Chapter 7.0

Cumulative Analysis

Chapter 7 | Cumulative Analysis

7.1 INTRODUCTION

State CEQA Guidelines § 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15355 further states that cumulative impacts can result from individually minor but collectively significant projects taking place over a period.

State CEQA Guidelines § 15130(a) requires a discussion of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in State CEQA Guidelines § 15065(a)(3), "means that the incremental effects of an individual 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."

According to State CEQA Guidelines § 15130(b), the discussion of cumulative effects "...need not provide as great a detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness...." The evaluation of cumulative impacts is to be based on either (a) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency," or (b) "a summary of projections contained in an adopted local, regional, or statewide plan or related planning document, that describes or evaluates conditions contributing to the cumulative effect...Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency" (State CEQA Guidelines § 15130(b)(1)). Pursuant to State CEQA Guidelines § 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans, which may be incorporated by reference.

7.2 CUMULATIVE ANALYSIS SETTING AND METHODOLOGY

Cumulative effects would occur from development associated with buildout of the candidate sites combined with effects of development on land within and around the City of Encinitas (City) and region in the horizon year (2035). This Environmental Assessment (EA) relies on the 2016 PEIR cumulative assumptions for growth forecasted in the County of San Diego General Plan for the unincorporated community of San Dieguito; the City of Carlsbad General Plan; the City of Solana Beach General Plan; and, anticipated ambient growth in the City of Encinitas. A broad examination of cumulative impacts involves considering buildout of the Project together with growth and new development in these surrounding jurisdictions. For example, growth within the City and adjacent jurisdictions would result in increased traffic on area roadways and regional facilities, such as I-5.

The geographic area considered for each cumulative impact depends upon the topic that is being analyzed. For example, in assessing air quality impacts, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions are the best tool for determining the cumulative effect. Each subsection below identifies the specific parameters for the cumulative evaluation.

SANDAG estimates anticipated growth for San Diego County's 18 cities and unincorporated areas for allocating growth to specific areas and identifying regional transportation infrastructure needed to support regional growth. The land uses and associated potential development that would result from buildout of the candidate sites generally correlate to SANDAG's 2035 regional growth forecasts.

A significant impact would occur if the Project's contribution to the cumulative effect is determined to be significant. Each subsection below provides an overview of the potential cumulative impacts that could occur followed by a summary of the Project's potential contribution to that cumulative effect. The subsection concludes with a determination of the significance of the Project.

7.3 CUMULATIVE IMPACT ANALYSIS

7.3.1 AESTHETICS

Consistent with the 2016 PEIR, the study area for the assessment of cumulative visual impacts includes the North County coastal region comprised of Encinitas, the unincorporated community of San Dieguito, and the cities of Carlsbad and Solana Beach. The 2016 PEIR concluded that adoption of the Housing Element Update (HEU) would contribute to the increased density and urbanization in the region but that adverse effects on visual character would be reduced through regulatory compliance with existing plans and programs as well as implementation of zoning standards and design guidelines intended to maximize consistency with the surrounding land use, including preserving significant views. The design controls placed on subsequent development would ensure that development occurs in accordance with the City goals, policies and design objectives. Therefore, the 2016 PEIR concluded the HEU's incremental contribution to visual impacts would not be cumulatively considerable.

Concerning the revised Project, as addressed in Section 4.1, *Aesthetics*, future development would not result in significant impacts to visual resources except for Candidate Sites #3 and #10, which could negatively impact the rural neighborhoods' characters resulting in a significant unavoidable impact concerning visual character. Consistent with the 2016 PEIR findings, future development on the candidate sites would not result in cumulatively considerable visual impacts.

7.3.2 Air Quality

The study area for the assessment of cumulative air quality impacts is the San Diego Air Basin (SDAB), which is currently in non-attainment for Federal and State ozone standards and respirable particulate matter (PM_{10} and $PM_{2.5}$) standards. Future development within the study area could have a cumulative impact on air quality due to increased air pollution emissions associated with construction and operations, including transportation. In addition to regional effects, increased traffic volumes could increase localized concentrations of carbon monoxide (CO_2).

The 2016 PEIR concluded that the cumulative assessment of air quality impacts to the SDAB relies partially on the assessment of a project's consistency with the adopted Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP). The analysis concluded that the additional housing would exceed the assumptions used to develop the RAQS and applicable SIP. Since the RAQS and SIP contain the means of attaining air quality standards for the entire San Diego Region, the 2016 PEIR found this exceedance to be significant on a cumulative basis. The 2016 PEIR also concluded that the HEU's incremental contribution to construction-related air quality emissions and operational air quality emissions would not be cumulatively considerable.

Concerning the revised Project's contribution to cumulative air quality impacts, the candidate sites' combined emissions (Project buildout) would exceed the SDAPCD significance thresholds for criteria pollutants on a programmatic basis. Exceeding these thresholds on a programmatic basis has the potential to hinder the region's compliance with the RAQS. As such, this exceedance is considered significant on a cumulative basis.

The Project's construction-related air quality effects would be reduced with implementation of Mitigation Measure AQ-2 which includes several restrictions on construction including but not limited to the types of architectural coating products and use and types of construction equipment. Adherence to the Encinitas General Plan (EGP) policies and mitigation measures associated with construction emissions would reduce impacts associated with future development. However, because neither the degree of concurrent construction nor project-specific details are known, it cannot be determined with certainty that construction emissions would be reduced to below regulatory thresholds. Therefore, on a programmatic basis, the Project would cumulatively contribute to a significant unavoidable impact concerning construction air emissions.

Concerning long-term operational emissions (mobile and stationary sources), individual future Project operational emissions are anticipated to be below significance thresholds and future development would occur in incremental phases over time (depending upon factors such as market demand, and economic and planning considerations). However, since under buildout conditions all future development projects would operate concurrently, the overall Project must be evaluated for significance consideration. Project buildout operational emissions would exceed significance thresholds for all criteria pollutants. Mitigation requiring that the Project reduce its maximum realistic yield (MRY) to levels that would result in operational emissions below the significance thresholds is infeasible, because State law requires that the City accommodate its Regional Housing Needs Assessment (RHNA) fair share of the region's housing needs. This cannot be achieved without the proposed rezoning and future development. Therefore, on a programmatic basis, the Project would cumulatively contribute to significant unavoidable long-term operational air emissions.

7.3.3 Biological Resources

The study area for the assessment of cumulative impacts to biological resources includes the North County coastal region inclusive of the City and neighboring jurisdictions. The 2016 PEIR concluded that adverse effects to biological resources would be reduced through implementation of Federal, State, and regional programs including Multiple Habitat Conservation Program (MHCP) compliance, EGP policies, and Encinitas Municipal Code (EMC) standards to protect sensitive species. Although the City has not adopted the MHCP, the City uses it as a local reference guide. The 2016 PEIR identified mitigation to reduce impacts to biological resources through requirements for site-specific biological and protocol surveys, and pre-construction surveys if vegetation clearing is proposed during the typical bird breeding season. Although future projects would contribute to cumulative biological resource impacts, following the MHCP as a reference for best practices, City codes and policies, and adherence to the 2016 PEIR mitigation would ensure that each project's incremental contribution to biological impacts would not be cumulatively considerable.

Concerning the revised Project and as discussed in Section 4.3, *Biological Resources*, there are various sensitive resources in the City. The distribution of these resources and potential for impacts to occur associated with future development on the candidate sites are identified in Tables 4.3-1 and 4.3-2. Consistent with the 2016 PEIR, Project impacts would be reduced to less than significant through

compliance with Federal, State, and regional programs, General Plan policies, and City ordinances in place for the protection of sensitive species. Although future projects on candidate sites would contribute to cumulative biological resource impacts, each project's incremental contribution to biological impacts would not be cumulatively considerable.

7.3.4 Cultural Resources

The study area for the assessment of cumulative impacts to cultural and tribal cultural resources is the San Diego region. Future development within the cumulative study area could have a cumulative impact on cultural resources through the loss records or artifacts as land is developed (or redeveloped). The 2016 PEIR found that potential impacts to historical and archaeological resources would be significant on a cumulative basis because preservation of resources could only be ensured at a project level. Impacts were identified as significant and unavoidable. Impacts to paleontological resources would not be cumulatively considerable.

The following is a summary of the revised Project's contribution to cumulative effects on historic, archaeological, tribal cultural, and paleontological resources.

There are no known historic resources on the candidate sites. Compliance with EGP policies and recommended mitigation measures for the protection of said resources would reduce potential impacts in the event historic resources are noted to less than significant. As such, the Project would not cumulatively contribute to impacts historic resources.

Future development on the candidate sites could impact archaeological and/or tribal cultural resources. It is possible that cumulative development could result in the adverse modification or damage to archaeological and/or tribal cultural resources. Potential cultural resource impacts associated with the development of individual projects would be site-specific. Future development would be subject to compliance with existing Federal, State, and local regulations and recommended mitigation measures concerning the protection of archaeological and tribal cultural resources on a project-by-project basis. Although future projects would be required to comply with EGP policies, EMC §30.34.050, and mitigation set forth in this EA, the Project could cumulatively contribute to significant unavoidable impacts concerning the alteration/destruction of an archaeological/prehistoric structure, object, or site.

Future development could significantly impact unknown subsurface paleontological resources. Measures are identified to mitigate potential impacts to paleontological resources. Although future projects throughout the cumulative Project area would contribute to cumulative impacts to paleontological resources, compliance with EGP policies, EMC standards, and the Project's mitigation requirements would ensure the Project's incremental contribution to paleontological impacts would not be cumulatively considerable.

7.3.5 Geology and Soils

The study area for the assessment of cumulative impacts to geology and soils is the San Diego Region. As development increases throughout the region, the number of persons/structures potentially exposed to seismic and geological hazards would increase. The following summarizes the Project's contribution to geology and soil impacts associated with geology and soils.

Southern California is a seismically active region with a range of geologic and soil conditions. These conditions can vary widely within a limited geographical area due to factors, including differences in

landforms and proximity to fault zones, among others. Therefore, while cumulative development could be exposed to seismic-related and geotechnical hazards, by their very nature, these hazards (i.e., strong ground shaking, liquefaction, landslides, unstable geologic units/soils, and expansive/compressible soils), the constraints are typically site-specific and there is usually little, if any, cumulative relationship between the development of a proposed project and development within a larger cumulative area, such as throughout a city or region. Additionally, while seismic conditions are regional in nature, seismic impacts on a given project site are site-specific. For example, development on the candidate sites or surrounding area would not alter geologic events or soil features/characteristics (such as ground-shaking, seismic intensity, or soil expansion). Therefore, the Project would not affect the level of intensity at which a seismic event on an adjacent site is experienced. However, future development on the candidate sites and in the City and region could expose more persons/structures to seismic hazards.

In accordance with the thresholds of significance, impacts associated with seismic events and hazards would be considered significant if the effects of an earthquake on a property could not be mitigated by an engineered solution. The significance criteria do not require elimination of the potential for structural damage from seismic hazards. Instead, the criteria require an evaluation of whether the seismic conditions on a site can be overcome through engineering design solutions that would reduce to less than significant the substantial risk of exposing people or structures to loss, injury, or death.

State and local regulatory code requirements and their specific mandatory performance standards are designed to ensure the integrity of structures during maximum ground shaking and seismic events. Future development would be constructed in compliance with applicable codes, which are intended to reduce the exposure of people or structures to substantial risk of loss, injury, or death related to geologic or seismic hazards. Therefore, Project impacts would be less than significant. Current building codes and regulations would apply to all present and reasonably foreseeable future projects, which could also be subject to even more rigorous requirements. Therefore, the Project—in combination with past, present, and reasonably foreseeable future projects—would not result in a cumulatively significant impact by exposing people or structures to risks related to geologic hazards, soils, or seismic conditions.

Future projects' compliance with the California Building Code (CBC) and EMC requirements would ensure that geology and soil impacts would be less than significant. As such, potential impacts would be reduced to a less than significant level with implementation of applicable standard engineering practices and construction requirements. The Project's incremental contribution to cumulative geotechnical and seismic impacts would be less than significant. None of the Project characteristics would affect or influence the geotechnical hazards for off-site development. Similarly, the cumulative projects, which would be required to comply with the CBC and their respective building code requirements are not expected to have an adverse impact on development on the candidate sites. For these reasons, no significant cumulative geotechnical impact would occur.

7.3.6 Greenhouse Gas Emissions

Because of the global nature of climate change, most projects will not result in greenhouse gas (GHG) emissions that are individually significant. Therefore, it is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change and the impact of future development on the candidate sites is therefore considered on a cumulative basis.

The 2016 PEIR found that buildout would result in an increase in GHG emissions. Compliance with regulatory programs intended to reduce GHG emissions was used to determine the significance of the

2016 PEIR emissions. Based on the analysis of regulatory programs, the 2016 PEIR concluded that the HEU would result in significant GHG emissions impacts due to transportation, energy, water use, and area sources. Regarding GHG policy consistency, the 2016 PEIR concluded that the HEU would not conflict with any State regulation to reduce GHG emissions, the most applicable plan (i.e., the Scoping Plan), nor policies codified in AB 32 and stated in EO S-3-05 and B-30-15.

The revised Project's incremental effect on statewide GHG emissions is addressed in Section 4.6, *Greenhouse Gas Emissions*. The test for local CEQA practice concerning GHG Project analysis is whether local action and Project mitigation would result in reasonable local fair-share of GHG reductions over time, and which show "substantial progress" toward the long-term State reduction targets. In result, the Project was evaluated for compliance with State and local climate plans and regulations to assess the Project's contribution to the local fair-share GHG reduction.

Consistent with the 2016 PEIR's analysis, notwithstanding implementation of regulatory measures, the revised Project would increase GHG emissions (see Table 4.6-2 and Table 4.6-3). As addressed in Section 4.6, due to the uncertainty of future Project details, at the program-level buildout of the Project would result in significant impacts due to transportation, energy, and area sources of GHG emissions. Therefore, this impact would be cumulatively significant and unavoidable.

Until the anticipated growth assumed as a part of the Project is included in the emission estimates of the SCS, impacts relative to conformance with the SCS would be cumulatively significant and unavoidable. The City adopted its Climate Action Plan (CAP) in January 2018. In the CAP, the City has committed to a 41 percent reduction below the City's 2012 levels by 2030. Although the revised Project would not directly conflict with the CAP policies and reduction measures, the potential exceedance of the City's interim screening threshold could conflict with the City's ability to achieve the CAP's GHG emissions reduction targets. Therefore, on a programmatic level, the Project's contribution would be cumulatively considerable and potential impacts are considered significant and unavoidable.

7.3.7 Hazards and Hazardous Materials

Impacts associated with hazardous materials are often site-specific and localized. The EA evaluates the potential presence of Recognized Environmental Conditions (RECs) in connection with the candidate sites and surrounding area. The 2016 PEIR concluded that adverse effects would be reduced through compliance with Federal, State, local, and regional programs associated with the safe handling and storage of known hazardous materials, as well as implementation of mitigation measures. Compliance with these regulations, EGP policies, and mitigation would ensure no direct or cumulative impacts related to hazardous materials would result from HEU implementation.

Concerning an increased risk of exposure to wildfire, potential impacts to future development would be addressed through project-level analysis and the application of remedial measures. Additionally, adherence to the State and local regulations including CBC standards would assure potential impacts would be less than significant. Compliance with these regulations as identified on a project basis would ensure that the HEU's incremental contribution to hazardous materials impacts would not be cumulatively considerable.

Impacts associated with hazardous materials are often site-specific and localized. Concerning the revised Project, the database search documents the findings of various governmental database searches regarding properties with known or suspected releases of hazardous materials or petroleum hydrocarbons and serves as the basis for defining the cumulative impacts study area. Although some of

the cumulative projects and other future projects associated with buildout of the surrounding communities could involve impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are typically site-specific. Generally, the release of hazardous materials has site-specific impacts that do not compound or increase in combination with impacts elsewhere.

Projects are required to address any issues related to hazardous materials or wastes. Projects must adhere to applicable regulations for the use, transport, and disposal of hazardous materials and implement mitigation in compliance with Federal, State, and local regulations to protect against site contamination by hazardous materials. Compliance with all applicable Federal, State, and local regulations related to hazardous materials would ensure that the routine transport, use, or disposal of hazardous materials would not result in adverse impacts. Demolition activities associated with projects that effect asbestos or lead-based paint would also occur in compliance with regulations, which would ensure that hazardous materials impacts would be less than significant. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers and the public to hazardous substances.

Concerning exposure to wildfire, compliance with these regulations as identified on a project basis would ensure that the Project's incremental contribution to hazardous materials impacts would not be cumulatively considerable.

7.3.8 Hydrology and Water Quality

The study area for the assessment of cumulative impacts to hydrology and water quality includes the Carlsbad Hydrological Unit. The 2016 PEIR future developments' construction and operations could result in significant impacts on drainage patterns, water quality, flooding, and groundwater, and an increase in stormwater runoff within the study area. Projects would be required to comply with Federal, State, and local regulations to ensure potential impacts would be less than significant. The Project's incremental contribution to hydrology and water impacts would not be cumulatively considerable.

New development and redevelopment projects in the study area would result in some increases in impervious surfaces, and thus could generate increased runoff from project sites, including the candidate sites. Future development would be required to prepare and implement Water Quality Management Plans (WQMPs) specifying best management practices (BMPs), including low impact development BMPs, that would minimize runoff from sites and reduce contamination of runoff with pollutants. Therefore, related projects are not expected to cause substantial increases in runoff and are not expected to require construction of substantial new or expanded municipal storm drain systems.

Future development would be required to prepare and implement Stormwater Pollution Prevention Plans (SWPPPs) and/or WQMPs identifying BMPs to be used during project construction to minimize runoff, erosion, and stormwater pollution. Therefore, related projects are not expected to cause substantial increases in stormwater pollution. Project implementation would require future development to comply with applicable EGP policies and Federal, State, and local regulations related to site-specific drainage, flooding, and runoff. Project implementation would not contribute to cumulative impacts related to water quality, drainage pattern runoff, or flooding. Cumulative impacts would be less than significant, and impacts would not be cumulatively considerable.

7.3.9 Land Use and Planning

The study area for the assessment of cumulative land use impacts would be the City and neighboring jurisdictions. Cumulative land use impacts could result from changes to land use plans, which become incompatible and/or unsustainable. The 2016 PEIR concluded the HEU would be consistent with, modify, or replace policies of adopted plans and regulations governing land use and development in the City. The HEU would not conflict with any relevant regional or local plans, including San Diego Forward and EGP policies aimed at conservation and sensitive land. While future housing development would contribute to an overall increase in density and intensity of uses throughout the City, the extent of adverse effects on land use and planning would be reduced through compliance with established regulatory framework, including plans and programs, as well as zoning standards and design guidelines. The 2016 PEIR found that the HEU's incremental contribution to land use impacts would not be cumulatively considerable.

Project implementation would not conflict with applicable plans and policies identified above. Future development within the City would be subject to adopted EGP/Local Coastal Program and Specific Plan policies, as well as EMC processes that govern discretionary actions, including design review. The City would review future project applications for compatibility, policy consistency, applicable noise requirements, and require specific conditions as part of the approval process. Adoption of the new R-30 Overlay Zone would not alter the City's adopted discretionary review process. Subsequent "by right" projects would not be subject to further CEQA review, but would be subject to compliance with the established regulatory framework, including the EMC standards and design guidelines, and mitigation, as applicable. This would ensure development is compatible with nearby land uses, and compatible with each neighborhood's character. Therefore, the Project's incremental contribution to land use impacts would not be cumulatively considerable.

7.3.10 Noise

The study area for the assessment of cumulative noise impacts would be the City and neighboring jurisdictions. Although the City and surrounding jurisdictions are largely urbanized, future development or redevelopment could cumulatively increase ambient noise. The 2016 PEIR concluded that compliance with EGP policies and adherence to mitigation measures associated with noise abatement would ensure that the incremental contribution to noise impacts would not be cumulatively considerable.

Concerning the revised Project, noise impacts were assessed by comparing noise levels without the Project and future noise levels with buildout of the candidate sites. As discussed in Section 4.10, *Noise*, increases in ambient noise are expected to be less than 3 dB significance thresholds. Therefore, the Project's incremental contribution to an increase in ambient noise levels would not be cumulatively considerable.

No project-specific developments are addressed in the EA. Construction associated with related cumulative projects could also occur in other areas of the City and neighboring jurisdictions associated with redevelopment of existing developed sites, as well as new construction on undeveloped sites. Because construction activities tend to be localized and of limited duration and intensity, construction noise and vibration levels are not anticipated to contribute substantially to the cumulative environment at any given location following compliance with General Plan policies, municipal code ordinances, and site-specific mitigation. For these reasons, the Project's contribution to cumulative short-term noise or vibration exposure would be less than significant.

Cumulative noise impacts would occur primarily because of increased traffic on local roadways due to development on the candidate sites and other nearby development. A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. Although there may be a significant noise increase due to the Project in combination with identified cumulative projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the Project. A significant impact would result only if both the combined and incremental effects criteria have been met. Significant mobile noise cumulative impacts would not occur on study area roadway segments, as mobile noise levels would not exceed both the combined and incremental effects criteria. Therefore, the Project's incremental contribution would not be cumulatively considerable.

7.3.11 Population and Housing

The study area considered for the population and housing cumulative impact analysis is defined as the region. The 2016 PEIR concluded that HEU buildout would respond to the need for affordable housing in compliance with the RHNA allocation and associated forecasted population growth within the City through 2035. Because the City is almost completely built out, any new development would be primarily infill or redevelopment of underutilized lands. Future housing development would accommodate the region's projected population growth and would be consistent with adopted plans and regional growth principles. No permanent displacement of housing or people would occur. Therefore, the 2016 PEIR concluded that HEU buildout would not result in a cumulatively considerable contribution to population and housing impacts.

Concerning the revised Project, its implementation would not extend infrastructure that would induce unanticipated population growth, and would therefore not combine with other related projects to contribute to a cumulative impact with respect to population growth. Project implementation, when combined with past, present, and reasonably foreseeable future projects, would not cumulatively contribute to significant adverse cumulative impacts concerning population or housing. Impacts would be less than significant.

7.3.12 Public Services and Recreation

The study area for public services and recreation is the applicable provider's service area. New development or redevelopment within the service area could result in cumulative impacts associated with additional demands for public services, resulting in the need for new or expanded facilities.

The 2016 PEIR concluded that future development within the City would be required to provide evidence that adequate facilities and services are available at the time of application. Future development would be required to pay applicable fees that would support acquisition and construction of additional facilities for fire/emergency response, schools, and parks and recreational facilities. The 2016 PEIR did not identify the need for expanded services or facilities; impacts were found to be less than significant. Therefore, the HEU's incremental contribution to public services, facilities, and recreational impacts were determined to not be cumulatively considerable.

Concerning the revised Project, cities and unincorporated areas continue to develop and, in many cases, intensify development, resulting in population increases and associated increases in the demand for public services and recreational facilities. Future developments would be required to comply with applicable regulations to ensure the adequate provision of public services, facilities, and recreational

facilities occur. Therefore, the Project's increased demand for services would not result in significant cumulative impacts.

7.3.13 Transportation and Traffic

The study area for transportation and traffic includes all EGP Circulation Element roadways within the limits of the City, as well as certain roadways nearby within the cities of Carlsbad and Solana Beach, and unincorporated San Diego County. Generally, the 2016 PEIR findings are applicable to the revised Project; see Section 4.13, *Transportation and Traffic*. Mitigation Measure TRF-1 Table A describes the improvements recommended to mitigate impacts to less than significant under Future Year 2035 With Project conditions. The assessment of traffic impacts associated with future development is based on identifying buildout traffic conditions and subtracting ambient growth (growth that would occur without the HEU). Therefore, the Future Year 2035 condition is inherently a cumulative analysis. As summarized below, Project implementation would result in significant unavoidable impacts to roadway segments, intersections, and ramp intersection/ramp metering throughout the City and surrounding jurisdictions within the cumulative study area. These significant impacts likewise represent significant cumulative impacts.

ROADWAY SEGMENTS AND INTERSECTIONS

Mitigation Measure TRF-1 Table A describes the potential improvements that, to the degree feasible, could mitigate some impacts to a less than significant level under Future Year 2035 With Project conditions.

The City has a citywide capital improvement program in place to address traffic improvements needed for future buildout under the adopted EGP. Because the Project would result in additional impacts beyond EGP buildout, a program related to future development consistent with the Project is required, as described in Mitigation Measure TRF-1. Further, future development would be subject to compliance with the EGP policies which are intended to mitigate impacts to traffic and circulation. However, the City has determined that certain mitigation measures/improvements are infeasible for one or more of the following reasons:

1. The improvement would result in the roadway exceeding the EGP classification;
2. Insufficient right-of-way existed and the City/Community prefer to retain existing adjacent uses instead of exercising eminent domain; and
3. improvement would conflict with existing/planned multi-modal facilities or adopted City policies or programs concerning the provision of multi-modal facilities (pedestrian, bicycle or transit)

Further, the City has not yet approved a mitigation fee program for the Project or included the measures identified in Mitigation Measure TRF-1 Table A in its Capital Improvement program, which means there is no assurance that funding would be available to construct the recommended improvements at the time future development is proposed. Therefore, impacts would be significant and unavoidable concerning 13 roadway segments and three (3) intersections:

Roadway Segments

- La Costa Avenue: North Coast Highway 101 to Vulcan Avenue – LOS F
- La Costa Avenue: Vulcan Avenue to Sheridan Road – LOS F
- Encinitas Boulevard: I-5 SB Ramps to I-5 NB Ramps – LOS F
- Encinitas Boulevard: I-5 NB Ramps to Saxony Road – LOS F

- Encinitas Boulevard: Quail Gardens Drive to Delphinium Street – LOS F
- Encinitas Boulevard: Delphinium Street to Balour Drive – LOS F
- Encinitas Boulevard: Balour Drive to Via Cantebria – LOS F
- Santa Fe Drive: Nardo Road to Windsor Road/Bonita Drive – LOS E
- Santa Fe Drive: Windsor Road/Bonita Drive to Balour Drive – LOS E
- Santa Fe Drive: Balour Drive to Lake Drive – LOS E
- Santa Fe Drive: Lake Drive to Crest Drive – LOS E
- Santa Fe Drive: Crest Drive to El Camino Real – LOS E
- South Rancho Santa Fe Road: City of Encinitas Limits to El Mirlo – LOS F

Intersections

- # 6 – Vulcan Avenue at La Costa Avenue – AM: LOS E, PM: LOS E
- # 17 – Saxony Road at Leucadia Boulevard – AM: LOS E, PM: LOS E
- # 45 – Balour Drive at Santa Fe Drive – AM: LOS F, PM: LOS F

FREEWAY RAMP INTERSECTIONS AND RAMP METERS

Although implementation of the recommended improvements (see Mitigation Measure TRF-1 Table A) could reduce impacts to less than significant, certain actions for design and implementation of the improvements would be required, which are within Caltrans jurisdiction, not City of Encinitas jurisdiction. Thus, the City cannot ensure that the improvements necessary to avoid/reduce impacts to less than significant would occur prior to future housing development. For these reasons, the HEU's impacts would be significant and unavoidable concerning the following Caltrans facilities (i.e., two ramp intersections and three ramp meters):

Ramp Intersections

- I-5 Northbound Ramps/Leucadia Boulevard – over capacity during the PM peak hour
- I-5 Southbound Ramps/Encinitas Boulevard – over capacity during the AM and PM peak hours

Ramp Meters

- I-5 Northbound on-ramp at Encinitas Boulevard – 20 minutes during PM peak hour
- I-5 Southbound on-ramp at Encinitas Boulevard – 17.0 minutes during AM peak hour
- I-5 Southbound on-ramp at Santa Fe Drive – 34.0 minutes during AM peak hour

7.3.14 Public Utilities and Service Systems

The study area for public utilities and service systems is the applicable provider's service area. New development or redevelopment within the service area could result in cumulative impacts associated with additional demands for public utilities and service systems, resulting in the need for new or expanded facilities.

STORM DRAIN

The 2016 PEIR concluded the HEU could contribute to impacts due to increased impervious surfaces throughout the service area, resulting in the potential for greater surface runoff and increased demands on existing stormwater. Development would be required to be comply with Federal, State, and local regulations to avoid/lessen potentially significant impacts related to runoff rates and volumes. If future projects need to increase sizing of existing storm drains, this would be reviewed on a project-by-project basis. Compliance with EGP policies and EMC regulations would ensure that the HEU's incremental contribution to storm drain infrastructure impacts would not be cumulatively considerable.

Concerning the revised Project, anticipated storm drain infrastructure for the candidate sites—together with related past, present, and reasonably foreseeable future projects—is not expected to result in the need for new or expanded storm drainage facilities that could result in significant environmental impacts. However, as concluded in the 2016 PEIR, if future projects need to increase sizing of existing storm drains, this would be reviewed on a project-by-project basis. Compliance with EGP policies and EMC regulations would ensure that the Project's incremental contribution to storm drain infrastructure impacts would not be cumulatively considerable.

WASTEWATER

The 2016 PEIR concluded future development consistent with the HEU would be required to document that adequate facilities are available to serve the sites. Following compliance with EGP policies and EMC regulations, the HEU's incremental contribution to wastewater capacity impacts would not be cumulatively considerable.

Given the existing available capacity, the wastewater treatment needs associated with development on the candidate sites—together with related past, present, and reasonably foreseeable future projects—would not result in the need for new or expanded wastewater treatment facilities that could result in significant environmental impacts or that could cause the wastewater treatment to exceed the capacity of the wastewater treatment facilities. The cumulative utilities impact with respect to wastewater treatment capacity would be less than significant. Wastewater treatment requirements issued by the Regional Water Quality Board for treatment plants are developed to ensure that adequate levels of treatment are provided. When combined with existing conditions and expected growth, the Project's estimated sewage flows are not expected to exceed the existing or projected capacity or ability to transport sewage to a treatment plant or exceed treatment or water quality standards. No significant cumulative impact is anticipated, and the Project's contribution is not considered cumulatively considerable.

WATER INFRASTRUCTURE/WATER SUPPLY

The 2016 PEIR concluded future development consistent with the HEU would be required to document that adequate water supplies were available to support the individual projects. Compliance with EGP policies and EMC regulations would ensure that the incremental contribution to water supply impacts would not be cumulatively considerable.

The Project's water supply needs, together with related past, present, and reasonably foreseeable future projects, could result in the need for new or expanded water entitlements that could result in significant environmental impacts. Concerning future development within the San Dieguito Water District (SDWD) service area, future development in accordance with the HEU would not be cumulatively considerable, since the SDWD's projected water supply would meet demand during all conditions (with excess supplies). However, concerning future development within the Olivenhain Municipal Water District (OMWD) service area, since the OMWD's projected water supply would meet demand during normal and single-dry years, but with no excess supplies, and since the projected water supply would not meet demand during the three multiple-dry years, future development in accordance with the HEU would be cumulatively considerable. Related projects proposing General Plan amendments, which are not accounted for in the Urban Water Management Plans, when combined with the revised Project, would further aggravate existing water supply shortages. Since Project implementation would have a significant impact on water supply, the Project could combine with other related projects to result in significant cumulative water supply impacts.

SOLID WASTE

The 2016 PEIR concluded that future development would be required to participate in recycling programs, comply with EGP policies, and the City's Solid Waste and Recycling Ordinance to preclude significant solid waste disposal impacts related to construction and operations. The 2016 PEIR found that compliance with EGP policies and EMC regulations would ensure that the Housing Element's incremental contribution to solid waste impacts would not be cumulatively considerable. Future projects in the area would increase solid waste generation and decrease available capacity of the County's landfills. Consistent with the 2016 PEIR's findings, compliance with EGP policies and EMC regulations would ensure that the Project's incremental contribution to solid waste impacts would not be cumulatively considerable.