressure petroleum lines underneath the median. The proposed Project would potentially involve utility relocations to accommodate the proposed improvements to the roadway corridor. In addition, ground disturbance activities that would occur near the high-pressure gas lines include construction of a fill embankment as part of the road widening to minimize impacts to adjacent private properties, and construction of biofiltration stormwater facilities along the proposed sidewalk. Preliminary potholing to locate the gas lines and coordination with San Diego Gas & Electric was conducted to ensure excavation during construction would not impact any gas lines. Impacts would be **Less than Significant**, and no mitigation is required.

b) *No Impact:* As the roadway improvements associated with the Project are relatively minor, including adding an additional northbound travel and construction of new sidewalk on the east side of El Camino Real, the Project would not result in the need for new or expanded water supplies. **No Impact** would result from development of the Project.

c) No Impact: The Project is a roadway improvements project. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities. **No Impact** would occur.

d) Less Than Significant Impact: The Project would not generate substantial solid waste during operation. Solid waste may be generated during construction; however, the amount will not exceed landfill capacities. This would not affect landfill capacity because the amounts would not be substantial and would occur only during the construction period. Therefore, impacts associated with development of the Project would be considered **Less Than Significant**.

e) Less Than Significant Impact: The Project would comply with federal, state, and local statutes and regulations related to solid waste; therefore, impacts associated with compliance with federal, state, and local statutes and regulations related to solid waste would be considered **Less Than Significant**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures are required for utilities and service systems.

FINDINGS

The Project would have a **Less Than Significant Impact** to utilities and service systems.

XX. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

AFFECTED ENVIRONMENT

According to the California Department of Forestry and Fire Protection (CAL FIRE), the Project is located within a “Very High Threat” fire hazard severity zone.

a) Less than Significant Impact: The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan as traffic would be accommodated during construction to allow movement through the area. As the Project is intended to accommodate and relieve future congestion, the Project would improve future traffic conditions for emergency response or emergency evacuation. Impacts would be **Less than Significant**.

b) Less than Significant Impact: The City’s 2012 Landscape Manual requires all projects that contain or are bounded by hazardous vegetation and/or within an area bounded by a Very High Fire Severity Zone as determined by the Fire Code Official to prepare a fire protection plan. The plan is required to demonstrate how potential fire hazards will be addressed, including fuel modification zones. Since the Project is located within a “Very High Threat” fire hazard severity zone, a fire protection plan would be prepared in accordance with the City’s 2012 Landscape Manual. Furthermore, the Carlsbad HMP also requires projects with potential impacts to CAGN to prepare and implement a fire management program for preserve areas as part of the detailed management plan. Since CAGN is presumed to be present within the Project area, a fire management program would be prepared in accordance with the Carlsbad HMP. With adherence to the 2012 Landscape Manual and Carlsbad HMP, the Project would not exacerbate wildfire risks; therefore, impacts would be **Less than Significant**.

c) No Impact: As the Project is intended to accommodate and relieve future congestion, the Project would not result in additional need of new associated infrastructure. The Project would not exacerbate fire risk; therefore there would be **No Impact**.

d) *Less Than Significant Impact:* As discussed in **Section VII**, Geology, landslide susceptibility does not occur within or near where the proposed Project vicinity. As discussed in **Section X**, Hydrology and Water Quality, the Project is located within an area of minimal flood hazard. The proposed Project would include biofiltration stormwater facilities along the sidewalk to treat stormwater runoff from El Camino Real. The change will not impede or redirect flood flows or increase flood risk. Therefore, the Project would have a **Less than Significant Impact**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No avoidance, minimization, and/or mitigation measures are required for wildfires.

FINDINGS

The Project would have a **Less than Significant Impact** to wildfires.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause the substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) *Less than Significant with Mitigation Incorporated:* Implementation of the Project would have the potential to degrade the quality of the existing environment. Potential impacts have been identified related to Biological Resources (IV), Cultural Resources (Section V), Geology and Soils (Section VII), Hazards and Hazardous Materials (Section IX), Hydrology and Water Quality (Section X), Noise (Section XIII), and Tribal Cultural Resources (Section XVIII). Mitigation measures have been identified related to individual resource-specific impacts. The Project has the potential to have impacts to several wildlife species including CAGN and associated coastal sage scrub habitat; however, mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered **Less than Significant with Mitigation Incorporated**.

b) *Less Than Significant Impact:* The Project would not have adverse environmental impacts at a significant level. All potential significant impacts will be addressed with avoidance, minimization and mitigation. No significant cumulative effects are anticipated because no resources would be adversely affected by the Project, or the Project effects would be localized and of limited extent. A **Less than Significant Impact** would occur in relation to cumulatively considerable effects.

c) *Less Than Significant Impact with Mitigation Incorporated:* The Project would not cause significant adverse effects to human beings, either directly or indirectly with mitigation incorporated. Potential impacts have been identified related to Aesthetics (Section I), Air Quality (Section III), Hazards and Hazardous Materials (Section IX), Hydrology and Water Quality (Section X), and Noise (Section XIII). Mitigation measures have been identified related to individual resource-specific impacts. Mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered **Less than Significant with Mitigation Incorporated**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following measures discussed in other sections in this document would ensure that mandatory findings of significance under CEQA and cumulative impacts would be less than significant should they occur.

- Measures **VIS-1** through **VIS-3**
- Measures **BIO-1** through **BIO-17**
- Measures **CR-1** through **CR-3**
- Measures **GEO-1** through **GEO-3**
- Measures **HAZ-1** through **HAZ-5**
- Measure **NOI-1**
- Measure **TCR-1**

XXII. LIST OF MITIGATION MEASURES

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the Project. Also, the inclusion of aesthetic features in the Project design previously discussed can help generate public acceptance of a project. This section describes additional avoidance and/or minimization measures to address specific visual impacts. These will be designed and implemented with concurrence of the District Landscape Architect.

The following measures to avoid or minimize visual impacts will be incorporated into the Project:

- VIS-1:** Caltrans Standard Specifications (2018) “Erosion Control” will be followed during construction. At the conclusion of construction, areas of bare soil shall be hydroseeded with native seed mix to prevent or at least minimize erosion.
- VIS-2:** Vegetation clearing would only occur within the delineated Project boundaries in an effort to minimize the impacts.
- VIS-3:** All disturbed areas including staging of vehicles and equipment will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native species.

The following avoidance, minimization, and mitigation measures along with Best Management Practices have been incorporated into the Project design to minimize impacts to Special Status Species and natural communities to the greatest extent practicable:

- BIO-1:** Prior to the start of construction activities, the Project limits in the vicinity of coastal sage scrub and southern mixed chaparral, near the HMP Hardline Preserve, shall be marked with high visibility ESA fencing or staking to ensure construction will not further encroach into these habitats. The fencing shall be inspected by the Contractor before the start of each workday and maintained by the Contractor until completion of the Project. The Project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.
- BIO-2:** Every individual working on the Project construction must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding special status species, including the coastal California gnatcatcher and sensitive habitats within the BSA.

The training shall include species identification characteristics, Best Management Practices (BMPs) to be implemented, Project-specific avoidance measures that must be followed, and the

steps necessary if the species is encountered at any time. Personnel would attend biological awareness training prior to working within the Project area.

BIO-3: Project activities would not encroach into any adjacent habitat designated as Hardline Preserve areas within the HMP.

BIO-4: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect regional water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;
- Soil exposure must be minimized through the use of temporary BMPs, groundcover, and stabilization measures
- The contractor must conduct periodic maintenance of erosion and sediment-control measures

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: If nighttime work must occur, any nighttime lighting must be shielded down and away from preserve areas.

BIO-7: Where feasible, native vegetation will be trimmed rather than fully removed in areas where vegetation removal is required. Furthermore, invasive plant species must not be used within any landscaped areas.

BIO-8: The Project biologist (qualified/pre-approved by USFWS) will periodically monitor construction within the vicinity of sensitive habitats to ensure that vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly constructed and followed.

BIO-9: Permanent impacts to approximately 0.66 acres of coastal sage scrub habitat outside of the coastal zone shall be mitigated at a 2:1 mitigation ratio through use of credits at the City's Lake Calavera Mitigation Parcel. Although protocol level surveys for CAGN were not conducted, the impacted habitat is presumed to be occupied.

BIO-10: During the spring blooming season immediately prior to initial ground disturbing activities, a focused botanical clearance survey will be conducted within the patch of coastal sage scrub habitat that will be impacted by the Project. If a special status plant species is identified within

this habitat community and cannot be feasibly avoided during construction, the Project team, in coordination with the appropriate regulatory agencies, will then identify appropriate measures to minimize adverse effects to special status plant species.

BIO-11: If a CAGN is identified nesting directly in or within 300 feet of Project limits all work must stop in that vicinity until the appropriate buffer and sound restrictions, determined in coordination with the city, are established. The established buffer and other restriction must remain until the Project biologist determined that the juveniles have fledged. Clearing of occupied CAGN habitat cannot occur during the breeding season of CAGN, from March 1- August 15.

BIO-12: If vegetation is being removed from within CAGN habitat during the nesting season, a biologist must inspect the vegetation immediately prior to removal and monitor for the duration of initial vegetation clearing.

BIO-13: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-14: If hydroseed and plant mixes are used during or post-construction, plant species must consist of a biologist approved plant palette seed mix of native species sourced locally to the Project area.

BIO-15: The construction contractor shall avoid removing vegetation within the mixed chaparral habitat during the nesting bird season (February 15 –August 31). If vegetation must be removed within the breeding season, a pre-construction nesting bird survey must be conducted by a qualified/approved biologist no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey.

A no-disturbance buffer will be established around any active nest of migratory birds (width to be determined by a qualified biologist in coordination with the City) and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the city) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the city.

BIO-16: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction personnel must not feed or attract wildlife to the Project area.

BIO-17: The contractor must not apply rodenticide or herbicide within the BSA during construction.

CR-1: Cultural awareness and sensitivity training shall be provided to construction crews working within the Project area. In addition, the City will inform the Rincon Band of Luiseño Indians of the construction schedule to ensure the tribe is afforded the opportunity to monitor Project ground disturbing activities.

CR-2: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 50 feet of the area until a qualified archaeologist/Tribal Monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits. If cultural materials are prehistoric in nature, the Rincon Band of Luiseño Indians shall be consulted regarding appropriate treatment protocol.

CR-3: Section 7050.50 of the California Health and Safety Code establishes the intentional disturbance, mutilation, or removal of interred human remains a misdemeanor. This code also requires that upon the discovery of human remains outside of a dedicated cemetery excavation or disturbance of land cease until a county Medical Examiner makes a report. If the Medical Examiner determines the remains are not the result of a crime scene and are not Native American, a qualified archaeologist shall be consulted to assess the significance of the find and develop a plan for documentation and removal. Should the remains be determined to Native American, then **TCR-1** shall be implemented.

GEO-1: Educate Construction Personnel in Recognizing Fossil Material

All construction personnel must receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that construction personnel can recognize fossil materials in the event that any are discovered during construction.

GEO-2: Stop Work if Substantial Fossil Remains are Encountered during Construction

If substantial fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities, activities will stop immediately until a State-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may include preparation of a report for publication describing the finds. The Project proponent will ensure that recommendations regarding treatment and reporting are implemented.

GEO-3: Resource Stewardship Measures

The following will be added to the Project's standard specification.

If paleontological resources are discovered at the job site, do not disturb the material and immediately:

1. Stop all work within a 60-foot radius of the discovery
2. Protect the area
3. Notify the Resident Engineer

The Project proponent investigates and modifies the dimensions of the protected area if necessary.

Do not take paleontological resources from the job site. Do not resume work within the specified radius of the discovery until authorized. A specification alerting the construction contractor that paleontological monitoring will occur during activities that will disturb native sediments will also be added to the Project's specifications.

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

HAZ-2: As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. If soil contaminated by hazardous waste is discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed.

HAZ-3: If any yellow pavement striping is to be removed during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provisions for REMOVE TRAFFIC STRIPE AND PAVEMENT MARKINGS.

HAZ-4: Any leaking transformers observed during the course of the Project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this Phase I Environmental Site Assessment. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

HAZ-5: Based on the Statewide Soil Management Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils (DTSC, 2016), the on-site soils down to 3 feet below grade can be reused with no minimum cover requirement. However, the soils below 3 feet can be reused with a minimum of 1-foot of soil cover. Contractors excavating, transporting, or stockpiling soil should prepare a Lead Compliance Plan in accordance with the Caltrans Code of Safety Practices, California Code of Regulations and Cal-OSHA standards addressing the presence of ADL in the soils

within the Project area. Lead content testing results contained herein should be given to contractors handling the soils during construction.

NOI-1: To minimize the construction-generated noise, abatement measures from Public Works Construction (Greenbook) 3-12.3 must be followed:

- Do not operate construction equipment or run the equipment engines.
 - After six p.m. on any day, and before seven a.m., Monday through Friday, and before eight a.m. on Saturday
 - All day on Sunday
 - On any federal holiday.
- 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.

A variance from these requirements may be provided by request at the discretion of City of Carlsbad.

TCR-1: Prior to the commencement of any ground-disturbing activities, including but not limited to exploratory geotechnical investigations/borings for contractor bidding purposes, the project developer shall enter into a Pre- Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with a consulting Traditionally and Culturally Affiliated Luiseño tribe ("TCA Tribe"). This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement shall outline the roles and powers of the Luiseño Native American monitors and the archaeologist, and may include the following provisions. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

- a) A Luiseño Native American monitor, associated with a TCA Tribe, shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.
- b) Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect in accordance with the TCA Tribe's cultural and spiritual traditions and reburied on- site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.
- c) The tribal representative shall be present at the project's preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as to consult with the archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.
- d) Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Luiseño Native

American monitor and the archaeologist can assess the nature and significance of the find.

- e) If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground-disturbing activities for this project, consulting TCA Tribes shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If, however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, or other culturally-appropriate mitigation measure, is authorized by the City of Carlsbad as the lead agency, and the TCA Tribes that consulted with the City for this project shall be consulted regarding the drafting and finalization of any such recovery plan.
- f) When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in TCR-1b.
- g) If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5(b) states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.
- h) In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. Commercial sources of fill material are already permitted as appropriate and will be culturally sterile. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.
- i) No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the consulting tribes.
- j) Prior to the approval of final inspection, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for general public distribution;

however, a copy of the final monitoring report shall be provided to each consulting tribe upon request to the Planning Division.

XXIII. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In such cases, a discussion should identify the following on attached sheets:

- a) Earlier analyses used. Identify earlier analyses and state where they are available for review.
- b) Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) Mitigation measures. For effects that are “Less Than Significant with Mitigation Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

XXIV. EARLIER ANALYSIS USED AND SUPPORTING INFORMATION SOURCES

The following documents were used in the analysis of this Project and are on file in the City of Carlsbad Planning Division located at 1635 Faraday Avenue, Carlsbad, California, 92008.

1. California Air Resources Board. *In-Use Off Road Diesel-Fueled Fleets Regulation Overview*, Revised October 2016.
2. *Carlsbad Climate Action Plan*, September 2015.
3. Carlsbad Climate Action Plan Ordinances CS-347, CS-348, CS-349, and CS-350, adopted March 12, 2019.
4. *Carlsbad General Plan*, September 2015.
5. *Carlsbad General Plan Land Use Map*, April 2019.
6. *Final Environmental Impact Report* for the City of Carlsbad General Plan and Climate Action Plan (SCH #2011011004), June 2015.
7. City of Carlsbad. *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines*. September 2017.
8. City of Carlsbad Guidance to Demonstrating Consistency with the Climate Action Plan, Form P-31, February 2020.
9. *City of Carlsbad Municipal Code (CMC)*
10. City of Carlsbad Transportation Demand Management Handbook, August 2019.
11. City of Carlsbad Transportation Impact Analysis Guidelines, April 2018.
12. City of Carlsbad Vehicle Miles Travelled (VMT) Analysis Guidelines, May 2020
13. ECORP Consulting, Inc. with contributions from Cogstone Resource Management. *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines*, September 2017.
14. *El Camino Real Roadway Improvements Project Transportation Impact Analysis Report*, Approved by Caltrans December 2020
15. *El Camino Real Roadway Improvements Project Noise Study Report*, Approved by Caltrans October 2020
16. *El Camino Real Roadway Improvements Project Air Quality Report*, Approved by Caltrans December 2020
17. *El Camino Real Roadway Improvements Project Hazardous Waste Initial Site Assessment*, Approved by Caltrans November 2020

18. *El Camino Real Roadway Improvements Project Water Quality Technical Memorandum*, Approved by Caltrans November 2020
19. *El Camino Real Roadway Improvements Project Natural Environment Study*, Approved by Caltrans May 2021
20. *El Camino Real Roadway Improvements Project Historic Property Survey Report/Archaeological Survey Report*, Approved by Caltrans May 2021
21. *Habitat Management Plan for Natural Communities in the City of Carlsbad (HMP)*, November 2004.
22. San Diego Regional Airport Authority/San Diego County Airport Land Use Commission. *McClellan-Palomar Airport Land Use Compatibility Plan. Draft January 2018.*
23. STC Traffic, Inc. *El Camino Real Widening Transportation Impact Analysis Report*, April 2020. Approved by Caltrans December 2020.
24. VRPA Technologies, Inc. *El Camino Real Roadway Improvement Plans, Capital Improvement Project No. 6072 Poinsettia Lane to Camino Vida Roble Vehicle Miles Traveled Analysis Memorandum*, June 2021