CHAPTER 4.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

4.1 Introduction

This section addresses environmental resources for which implementation of the proposed Project would not result in significant impacts. Pursuant to Section 15128 of the *State CEQA Guidelines*, "An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."

4.2 Effects Found Not Significant as Part of the EIR Process

The following environmental issues were determined not to be significantly impacted by the proposed Project based on the listed thresholds of significance for each issue pursuant to *State CEQA Guidelines*, Appendix G.

4.2.1 Agriculture and Forestry Resources

A project would generally be considered to have a significant effect if it would:

1) 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.
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract.
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
4) Result in the loss of forest land or conversion of forest land to non-forest use.
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Analysis

Issue 1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

As illustrated on the California Department of Conservation (CDC) *Important Farmland Map for San Diego County* (CDC 2012), the majority of the Project corridor is classified as urban and built-up land. A 10-acre parcel adjacent to the Project corridor on Vulcan Avenue between Ashbury Street and Hillcrest Drive in Leucadia is classified as Farmland of Local Importance on the 2012 Important Farmland Map. However, that parcel has been developed with single-family residences (Coral Cove Project).

Additionally, there are three small undeveloped parcels of Prime and Unique Farmland adjacent to Santa Fe Drive and South Vulcan Avenue, and adjacent to Santa Fe Drive and San Elijo Avenue, but these parcels are located over one mile away from the southern end of the Project corridor.

As noted on the 2012 Important Farmlands Map, there are no lands within or adjacent to the Project corridor that are designated Prime, Unique or Farmland of Statewide/Local Importance. Therefore, implementation of the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Important Farmland to non-agricultural uses.

Issue 2: Conflict with existing zoning for agricultural use, or a Williamson Act contract.

Zoning

As illustrated on the City's E-Zoning,[1] none of the parcels within the Project corridor are zoned for agricultural use. Therefore, implementation of the proposed Project would not conflict with agricultural zoned lands.

Williamson Act Contract

The nearest locations of Agricultural Preserve areas to the Project corridor per the 2013-14 Williamson Act Map for San Diego County illustrates three parcels[2] located over one mile away. Therefore, implementation of the Project would not conflict with Williamson Act Contract lands.

Issue 3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

This issue is not applicable to the proposed Project.

Issue 4: Result in the loss of forest land or conversion of forest land to non-forest use.

This issue is not applicable to the proposed Project.

Issue 5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

This issue is not applicable to the proposed Project.

4.2.2 Air Quality

A project would generally be considered to have a significant effect if it would:

1) Conflict with or obstruct implementation of the applicable air quality plan.

[1] http://www.encinitasca.gov/index.aspx?page=361. Accessed October 21, 2016.

[2] http://www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx. Accessed October 21, 2016.

2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3) Result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
4) Expose sensitive receptors to substantial pollutant concentrations.
5) Create objectionable odors affecting a substantial number of people.

Discussion

The Project corridor is in the San Diego Air Basin (SDAB) under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD) and the California Air Resources Board (CARB). Concentrations of ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and particulate matter (PM_{10} and $PM_{2.5}$) are commonly used as indicators of ambient air quality conditions (i.e., criteria air pollutants) and are regulated by the U.S. Environmental Protection Agency (USEPA) and CARB through national and California ambient air quality standards (NAAQS and CAAQS), respectively. The NAAQS and CAAQS limit criteria air pollutant concentrations to protect human health and prevent environmental and property damage. Other pollutants of concern are nitrogen oxides (NO_X) and reactive organic gases (ROG), which are precursors to O_3, and diesel particulate matter (DPM), which can cause cancer and other human health ailments. Criteria air pollutant concentrations in the SDAB are measured at various monitoring stations throughout the region. Recent air quality measurements from all San Diego County monitoring stations indicate that the SDAB is in nonattainment status for the federal and State O_3 standards; is in “maintenance mode” for the federal CO standard; and is in nonattainment status for the State PM_{10} and $PM_{2.5}$ standards.

The SDAPCD manages air quality through the *Regional Air Quality Strategy* (RAQS), a comprehensive program of long-term planning, regulations, education, and community outreach. The RAQS outlines SDAPCD's plans and control measures to attain the O_3 CAAQS, and the 2012 Maintenance Plan includes control measures for attaining the O_3 NAAQS. The main purpose of the RAQS is to bring the SDAB into compliance with the requirements of the NAAQS and CAAQS. For a project to be consistent with the RAQS, pollutants emitted from a project may not exceed the SDAPCD daily thresholds or cause a significant impact on air quality. In addition to RAQS, SDAPCD Rules 20.2 and 20.3 outline Air Quality Impact Analysis trigger levels for criteria air pollutants. Based on these trigger levels, screening thresholds have been established (Table 4.2.2-1, SDAPCD Air Quality Significance Thresholds). Emissions in excess of these thresholds would have a significant impact on air quality and contribute to NAAQS violations in the SDAB. During grading and construction, contractors are also required to comply with SDAPCD Rule 55 (*Fugitive Dust)*, Rule 50 (*Visible Emissions)*, and Rule 51 *(Nuisance)* to reduce short-term construction-related air pollutant emissions.

TABLE 4.2.2-1. SDAPCD AIR QUALITY SIGNIFICANCE THRESHOLDS

Pollutant	SDAPCD Thresholds (lbs/day)	SDAPCD Thresholds (tons/year)
CO	550	100
Oxides of Sulfur (SO_x)	250	40
Volatile Organic Compounds (VOCs)	751	40
Oxides of Nitrogen (NO_x)	250	40
PM_{10}	100	15
$PM_{2.5}$ [2]	55	NA

NA – Not Applicable

1 County of San Diego, Department of Planning and Development Services, Draft Guidelines for Determining Significance and Report Format and Content Guidance Requirements Air Quality, 2007.

2 SDAPCD does not have thresholds of significance for PM2.5. As such, the PM2.5 threshold from the South Coast Air Quality Management District (SCAQMD) was utilized.

Source: SDAPCD Rule 1501, 20.2(d)(2), 1995.

SDAPCD Rule 55 requires that construction or demolition activities shall not discharge dust emissions into the atmosphere for a period or periods aggregating more than three minutes in any 60-minute period. The applicable control measures in Rule 55 are intended to minimize fugitive dust emissions during active operations (e.g., backfilling, crushing, cut and fill, demolition, earth-moving activities, bulk material import and export, construction staging, stockpiles/bulk material handling, trenching, loading). Methods to minimize dust emissions include track-out grates or gravel beds at each egress point; wheel-washing at each egress point during muddy conditions; secured tarps or cargo covering, watering, or treating of transported material for outbound transport trucks; and soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding on exposed/graded ground surfaces. If a street sweeper is used for the removal of any track-out, only PM_{10}-efficient street sweepers certified to meet the SCAQMD Rule 1186 requirements are permitted. SCAQMD's Rule 1186 is intended to reduce air toxic and criteria air pollutant emissions by requiring certain public and private sweeper fleet operators to acquire alternative-fuel or otherwise less-polluting sweepers when purchasing or leasing these vehicles for sweeping operations.

Rule 50 sets regulations on the discharge of air emission contaminants from asphalt paving equipment or pavement rehabilitation equipment.

Rule 51 prohibits the discharge of air contaminates or other materials in quantities that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.

Asbestos

Pursuant to guidance issued by the Governor's Office of Planning and Research (State Clearinghouse), CEQA Lead Agencies are encouraged to analyze potential impacts related to naturally occurring asbestos which are a human health hazard when airborne; a known human carcinogen by State, federal, and international agencies; and a toxic air contaminant by the CARB in 1986.

CO Hotspots

The SDAPCD requires a quantified assessment of CO hotspots for any project that would place receptors within 500 feet of a major intersection or roadway segment operating at or below Level of Service (LOS) E. Likewise, projects that would cause intersections or roadway segments to operate at or below LOS E would also be required to conduct a CO microscale hotspot analysis (County of San Diego 2007).

Mobile-Source Air Toxics

Mobile-Source Air Toxics (MSAT) emissions include the following criteria air pollutants: CO, NO_2, NO_X, ROG, DPM, PM_{10} and $PM_{2.5}$. The USEPA's national control programs are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, vehicle miles traveled (VMT) growth rates, and local control measures; however, the magnitude of the USEPA-projected reductions is so great (even after accounting for growth in traffic volumes) that MSAT emissions are likely to be lower in the future in nearly all cases.

Analysis

Issue 1: Conflict with or obstruct implementation of the applicable air quality plan.

This issue is not applicable to the proposed Project.

Issue 2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction of the proposed roadway improvements would generate short-term criteria air pollutant emissions associated with grading, construction, and paving operations. Grading would be necessary for widening of the roadway and associated improvements (i.e., curbs/gutters, raised landscaped medians and sidewalks) resulting in fugitive dust emissions (PM_{10} and $PM_{2.5}$). Exhaust emissions (CO, NO_2, NO_X, ROG, DPM, PM_{10} and $PM_{2.5}$) would also occur from combustion sources during grading and construction activities, including emissions associated with the transport of machinery, supplies and soil to and from the construction site. These emissions would be short term and would cease following completion of the proposed improvements. In addition to these particulate and exhaust emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. However, mandatory compliance with SDAPCD Rules 55, 50, and 51 would reduce the Project's potential construction-related air quality impacts associated with heavy-duty equipment emissions to less than significant.

In terms of long-term criteria air pollutant emissions, the proposed Project would not result in substantial changes in traffic volumes, vehicle mix, or any other factor causing a significant increase in MSAT emissions, except that the Project would cause LOS F conditions at the North Highway 101/La Costa Avenue intersection during the Year 2035 AM peak hour under both Alternatives 1 and 2 scenarios, according to the Traffic Impact Analysis (TIA) in Appendix H, which could trigger the requirements for a CO microscale hotspot analysis at this location. As mitigation for this significant impact, if the Alternative 2 scenario is implemented (i.e., two lanes on Carlsbad Boulevard north of La Costa Avenue and two lanes on North Highway 101 between La Costa Avenue and Encinitas Boulevard), then the

currently proposed roundabout at North Highway 101/La Costa Avenue shall be replaced in the Project improvement plans with a signalized intersection and an additional by-pass lane in the SB direction. If this mitigation measure is implemented, it would improve traffic flow due to elimination of the proposed roundabout at this intersection, which would reduce traffic congestion and associated long-term criteria air pollutant emissions from mobile sources. In this mitigation scenario, therefore, a CO microscale hotspot analysis would not be required at this location.

Issue 3: Result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

With respect to cumulative SDAB-wide conditions, the SDAPCD has developed strategies to reduce both short-term (construction-related) and long-term criteria air pollutant emissions outlined in the *Measures to Reduce Particulate Matter in San Diego County* (SDAPCD 2005) and in the RAQS pursuant to federal Clean Air Act mandates. As evaluated in Issue 2 above, the Project would comply with SDAPCD Rules 55, 50, and 51 and implement all feasible mitigation measures with respect to heavy-duty equipment emissions from Project construction; and it would not result in substantial changes in traffic volumes, vehicle mix, or any other factor causing a significant increase in MSAT emissions. These same requirements would also be imposed on cumulative projects throughout the SDAB. Therefore, based on SDAPCD and RAQS guidance, in combination with those from the cumulative projects in Figure 2-2, Local Vicinity Map, the proposed Project would not result in cumulatively considerable short-and long-term air quality impacts.

Issue 4: Expose sensitive receptors to substantial pollutant concentrations.

Sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Sensitive receptors along the east and west sides of the Project corridor include residences, schools, hospitals, and daycare centers.

The proposed Project would be required to implement mandatory measures to reduce or eliminate emissions by following standard construction practices in compliance with Rules 55, 50, and 51 and strategies outlined in the RAQS pursuant to federal Clean Air Act mandates to reduce short- and long-term criteria air pollutant emissions. Based on SDAPCD and RAQS guidance, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations, and such potential impacts would be less than significant.

Issue 5: Create objectionable odors affecting a substantial number of people.

Some objectionable odors may emanate from the operation of diesel-powered construction and paving equipment; however, they would be limited in duration to the short-term construction period. Therefore, the Project would not create objectionable odors affecting a substantial number of people, and such potential impacts would be less than significant.

4.2.3 Biological Resources

Issue 1: 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, and regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

There are no natural habitats within the Project corridor or surrounding lands that could otherwise be occupied by special-status plant and wildlife species. Therefore, the proposed Project would not have a substantial adverse effect on such biological resources.

A total of 31 trees would be removed from the median and west and east sides of the Project corridor as part of the streetscape improvements. Since there is a potential for migrating birds, protected under the Migratory Bird Treaty Act (MBTA), to utilize these trees for breeding and/or roosting, tree removals and grading/construction activities would occur outside the typical bird breeding seasons. Therefore, the proposed Project would not result in potential impacts associated with construction-related direct loss of active nests or indirect disturbance of bird breeding activities (e.g., noise) that could result in abandonment of active nests and impacts to migratory birds.

Issue 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW and USFWS.

As stated above, there are no riparian habitats or sensitive vegetation communities within the Project corridor or surrounding lands. Therefore, the proposed Project would not have a substantial adverse effect on such biological resources.

Issue 3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

There are no jurisdictional wetlands within the Project corridor or surrounding lands. Therefore, the proposed Project would not have a substantial adverse effect on such biological resources.

Issue 4: 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.

The North County Transit District (NCTD) railway ROW runs parallel to the Project corridor on the east side which limits movement of any native resident or migratory wildlife species and precludes native resident or migratory wildlife corridors. In addition, no wildlife corridors are designated by the General Plan within the corridor and immediate vicinity. Therefore, the proposed Project would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Issue 5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The north portion of the Project corridor includes numerous mature trees including a median that provides a landscaped buffer, primarily eucalyptus trees, between Cadmus Street and La Costa Avenue. Aside from the trees, the median and east side of the corridor is sparsely landscaped with informal plantings of groundcovers and shrubs but primarily consist of dirt and wood bark mulch. On the west side of the Leucadia Boulevard intersection, at approximately the midpoint of the Project corridor, Roadside Park consists of a lawn and trees, and provides a small open space area but no pedestrian improvements.

The City's Municipal Tree Ordinance (2011-04) promotes and protects public health, safety, and general welfare by providing for regulation of the planting, maintenance, and removal of trees within the public right-of-way or on public property. This Ordinance is meant to enhance the Urban Forestry Management Program adopted by City Council in March 2009. Section 5 (Planting) and Section 7 (Tree Maintenance Guidelines) of this Program require all trees designated for removal within public rights-of-way to be completely removed from the site and disposed of in an authorized manner. Trees not designated for removal are protected under Section 2 (Protection of Trees During Construction). Excavation of ditches, tunnels, trenches, or drives are not allowed within the Tree Protection Zone as spelled out in Section 2.30.3.

A total of 31 trees would be removed from the median and west and east sides of the Project corridor as part of the streetscape improvements with the Project as proposed; five are eucalyptus. Removal of trees would be done in compliance with Ordinance 2011-04 and the City's Urban Forest Management Program to ensure no conflicts with associated tree removal, preservation and planning policies. Approximately 823 trees would be planted along the corridor as part of the proposed improvements for a net increase of street trees along the Project corridor. Most of these trees would be native, drought-tolerant species to preserve/enhance the tree canopy and reduce overall irrigation water demand. Therefore, the proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Issue 6: Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP.

The Project corridor is not within the boundaries of the draft North County Multiple Species Conservation Plan or adopted North County Multiple Habitat Conservation Program. Therefore, the Lane Diet project did not conflict with the provisions of an adopted local HCP or NCCP.

4.2.4 Cultural and Paleontological Resources

A project would generally be considered to have a significant effect if it would:

1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
4) Disturb any human remains, including those interred outside of formal cemeteries.

Discussion

Cultural and Historic Resources

A Regional Historic Preservation Study in 1980 listed 67 historic structures, properties and sites in the communities of Old Encinitas, Olivenhain, Leucadia and Cardiff-by-the-Sea (RECON 1980). In 1992, a total of 92 historic structures and other resources were identified in the N101SP area and Downtown Encinitas Specific Plan area as part of an architectural and historical resources inventory (DWL 1992). Since these studies, some structures have been demolished, remodeled or altered to some extent; however, a substantial number of the identified resources are in basically the same condition as described in the original reports.

Paleontological Resources

Paleontology is a science dealing with the life of past geologic periods as known from fossil remains. Paleontological resources (fossils) are the remains and/or traces of prehistoric animal and plant life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, leaves and so on, are found in the geologic deposits (rock formations) within which they were originally buried. Fossil remains are important as they provide indicators of the earth's chronology and history. They represent a limited, nonrenewable and sensitive scientific and educational resource. The potential for fossil remains at a given location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are entombed. Geologic formations possess a specific paleontological resource potential wherever the formation occurs based on discoveries made elsewhere in that particular formation.

According to the General Plan Update *Current Conditions Report*, three geologic formations within the City are known to contain fossil deposits.[3] Torrey Sandstone, Del Mar and Santiago. No major exposures of the first two formations occur within the Project corridor; however, the Santiago Formation occurs within the Project corridor, between Leucadia Boulevard and Batiquitos Lagoon. This formation is a middle Eocene stratum with two layers of high paleontological resource sensitivity producing terrestrial and aquatic vertebrate fossils (e.g., primates, insectivores, rhinoceros, brontothere), as well as marine and estuarine mollusks. The mammal assemblages are especially significant because they exhibit a wide diversity and excellent preservation.

[3] City of Encinitas. 2010. *General Plan Update Current Conditions Report*. Chapter 11, Cultural Resources (pages 11-10 and 11-11).

Analysis

Issue 1: Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

The proposed Project would not involve demolition or alteration of any existing structures within the Project corridor and, therefore, would not result in a substantial adverse change to a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines*.

Issue 2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

The land beneath the existing urban areas along the Project corridor has been previously disturbed. It is expected that Project earthmoving activities would be limited to already disturbed soils and would not extend below previously excavated areas into native soils. Therefore, the proposed Project is not anticipated to result in a substantial adverse change to an archeological resource as defined in Section 15064.5 of the *State CEQA Guidelines*, and archaeological monitoring during earthmoving activities is not anticipated as long as such activities are limited to previously disturbed soils.

Issue 3: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

As stated in Issue 2 above, since earthmoving activities are expected to be limited to already disturbed soils and would not extend into native soils, the proposed Project is not anticipated to directly or indirectly destroy a unique paleontological resource or geologic feature. Therefore, paleontological monitoring during Project earthmoving activities is not anticipated as long as such activities are limited to previously disturbed soils.

Issue 4: Disturb any human remains, including those interred outside of formal cemeteries.

As stated in Issue 2 above, since earthmoving activities are expected to be limited to already disturbed soils and would not extend into native soils, the proposed Project is not anticipated to disturb any human remains. Therefore, cultural resource/Native American monitoring during Project earthmoving activities is not anticipated as long as such activities are limited to previously disturbed soils.

4.2.5 Geology and Soils

A project would generally be considered to have a significant effect if it would:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    a. 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.
    b. Strong seismic ground shaking.

c. Seismic-related ground failure, including liquefaction.

d. Landslides.

e. Result in substantial soil erosion or the loss of topsoil.

2) 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.

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

4) 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.

Discussion

Seismicity

Southern California is considered one of the most seismically active regions in the United States because the faulting is dominated by the compression regime associated with the "big bend" of the San Andreas Fault zone. The San Diego region is transected by several sub-parallel, pervasive fault zones, as well as smaller faults. The City is located in the southern part of the Peninsular Ranges geologic Province: an area that is exposed to risk from multiple earthquake fault zones. The San Andreas Fault, which runs from Baja, California to San Francisco, is approximately 100 miles east of the City and poses a potential risk for much of the San Diego region. However, for the City the highest risks originate from nearby zones such as the Elsinore Fault zone, the Rose Canyon Fault zone and other offshore faults. Each zone has the potential to cause moderate to large earthquakes that would cause ground shaking in Encinitas and nearby communities.

According to the General Plan Update *Current Conditions Report*,[4] the Julian section of the Elsinore Fault zone is approximately 40 miles to the east; the Oceanside and Del Mar sections of the Rose Canyon Fault zone are located predominantly offshore to the west, approximately two to six miles respectively; and other zones are located further offshore. All of these are designated as Alquist-Priolo Fault Zones capable of causing major ground shaking or surface rupture within the Project corridor during a seismic event. However, the Project corridor itself is not located within a designated Alquist-Priolo Fault Zone, and no active or potentially active faults are known to underlie the corridor.

Soils

According to the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS),[5] the following soil types occur in and adjacent to the Project corridor:

[4] City of Encinitas. 2010. *General Plan Update Current Conditions Report*, Chapter 15, Geology and Geotechnical (Exhibit 15-2).
[5] USDA, NRCS. http://websoilsurvey.nrcs.usda.gov/app/. Accessed June 22, 2015.

- **Corralitos loamy sand (CsC), 5 to 9 percent slopes:** somewhat excessively drained, very deep loamy sands; runoff is medium; erosion hazard is moderate.
- **Marina loamy coarse sand (MlC), 2 to 9 percent slopes:** somewhat excessively drained, very deep loamy coarse sands; runoff is slow to medium; erosion hazard is slight to moderate.
- **Marina loamy coarse sand (MlE), 9 to 30 percent slopes:** runoff is medium to rapid; erosion hazard is moderate to high.

Analysis

Issue 1a: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Although the Project corridor is not within a designated Alquist-Priolo Fault Zone and no other active or potentially active faults are known to underlie the corridor, infrastructure damage from seismically-induced surface rupture could occur within the corridor exposing people or structures to substantial adverse effects, including the risk of loss, injury, or death. However, Project design adheres to applicable City standards to minimize such seismic hazards, and such potential impacts would be less than significant.

Issue 1b: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

Please refer to Issue 1a above.

Issue 1c: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

Liquefaction occurs when loose, unconsolidated, saturated or near-saturated soils in areas of recently deposited sands/silts and high groundwater levels are subject to shaking, causing the soils to lose cohesion. However, these conditions do not exist beneath the Project corridor and the underlying soils are not susceptible to liquefaction. Therefore, the proposed Project would not expose people or structures to potential substantial adverse effects from seismically-induced liquefaction, including the risk of loss, injury, or death.

Issue 1d: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

A steep slope at the north end of the Project corridor, across from the La Costa Avenue intersection, could be susceptible to a seismically-induced landslide causing infrastructure damage that may expose people or structures to substantial adverse effects, including the risk of loss, injury, or death. However, Project

design adheres to applicable City standards to minimize such seismic hazards, and such potential impacts would be less than significant.

Issue 2: Result in substantial soil erosion or the loss of topsoil.

Construction contractors are required to carry out standard erosion control measures such as the following typical Best Management Practices (BMPs):

- Regularly water construction areas where soil exposure occurs, as long as limited and minimal use of water is carried out efficiently and judiciously recognizing drought conditions.
- Apply mulch and fiber rolls to exposed slopes, as necessary.
- Use grading and landscaping methods that lower the potential for downstream sedimentation.
- Ensure that structural erosion and sediment transport control measures are ready for implementation prior to the onset each storm event.
- Trap sediment before it leaves the site with such techniques as sediment ponds, straw bales, gravel bags or silt fences.

With implementation of these standard BMPs to avoid substantial soil erosion or loss of topsoil, potential Project impacts in this regard would be less than significant.

Issue 3: 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.

Please refer to Issue 1c and 1d above.

Issue 4: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (UBC), creating substantial risks to life or property.

As described above, the majority of the Project corridor is underlain by soil types with medium to rapid runoff potential (CsC, MlC, MlE), or low potential for expansivity. Therefore, the proposed Project would not be located on expansive soils, as defined in Table 18-1-B of the UBC (1994), otherwise creating substantial risks to life or property.

Issue 5: 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.

This issue is not applicable to the proposed Project.

4.2.6 Greenhouse Gas (GHG) Emissions

A project would generally be considered to have a significant effect if it would:

1) Generate cumulatively considerable GHG emissions that exceed 900 metric tons per year (equivalent to 50 dwelling units).

2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the GHG emissions.

Discussion

Global Climate Change

California is a substantial contributor of global GHGs, emitting over 400 million tons of carbon dioxide (CO_2) per year (California Energy Commission 2014). Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit (ºF) over the next century. Methane (CH_4) is also an important GHG that contributes to global climate change. GHGs are global in their effect, and increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750) to over 650,000 years ago. For that period, CO_2 concentrations ranged from 180 parts per million (ppm) to 300 ppm. For the period from approximately 1750 to 2005, global CO_2 concentrations increased to 379 ppm.

City of Encinitas Climate Action Plan, Air Quality Regulations and Significance Criteria

Please refer to Section 3.3.1.2 in this EIR (Land Use and Planning, Regulatory Framework) for a discussion of relevant air quality regulations including Executive Orders S-3-05 and B-16-2012; the California Governor's Office of Planning and Research (OPR) 2008 Technical Advisory; the California Air Pollution Control Officers Association (CAPCOA) 2008 white paper (*CEQA and Climate Change*); the CAPCOA *Model Policies for Greenhouse Gases in General Plans*; the CARB's *Climate Change Scoping Plan*; and the City's Climate Action Plan (CAP). As required by Assembly Bill (AB) 32, CARB has approved a State 2020 emissions limit of 427 million metric tons (MMT) of CO_2eq. It is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from a project would combine with emissions across the world to cumulatively contribute to global climate change. The City has not adopted a significance threshold for GHG impacts. Accordingly, the following analysis uses the County of San Diego and CAPCOA interim threshold of 900 metric tons CO_2e. As set forth in the OPR Technical Advisory and Section 15064.4(a)(1) and (2) of the *State CEQA Guidelines*, the analysis below examines whether GHG emissions are significant based on qualitative and performance-based standards.

Analysis

Issue 1: Generate cumulatively considerable GHG emissions that exceed 900 metric tons per year (equivalent to 50 dwelling units).

With respect to cumulative SDAB-wide conditions, the SDAPCD has developed strategies to reduce short-term construction-related criteria air pollutant emissions outlined in the Measures to Reduce Particulate Matter in San Diego County (SDAPCD 2005), and to reduce long-term mobile-source GHG emissions outlined in the RAQS pursuant to federal Clean Air Act mandates.

During Project construction, GHG emissions from heavy-duty equipment, worker vehicle trips, and truck hauling trips are not expected to exceed 900 MMT CO_2eq/year as such activities would be short-term. Additionally, the construction manager would be required to comply with SDAPCD Rules 50, 51 and 55 and applicable BMPs such as using low-emission construction vehicles and equipment. These requirements are also imposed on cumulative projects throughout the SDAB.

In the long-term, the proposed Project would not directly generate additional trips, emit air pollutants or increase mobile-source GHG emissions. Rather, the project is intended to decrease mobile-source GHG emissions by promoting more alternative means of transportation consistent with Executive Orders S-3-05 and B-16-2012; OPR's 2008 Technical Advisory; CAPCOA's 2008 white paper and *Model Policies for Greenhouse Gases in General Plans*; the CARB's *Climate Change Scoping Plan*; and the City's CAP.

Therefore, the proposed Project, in combination with the cumulative projects in Figure 2-2, would not substantially contribute to cumulatively considerable short- or long-term GHG impacts in excess of 900 metric tons per year (equivalent to 50 dwelling units).

Issue 2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

The proposed Project would provide the following multi-modal functions to promote alternative transportation modes, reduce traffic congestion, decrease mobile-source GHG emissions, and encourage residents to have more healthy and active lifestyles:

- Road diet features such as striping to reduce the number/width of vehicle lanes; added/enhanced bicycle lanes/ facilities; and shared vehicle/ bicycle lanes.
- Traffic calming roundabouts and traffic signals.
- Walkability measures such as expanded sidewalks; added/enhanced pedestrian facilities; and enhanced pedestrian crosswalks at uncontrolled intersections near bus stops consisting of pedestrian activated signals and pavement treatments (i.e., rectangular rapid flashing beacons, striping, and textural pavement).

These Project features are consistent with Executive Orders S-3-05 and B-16-2012; OPR's 2008 Technical Advisory; CAPCOA's 2008 white paper and *Model Policies for Greenhouse Gases in General Plans*; the CARB's *Climate Change Scoping Plan*; and the City's CAP. Therefore, the proposed Project would not conflict with applicable plans, policies and regulations adopted for the purpose of reducing GHG emissions.

4.2.7 Hazards and Hazardous Materials

A project would generally be considered to have a significant effect if it would:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Analysis

Issue 1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Project construction activities could involve the transport, use or disposal of hazardous materials (i.e., chemical agents, solvents, paints); however, such activities are required to comply with standard safety procedures to avoid the potential for significant hazards to the public and environment or accidents that could result in the release of hazardous substances into the environment, and such potential impacts would be less than significant.

Issue 2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Please refer to Issue 1 above.

Issue 3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Please refer to Issue 1 above.

Issue 4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

Please refer to Issue 1 above.

Issue 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

The Project corridor is not located within two miles of a public airport or within an airport land use plan.

Issue 6: For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

The Project corridor is not located within the vicinity of a private airstrip.

Issue 7: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

During Project construction, emergency vehicles would be accommodated access at all times through the corridor, including fire trucks and police, ambulance and paramedic vehicles, by always maintaining open at least one travel lane in each direction. Also, please refer to Appendix G, Emergency Response Technical Memo, and Section 3.4.2 of this EIR for evaluation of how the Project design would accommodate emergency vehicle access at all times through the corridor to maintain acceptable emergency response times. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan along the Project corridor, and such potential impacts would be less than significant.

Issue 8: Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The Project corridor is within a developed area, largely surrounded by urbanized land uses, and is not adjacent to any wildlands. Therefore, the proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

4.2.8 Mineral Resources

A project would generally be considered to have a significant effect if it would:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
2) 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.

Analysis

Issue 1: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

No known mineral resource recovery sites occur or are designated within or adjacent to the Project corridor; therefore, this issue is not applicable to the proposed Project.

Issue 2: 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.

Please refer to Issue 1 above.

4.2.9 Noise/Vibration

A project would generally be considered to have a significant effect if it would cause:

1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
5) 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 expose people residing or working in the project area to excessive noise levels.
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Discussion

For existing land uses adjacent to the Project corridor, construction-related (point-source) noise levels at the property line are regulated by Chapter 9.32 (Noise Abatement and Control) and Section 30.40.010 (Noise Ordinance) of the City's Municipal Code. Table 4.2.9-1, Exterior Noise Limits, shows these exterior noise limits. In addition, Table 4.2.9-2, Land Use Compatibility for Community Noise Environments, shows the exterior noise limits stated in OPR's General Plan Guidelines for mobile-source

noise levels at the property line. In addition to these exterior noise limits, an increase in noise levels in excess of 3 dB(A) is commonly used as a perceptible increase based on the human hearing range.

TABLE 4.2.9-1. EXTERIOR NOISE LIMITS

Adjacent Zone	One Hour Average Sound Level (dB(A))	
	7 AM – 10 PM	10 PM – 7 AM
Residential Zones: Low density single family and suburban single family (RR, RR-1, RR-2, R-3, R-5, and R-8)	50	45
Residential Zones: single-family, high-density single-family, high-density multi-family, and mobile home park (R-11 RS-11, R-15, R-20, R-25, and MHP)	55	50
Commercial Zones: (OP, LLC, LC, GC, L-VSC, and VSC)	60	55
Light Industrial Zones (L-I and BP)	60	55

Source: City of Encinitas Municipal Code, Chapter 9.32, Section 30.40.010.

TABLE 4.2.9-2. LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Category	Community Noise Exposure (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 77.5	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

CNEL = community noise equivalent level; NA = not applicable

NORMALLY ACCEPTABLE: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

NORMALLY UNACCEPTABLE: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.

CLEARLY UNACCEPTABLE: New construction or development should generally not be undertaken.

Source: OPR's General Plan Guidelines, October 2003.

Construction-related noise levels would be created by the operation of heavy-duty trucks, backhoes, bulldozers, excavators, tractors, graders, pavers, and other construction equipment. Typical maximum

noise levels generated by construction equipment are shown in Table 4.2.9-3, Maximum Noise Levels Generated by Construction Equipment. Operating cycles for these types of equipment may involve one or two minutes of full power followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents which would last less than one minute (e.g., jackhammers, hydraulic movement of machinery lifts).

In addition to noise levels, Project construction may generate varying degrees of ground-borne vibrations depending on the construction procedures and equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The vibrations produced by construction equipment are listed in Table 4.2.9-4, Typical Vibration Levels for Construction Equipment. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. The effects on buildings in the vicinity of construction sites often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and geologic layers between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. However, ground-borne vibrations from construction activities rarely reach levels that damage structures.

TABLE 4.2.9-3. MAXIMUM NOISE LEVELS GENERATED BY CONSTRUCTION EQUIPMENT

Type of Equipment	Acoustical Use Factor[1]	Lmax at 50 Feet (dBA)
Backhoe	40	78
Tractor	40	84
Concrete Saw	20	90
Water Truck	40	70
Excavator	40	81
Cement and Mortar Mixer	40	79
Crane	16	81
Dozer	40	82
Forklift	40	70
Grader	40	85
Paver	50	77
Roller	20	80

1. Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., loudest condition) during a construction operation.

Source: Federal Highway Administration, Roadway Construction Noise Model (FHWA-HEP-05-054), January 2006.

Ground-borne vibration decreases rapidly with distance. As indicated in Table 4.2.9-4, vibration velocities from typical heavy-duty construction equipment operation range from 0.003 to 0.089 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity. At 75 feet from the source activity, vibration velocities range from 0.001 to 0.017 inch-per-second PPV. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time.

TABLE 4.2.9-4. TYPICAL VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Approximate peak particle ground velocity at 25 feet (inches/second)[1]	Approximate peak particle ground velocity at 75 feet (inches/second)[1]
Large bulldozer	0.089	0.017
Loaded trucks	0.076	0.015
Small bulldozer	0.003	0.001
Jackhammer	0.035	0.007

1. Root mean square amplitude ground velocity in decibels (VdB) referenced to 1 micro-inch/second.
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

Analysis

Issue 1: Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Short-Term Construction-Related Noise Impacts

Project construction would result in short-term, temporary or periodic increases in noise levels during vegetation/tree removal, pavement demolition, grading, excavation and paving. The duration or magnitude of such noise levels would vary based on the types of construction equipment and the specific construction activities, as well as the distance between the noise source and receiver. The construction contractor is required to comply with established time limits in the City's Noise Ordinance to ensure that any construction-related noise levels would not cause disturbance to neighboring sensitive receptors outside the allowable work hours. Compliance with these standards would ensure that Project construction would not expose persons to, nor generate, short-term, temporary or periodic increases in noise levels in excess of the City's Noise Ordinance limits (Table 4.2.9-1). Therefore, the potential construction-related noise impacts of the proposed Project would be less than significant.

Long-term Traffic-Related Noise Impacts

As noted previously, the proposed Project would not result in a substantial increase in traffic volumes along the Project corridor, according to the Project TIA (Appendix H), which could otherwise cause an increase in long-term, mobile-source noise levels affecting noise-sensitive receptors along the corridor. Therefore, the proposed Project would not expose persons to, nor generate, noise levels in excess of the OPR Land Use Compatibility Guidelines for Community Noise Environments (Table 4.2.9-2) or in excess of the 3-dB(A)-threshold commonly used to detect a perceptible noise level increase based on the human hearing range, and potential long-term, mobile-source noise impacts would be less than significant.

Issue 2: Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

Project construction would result in short-term, temporary or periodic increases in ground-borne vibrations during vegetation/tree removal, pavement demolition, grading, and excavation. The duration or

magnitude of such effects would vary based on the types of construction equipment and the specific construction activities, as well as the distance between the vibration source and receiver. The closest occupied structures (with a daytime use) from the paved edge of North Highway 101 are located 25 feet or more away, which would result in vibration levels less than the PPV values in the second column of Table 4.2.9-4. Therefore, Project construction would not expose persons to, nor generate, excessive groundborne vibration levels, and potential construction-related vibration impacts would be less than significant.

Issue 3: A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Please refer to Issue 1 above.

Issue 4: A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Please refer to Issue 1 above.

Issue 5: 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 expose people residing or working in the project area to excessive noise levels.

The Project corridor is not located within an airport land use plan or within two miles of a public airport.

Issue 6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The Project corridor is not located within the vicinity of a private airstrip.

4.2.10 Population and Housing

A project would generally be considered to have a significant effect if it would:

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Analysis

Issue 1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

This issue is not applicable to the proposed Project.

Issue 2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The proposed Project would not result in displacement of any existing housing along the corridor, necessitating the construction of replacement housing elsewhere.

4.2.11 Utilities / Service Systems

A project would generally be considered to have a significant effect if it would:

1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
4) Have insufficient water supplies available to serve the project from existing entitlements and resources, and need new or expanded entitlements.
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
6) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
7) Not comply with federal, state, and local statutes and regulations related to solid waste.

Analysis

Issue 1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB).

This issue is not applicable to the proposed Project.

Issue 2: Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

This issue is not applicable to the proposed Project.

Issue 3: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

As described in Section 3.2.2 of this EIR and the Project drainage study (Appendix F, Drainage Study and Storm Water Quality Management Plan), new gutters and upgraded storm drains would convey runoff to

the nearest point of discharge, in accordance with City storm water regulations, thereby eliminating ponding in the street, adjacent to the railroad tracks, and at private driveways. By increasing the amount of landscaped areas over the Project corridor, the runoff coefficient would be reduced, the Project would not increase the peak 100-year storm discharge from the watershed, and the ultimate flows at downstream discharge points would remain the same as under exiting conditions. The physical environmental impacts associated with the proposed drainage improvements (i.e., ground disturbance from trenching and excavation) are addressed in Section 3.2.2 of this EIR, as part of the overall grading and construction activities. Therefore, the Project would result in the construction of new storm water drainage facilities and expansion of existing facilities, the construction of which could cause environmental impacts that have been thoroughly evaluated in this EIR and, through adherence to applicable City design standards, would be reduced to less than significant.

Issue 4: Have insufficient water supplies available to serve the project from existing entitlements and resources, and need new or expanded entitlements.

The proposed Project would require limited amounts of water for wetting of graded surfaces to minimize the potential for dust or erosion during construction, and would require long-term use of water for irrigation of proposed landscaping, although native vegetation will be used to the extent feasible which would reduce irrigation demands. The existing municipal water system is adequate to satisfy such demands. Therefore, it is anticipated that sufficient water supplies would be available to serve the proposed Project and no new water entitlements, resources, or expanded entitlements would be necessary.

Issue 5: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

This issue is not applicable to the proposed Project.

Issue 6: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

Project construction would generate debris and solid waste for transport to a local transfer station and then to the Otay landfill in Chula Vista or the Sycamore landfill in Santee, both of which are permitted to accept 4,000 tons per day. Both landfills have a remaining capacity of 15 years. Therefore, the limited solid waste to be generated by construction activities would be served by a landfill with sufficient permitted capacity to accommodate the proposed Project's solid waste disposal needs, and potential impacts to landfills would be less than significant.

Issue 7: Not comply with federal, state, and local statutes and regulations related to solid waste.

Please refer to Issue 6 above.

4.2.12 Growth Inducement

In accordance with Section 15126.2(d) of the CEQA Guidelines, the analysis of growth-inducing impacts should address two key issues:

1) Does the project have the potential to foster substantial economic or population growth, or the substantial amount of construction of additional housing, either directly or indirectly, in the surrounding environment, including the potential to remove an obstacle to substantial population growth; or,

2) Does the project have the potential to require the construction of a substantial amount of new community service facilities, or to encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

Induced growth differs from the direct employment, population, or housing growth resulting from implementation of a project. The first issue above addresses the potential for a project to create pressure for additional development in the area, for example by adding housing that would in turn support commercial development. It also addresses the potential for a project to foster additional development by removing an obstacle to growth, such as through the extension of new or higher capacity roads or utilities that could serve currently undeveloped areas.

The latter issue involves the potential for a project to exceed the capacity of the existing service systems and require the construction of new public facilities within the community, such as new parks, schools, fire or police stations, or water/wastewater treatment plants. Construction of these new facilities could then result in additional environmental impacts.

Section 15126.2(d) of the *State CEQA Guidelines* further states that "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." A significant adverse growth-inducing impact is assessed only if the growth would cause a significant adverse environmental impact. If growth patterns resulting from a project are determined to be speculative, rather than reasonably foreseeable, further discussion is not warranted (Kostka and Zischke 2015).

As discussed in the Final Supplemental EIR (SEIR) for the Downtown Encinitas Specific Plan and N101SP, the primary economic effects of these Specific Plans are continued growth in investment and increased population, employment, and housing opportunities. Additional commercial development would generate additional revenue, thereby offsetting increased demand for City-provided services. Further, the SEIR states that the N101SP is consistent with the City General Plan. Over time, beneficial economic growth is anticipated to occur within not only the Specific Plan areas, but within the larger boundaries of the City.

The Final SEIR also states that the intent of the N101SP is to maintain the unique and desirable aspects and existing character of the Specific Plan area, while providing continued private investments, public improvements, and economic success of each commercial district, and ensuring orderly and well planned growth within the Specific Plan area. Implementation of the N101SP would therefore assist in managed growth on a City-wide basis. Additionally, the SEIR indicates that implementation of the N101SP would indirectly promote infill development within the Specific Plan area and would not encourage new development within currently undeveloped areas of the City, thereby resulting in potential expansion of

development into previously undisturbed lands. Therefore, the Final SEIR concluded that implementation of the N101SP would not result in significant growth-inducing impacts.

The City's General Plan Housing Element Update (2016) anticipates an increase in residential densities along the Project corridor, allowing for a potential increase in the number of housing units in the area and an increase in population. With enhancement of the visual appearance of the corridor due to the proposed streetscape improvements, addition of community-gathering places and landscaping, such improvements may encourage new businesses to locate in the area (infill development) or existing businesses to expand or improve over future years, thereby contributing to an environment that may attract further growth. However, determining the type or extent of such future growth along the corridor, as well as any potential growth-inducing effects, would be speculative at this time.

Changes to General Plan land use designations or zoning along the corridor are not a part of the proposed Project, which could otherwise remove a potential obstacle to growth. As such, Project implementation would not result in changes in development regulations for any lands adjacent to or in the vicinity of the corridor that could allow for an increase in the allowed intensity or density of development. In addition, no new residential housing or other land use types (e.g., commercial, industrial) would be required that may directly or indirectly generate population growth in the area. Furthermore, the N101SP area is presently served by all major public services and utilities, and the Project would not require the extension of any public utilities into a previously unserved area (i.e., public water or sewer service).

Consistent with the findings of the Final SEIR for N101SP, the proposed Project would not foster substantial population growth in the surrounding area, either directly or indirectly, nor would it remove an obstacle to population growth. Additionally, it would not require or encourage the construction of new housing or community facilities, nor would it facilitate other activities that could significantly affect the environment, either individually or cumulatively. For the reasons stated above, Project implementation would not be considered growth-inducing.