

CITY OF ROLLING HILLS ESTATES GENERAL PLAN UPDATE

PROGRAM ENVIRONMENTAL IMPACT REPORT

SCH No. 2021050450



PREPARED FOR:



**CITY OF ROLLING HILLS ESTATES
COMMUNITY DEVELOPMENT DEPARTMENT
4045 PALOS VERDES DRIVE NORTH
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ES.1 INTRODUCTION

This draft Program Environmental Impact Report (PEIR) addresses the environmental effects associated with the implementation of the proposed General Plan Update (proposed GPU) for the City of Rolling Hills Estates (City). In accordance with the California Environmental Quality Act (CEQA), local government agencies are required to consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An EIR analyzes potential environmental consequences in order to inform the public and support informed decisions by local and State governmental agency decision makers.

This PEIR has been prepared pursuant to the requirements of CEQA, the CEQA Guidelines, and the City's CEQA procedures. This PEIR represents the best effort to evaluate the proposed GPU given its planning horizon through the year 2040. It can be anticipated that conditions will change; however, the assumptions used are the best available at the time of preparation and reflect existing knowledge of patterns of development.

ES.2 PROJECT LOCATION

The City of Rolling Hills Estates is located in the center of the Palos Verdes Peninsula in the southwestern portion of the County of Los Angeles. The General Plan Planning Area (Planning Area) is the land area addressed by the City of Rolling Hills Estates (City) General Plan Update (Proposed Project), which encompasses approximately 2,378 acres, including all of the land within City limits (84 percent) and the unincorporated Sphere of Influence (SOI) (16 percent). The boundaries of the Planning Area generally follow the borders of the City. The City is bounded by the City of Rancho Palos Verdes on the west and south, the City of Rolling Hills on the south, the City of Palos Verdes Estates on the north, the City of Torrance on the north and northeast, the City of Lomita on the north and east, and unincorporated Los Angeles County on the south and southeast.

ES.3 PROJECT SUMMARY

The Rolling Hills Estates General Plan is a guidance document that describes the City's vision as a livable community with excellent services, a strong identity, healthy business opportunities, and a strong and efficient government. Future land use, circulation, housing, conservation, and other decisions in the City are guided by goals and policies set forth in the General Plan. The General Plan is a State-required legal document (Government Code Section 65300) that provides guidance to decision-makers regarding the conservation of resources and the future physical form and character of development in the City. It is the jurisdiction's official statement regarding the extent and types of development of land and infrastructure that will achieve the community's physical, economic, social, and environmental goals. The General Plan expresses the City's goals and articulates the City's intentions with respect to the rights and expectations of the general public, property owners, community interest groups, prospective investors, and business interests. Although the General Plan consists of individual sections, or elements, that address a specific area of concern, it also embodies a comprehensive and integrated planning approach.

In 2017, the City initiated a multi-year process to update the City's General Plan, referred to as the proposed GPU. If adopted, the proposed GPU would be the overarching policy document that

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guides land use, housing, transportation, infrastructure, community design, and other policy decisions through the anticipated plan horizon year of 2040. The proposed GPU would serve as the City's "blueprint" for future development, providing the policy guidance for achieving the community's vision.

The City's current General Plan dates back to 1992 and is in need of an update as new opportunities, challenges, and approaches have emerged in recent years. The proposed GPU would address emerging issues and community priorities, ensure compliance with State law, and revise implementing policy frameworks to focus on present and future goals and policy objectives. The proposed GPU would also incorporate new and updated assumptions, data, and analysis, as well as establish a new vision and blueprint for development and investment through 2040.

The proposed GPU would address eight General Plan elements, seven of which are required by State law (i.e., circulation, conservation, housing, land use, noise, open space, and safety). In addition to these seven elements, the proposed GPU would establish a Sustainability Element.

Rolling Hills Estates is essentially a built-out City with only two vacant parcels (other than those designated for open space), a low-density residential parcel and a commercial use parcel. The residential neighborhoods, as well as the parks and recreation areas, in the City are well-established and are not expected to change during the timeline of this proposed GPU. The primary changes included in the proposed GPU include:

- Apply a new Commercial District Mixed-Use Overlay to the City's Commercial District that would allow for a base residential density of 30 dwelling units per acre with an opportunity for a 50-percent density bonus for projects that provide certain community benefits
- Extend the existing Mixed-Use Overlay to the properties designated for Commercial Office
- Redesignate the property on the northeastern corner of Highridge Road and Armaga Spring Road from Commercial Office to Neighborhood Commercial
- Redesignate the Seahorse Riding Club parcel along Crenshaw Boulevard from Commercial Recreation to Neighborhood Commercial
- Revise allowable land uses in the Institutional designation to include affordable residential uses at 1 to 2 units per acre concentrated in small portions of Institutional properties
- Adjust the land use designations of several parcels to match their current uses
- Envision changing Silver Spur Road from a four-lane street to a two-lane street, narrowing it to a "main street" scale street, with angled parking (instead of parallel parking), buffered bike lanes, and other amenities
- Envision removing Bart Earle Way (replaced by a rear entry drive aisle to access parking) and providing the roadway space for development as an addition to existing parcels along the north side of Bart Earle Way
- Envision reconnecting Deep Valley Drive if and when redevelopment of the Promenade Mall site occurs

ES.4 SUMMARY OF PROJECT ALTERNATIVES

CEQA Guidelines Section 15126.6 requires the identification and evaluation of a range of reasonable alternatives designed to feasibly achieve most of the basic objectives of the project, while avoiding or substantially lessening any of the significant environmental effects of the project. In addition, CEQA requires a comparative evaluation of the merits of the alternatives. The alternatives considered in this PEIR are based, in part, on their potential to reduce or eliminate the impacts that have been determined to be significant for implementation of the proposed GPU. Three alternatives are assessed in further detail in Section 5.0, Alternatives to the General Plan Update, of this PEIR, including the following:

NO PROJECT ALTERNATIVE

Under Alternative 1, no changes to the current General Plan designations and zoning would occur. Alternative 1 would continue to allow future development of what would be reasonably expected under the current (1992) General Plan based on existing land use designations and zoning in the City.

ALTERNATIVE 2: PROJECT WITHOUT LOCAL DENSITY BONUS ALTERNATIVE

Under Alternative 2, no local density bonus would be provided for the Commercial General land use designation. As a result, the base residential density in the Commercial District would be 30 dwelling units per acre, which with the State's affordable housing density bonus opportunity would provide for a maximum density of 45 dwelling units per acre. Because no local density bonus would be allowed, certain community benefits would not be incentivized.

ALTERNATIVE 3: PROJECT WITHOUT MIXED-USE OVERLAY ON COMMERCIAL OFFICE ALTERNATIVE

Under Alternative 3, the Mixed-Use Overlay would not be applied to parcels that are designated as Commercial Office. As a result, 52 dwelling units (under the low range scenario) and 78 dwelling units (under the high range scenario) would not be allowed to be developed on the parcel designated Commercial Office (Academy Center development at the southwest corner of Palos Verdes Drive North and Crenshaw Boulevard).

ES.5 ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(3) requires that an EIR identify issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed GPU, the major issues to be resolved include decisions by the lead agency as to:

- Whether this PEIR adequately describes the environmental impacts of the proposed GPU.
- Whether the benefits of the proposed GPU override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
- Whether the proposed land use changes are compatible with the character of the Planning Area.
- Whether the identified goals, policies, or mitigation measures should be adopted or modified.

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- Whether there are other mitigation measures that should be applied to the proposed GPU beyond the mitigation measures identified in this PEIR.
- Whether there are any alternatives to the proposed GPU that would substantially lessen any of the significant impacts of the proposed GPU and achieve most of the basic Project objectives.

ES.6 AREAS OF CONTROVERSY

In accordance with CEQA Guidelines Section 15123(b)(2), the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. The City of Rolling Hills Estates has no knowledge of expressed areas of controversy regarding the environmental impacts of the proposed GPU. Prior to preparation of this PEIR, a public scoping meeting was held on June 3, 2021, to determine the concerns of responsible and trustee agencies and the community regarding the proposed GPU. The scoping meeting was held virtually, and one community member identified concerns related to the preservation of open space. In addition, Notice of Preparation (NOP) comment letters received during the 30-day comment period were reviewed, and issues raised were addressed in this PEIR.

ES.7 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table ES-1 summarizes the conclusions of the environmental analysis contained in this PEIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after implementation of the mitigation measures is also presented.

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.1 Aesthetics		
Due to the siting and nature of the proposed land use changes, and policies that guide new development to minimize impact on scenic corridors and other scenic resources, the proposed GPU would have a less-than-significant impact on the scenic vistas within the Planning Area.	No mitigation is required.	Less Than Significant without Mitigation
While the proposed GPU would have a beneficial impact in some areas with respect to aesthetics and visual quality, particularly in the Commercial District, it is expected that any adverse impacts on visual character or quality of public views in other areas of the Planning Area would be less than significant. Similarly, the proposed GPU would not conflict with applicable zoning or other goals and policies related to scenic quality and, as such, impacts would also be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
Consistent with the goals and policies to protect open spaces, parks, and the semi-rural and suburban character of the Planning Area and the attention to preserving existing neighborhoods through policies and land use design, the proposed GPU's contribution to aesthetic impact would not be cumulatively considerable, and, as such, cumulative aesthetic impacts would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
4.2 Air Quality		
Emissions of reactive organic gases (ROG), carbon monoxide (CO), sulfur dioxide (SO ₂), particulate matter less than 10 microns in diameter (PM ₁₀), and particulate matter less than 2.5 microns in diameter (PM _{2.5}) from the Planning Area after buildout of the proposed GPU would be higher than the existing setting. Given the volume of air pollutants attributable to buildout of the Planning Area, the proposed GPU could potentially cause an increase in the frequency or severity of existing air quality violations and could have the potential to contribute to a violation of the ambient air quality standards. In addition, although the proposed GPU would implement emission reduction measures and be consistent with the land use strategies in Southern California Association of Governments' (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), projections associated with the proposed GPU are not currently included in the	Refer to Mitigation Measures MM-AQ-1 and MM-AQ-2 below.	Significant and Unavoidable

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**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>2016 Air Quality Management Plan (AQMP). As such, the proposed GPU is not consistent with the growth projections utilized in the preparation of the 2016 AQMP.</p>		
<p>Future development projects would be required to comply with Rolling Hills Estates Municipal Code (RHEMC) Section 17.72.080 and all applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, as well as other control measures to reduce construction emissions. However, because the proposed GPU would facilitate future development and generate construction emissions that could potentially exceed SCAQMD thresholds, future construction-related emissions could lead to the violation of an applicable air quality standard or contribute substantially to an existing or projected air quality violation. As such, impacts would be potentially significant.</p> <p>Development projects allowed under the proposed GPU would increase regional pollutants over current conditions, although ozone precursor pollutant (i.e., NO_x) would decrease due to improvements in vehicular technology for mobile source emissions. However, given the volume of air pollutants attributable to buildout of the proposed GPU, impacts would be conservatively considered significant.</p>	<p>MM-AQ-1: Prior to issuance of any grading permit, the City's Community Development Department shall confirm that the grading plans, building plans, and specifications require that ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications. The equipment maintenance records and equipment design specifications data sheets shall be submitted to the City and verified by the City's Community Development Department, and shall be kept on site by the project contractor during construction activities.</p> <p>MM-AQ-2: To identify potential long-term operational-related air quality impacts from future development projects that are larger than the representative projects considered in this analysis, project-specific air emissions impacts shall be determined in compliance with the latest version of the SCAQMD CEQA Guidelines. To address potential localized impacts, the air quality analysis shall be completed pursuant to the latest version of SCAQMD's Final Localized Significance Threshold Methodology document or other appropriate methodology as determined in conjunction with SCAQMD. The results of the operational-related and localized air quality impacts analyses shall be included in the future development project's CEQA documentation. If such analyses identify potentially significant regional or localized air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts as required by CEQA. In such cases, appropriate mitigation could include, but would not be limited to:</p> <ul style="list-style-type: none"> • Use of Tier 4 equipment during project construction; • Incorporation of energy-efficient design features beyond those required by Title 24 and the CALGreen Code; and 	<p>Significant and Unavoidable</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	Application of transportation demand measures (TDM) beyond those required by code.	
<p>Since individual development projects could occur close to existing sensitive receptors, construction activities associated with the proposed GPU would potentially expose sensitive receptors to substantial pollutant concentrations. Therefore, impacts would be potentially significant.</p> <p>According to SCAQMD localized significance threshold (LST) methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). No industrial uses currently exist or are planned in the Planning Area. Therefore, operational LSTs would not apply to the developments associated with the proposed GPU. As such, the impacts would be less than significant.</p> <p>Health impacts on sensitive receptors associated with exposure to diesel particulate matter (DPM) from construction of developments projects associated with the proposed GPU are anticipated to be less than significant because construction activities of individual development projects are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature and, therefore, would not generate toxic air contaminant (TAC) emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction activities associated with the proposed GPU are not anticipated to result in an elevated cancer or other health risk to nearby sensitive receptors and the impact would be less than significant.</p> <p>The proposed GPU would involve new developments, including residential uses, offices, retail, and restaurants that would result in very limited operational activities with potential health risks, including landscaping maintenance operations and boilers for restaurants. None of these activities would result in the generation of excessive TAC emissions, or associated health risks from the individual development</p>	<p>Refer to Mitigation Measures MM-AQ-1 and MM-AQ-2 above to reduce construction-related impacts on existing sensitive receptors.</p> <p>All other impacts (i.e., localized emissions during operation, health impacts on sensitive receptors during construction and operation, and CO hotspots) would be less than significant, and no mitigation is required.</p>	<p>Significant and Unavoidable for construction-related impacts on existing sensitive receptors.</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>projects' operation. Therefore, operation associated with the proposed GPU is not anticipated to result in an elevated cancer or other health risk to nearby sensitive receptors, and the impact would be less than significant.</p> <p>The Wilshire Boulevard/Veteran Avenue intersection is one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection (100,000 ADT), it can be reasonably inferred that CO hotspots would not be experienced at any locations within the City as the highest anticipated volume of traffic in the City during the planning period would be 33,727 ADT on Palos Verdes Drive North west of Strawberry Lane. Therefore, impacts related to CO hotspots would be less than significant.</p>		
<p>Although the proposed GPU would be consistent with the SCAQMD and SCAG's goals and policies, the proposed GPU would include growth projections that are not currently included in the 2016 AQMP and, therefore, is inconsistent with the 2016 AQMP. As such, impacts associated with the proposed GPU in this regard would be cumulatively considerable. Cumulative impacts would be significant and unavoidable.</p>	<p>Refer to Mitigation Measures MM-AQ-1 and MM-AQ-2 above.</p>	<p>Significant and Unavoidable</p>
<p>4.3 Biological Resources</p>		
<p>While the goals and policies in the proposed GPU would reduce impacts to biological resources associated with buildout of the GPU, future development may result in impacts to special status species and habitats, thus requiring detailed review on a project-by-project basis. Therefore, impacts to special status species and habitats resulting from buildout of the proposed GPU would be potentially significant.</p>	<p>MM-BIO-1: The City of Rolling Hills Estates shall require applicants of future development projects that require discretionary grading approval by the Planning Commission within portions of the City that are included within USFWS-designated critical habitat for coastal California Gnatcatcher, or are within close proximity to known occurrences of protected species to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall minimally include a reconnaissance level field survey of the project site for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, protected/special-status species or their habitat, sensitive</p>	<p>Less Than Significant After Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the project site and adjacent lands potentially affected by the project, the biologist shall submit a written report substantiating such to the City of Rolling Hills Estates before issuance of a grading permit by the City, and the project may proceed without any further biological investigation.</p> <p>If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, then a qualified biologist shall evaluate impacts to sensitive or protected biological resources from development and produce a biological resources impact assessment. The impact assessment may include focused plant and animal surveys or jurisdictional delineations to determine a future development project's impact to biological resources, along with corresponding project-specific mitigation measures, as necessary. To minimize impacts, the City of Rolling Hills Estates will require applicants to design projects to avoid impacts to sensitive or protected biological resources to the greatest extent feasible. Further, if sensitive or protected species are present on the project site, then the applicant shall consult with the appropriate oversight agency, such as CDFW or USFWS, as necessary.</p> <p>MM-BIO-2: If future development projects that involve vegetation removal, and are not otherwise categorically exempt from CEQA or subject to the emergency project statutory exemption from CEQA, are unable to avoid construction activities within nesting bird season (January 1st through July 31st for raptors and February 1st through August 31st for other avian species), a qualified biologist shall conduct a pre-construction nesting bird survey for avian species to determine the presence/absence, location, and status of any active nests on or adjacent to the area proposed development area. The survey shall be conducted for active nests, eggs, and young of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act (MBTA), and/or the California Fish and Game Code (CFG)</p>	

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>Sections 3503, 3503.5, or 3511, within 200 feet of the disturbance zone for songbirds, or within 500 feet of the disturbance zone for raptors and special-status bird species. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and the CFGC, a nesting bird survey should be conducted no more than three (3) days prior to the commencement of project construction if construction occurs between January 1st and August 31st. In the event that active nests are discovered, a suitable buffer (distance to be determined by the biologist) shall be established around such active nests, and no construction activities within the buffer will be allowed, until the biologist has determined that the nest(s) is no longer active (i.e., the nestlings have fledged and are no longer dependent on the nest).</p> <p>MM-BIO-3: The City of Rolling Hills Estates shall require applicants of future development projects that require discretionary grading approval by the Planning Commission and are not categorically exempt from CEQA or subject to the emergency project statutory exemption from CEQA to retain a qualified bat biologist to conduct a clearance survey for bats within suitable structures and trees within a project’s impact area within 30 days of construction. If bats roosts are found within the project impact area, the qualified bat biologist shall identify the bats to the species level and evaluate the colony to determine its size and significance. If any structures house an active maternity colony of bats, construction activities shall not occur during the recognized bat breeding season (March 1 to October 1). Any proposed work in areas with no suitable roosting or foraging habitat shall not require a bat survey. If a bat roost is present within the vicinity of a proposed project impact area that does not need to be removed, a qualified bat biologist shall establish a species-specific no-disturbance buffer that must be maintained throughout the duration of the project’s construction. If a maternity roost is identified, a no disturbance buffer shall be established and</p>	

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>maintained until a qualified bat biologist determines that the roost is no longer active.</p> <p>If project activities must occur during non-daylight hours or during the bat breeding season (March 1 to October 1), a qualified bat biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. Night lighting shall be used only within the portion of the project actively being worked on and focused directly on the work area. This measure would minimize visual disturbance and allow bats to continue to utilize the remainder of the area for foraging and night roosting. If bats are showing signs of distress, work activities shall be modified to prevent bats from abandoning their roost or altering their feeding behavior. At any time, the qualified biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to roost abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect roost success. Any roosting habitat loss shall be sequenced, and roosting habitat shall be restored or replaced in-kind and on-site to prevent temporal or permanent loss based on the bat species roosting requirements.</p>	
<p>Because the proposed GPU would not concentrate development in close proximity to existing wetland or riparian habitats, and because any direct or indirect impacts to riparian and wetland habitat would be evaluated on a project-by-project basis and would be required to comply with existing local, State, and federal regulations, the proposed GPU would not likely have a substantial effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, riparian habitat, or other sensitive natural community. However, buildout of the proposed GPU could include sites beyond the Commercial District and, therefore, may result in significant impacts to riparian areas if such development would be located in close proximity to these resources. As such, impacts would be potentially significant.</p>	<p>MM BIO-4: The City of Rolling Hills Estates shall require applicants of future development projects that that require discretionary grading approval by the Planning Commission within portions of the Planning Area that are located within 100-feet of a riverine or wetland feature to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall minimally include a site survey for the presence and quality of riverine or wetland features potentially affected by project development, as well as a stream delineation of the potentially impacted riparian or wetland feature. If such features are present and may be impacted by the future development, then the City shall require appropriate vegetative buffers and/or setbacks adjoining the stream or wetland feature to reduce impacts of future development on these riparian or wetland features. If avoidance of</p>	<p>Less Than Significant After Mitigation</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	riparian habitat, wetlands, or other drainage features within the jurisdiction of the CDFW or Army Corps cannot be avoided, permits/approvals from the jurisdictional agency/agencies will be necessary and impacted acreage shall be replaced at a ratio acceptable to the jurisdictional agency/agencies. In no case shall the replacement ratio be less than 1:1.	
While development would be concentrated in portions of the Planning Area that are characterized by existing urban/suburban development, development associated with the buildout of the proposed GPU could result in limited vegetation removal, intrusion by humans and pets, or increases in nuisance noise, affecting wildlife movement and nesting sites in areas with known occurrences of wildlife species and habitats. As such, impacts related to interference with the movement of native resident migratory wildlife species would be potentially significant.	Please refer to Mitigation Measures MM-BIO-1 through MM-BIO-3 above.	Less Than Significant After Mitigation
Any future development project under the proposed GPU would be approved on a project-by-project basis by the City, at which time the City would ensure that each project meets local ordinances and policies related to protection of biological resources. Therefore, the proposed GPU would not conflict with any local policies or ordinances protecting biological resources, and impacts would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
The Planning Area is not located within a Natural Community Conservation Plan (NCCP) or a Habitat Conservation Plan (HCP) area. However, the Palos Verdes Peninsula and Coastline Significant Ecological Area (SEA), as delineated by Los Angeles County, covers a portion of the Planning Area. Regardless, buildout of the proposed GPU would not involve development within the County-designated SEAs located within the City, as the areas proposed for intensification in the proposed GPU are predominantly located in previously developed areas. Further, the SEAs within the Planning Area are located within canyons and open space areas protected from development by land use designation, as well as by the physical constraints of the parcels themselves. Therefore, buildout of the proposed GPU would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. As such, impacts would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>The biologically sensitive and protected habitats located on the Palos Verdes peninsula are collectively protected by the goals and policies of the General Plans of the five cities on the Peninsula, as well as by the land conservation measures undertaken by the Palos Verdes Land Conservancy, which has preserved over 1,600 acres of open space on the Peninsula. The areas managed by the Conservancy primarily include open space areas and canyons that often overlap with designated critical habitat and the Palos Verdes Peninsula and Coastline SEA. While the proposed GPU would not cause a substantial change in vegetation cover in the Planning Area, limited, isolated habitat disturbance could occur through development of under-utilized parcels within the Planning Area. Through consistency with the goals and policies to protect open spaces and the existing biological resources within Planning Area, implementation of Mitigation Measures MM-BIO-1 through MM-BIO-4, as well as ongoing enforcement of existing General Plan goals and policies protecting sensitive biological resources by the other jurisdictions on the Peninsula (Cities of Rolling Hills, Palos Verdes Estates, Rancho Palos Verdes and Los Angeles [the San Pedro community]) and preservation activities conducted by the Conservancy, the proposed GPU's contribution to impacts on biological resources within the Planning Area would not be cumulatively considerable, and, as such, cumulative impacts would be less than significant.</p>	<p>No additional mitigation is required.</p>	<p>Less Than Significant After Mitigation</p>
<p>4.4 Cultural Resources</p>		
<p>Although future development projects would be required to comply with the provisions of the Rolling Hills Estates Municipal Code (RHEMC) and be consistent with the goals and policies of the proposed GPU, demolition or alteration of a historical resource, such that its significance is materially impaired, would be considered a significant impact.</p>	<p>MM-CUL-1: Prior to the issuance of a demolition permit for projects that propose to relocate, demolish, or alter a building or structure that is over 45 years old, possesses a distinctive architectural style, and was built during and representative of the period of significance for that architectural style (e.g., California Ranch of the 1940s and 1950s, Midcentury Modern of the 1940s-1960s, etc.), the City of Rolling Hills Estates shall require the applicant to submit a historical resources assessment report, if the building or structure has not been previously evaluated for potential historical significance. For single-family residential properties, a historical resources assessment report shall only be</p>	<p>Significant and Unavoidable</p>

**Table ES-1
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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>required if the involved building/structure is characteristic of the surrounding neighborhood and the demolition/alteration involves a façade or building volume that is/would be visible from the street or other publicly accessible vantage point. If the building or structure is determined to be a historical resource, the report shall include an assessment of the project’s impacts to the resource. The report shall be prepared by a qualified Architectural Historian or Historian who meets the Secretary of the Interior’s Professional Qualifications Standards, and shall satisfy federal and State guidelines for the identification, evaluation, and recordation of historical resources. Should the City conduct and/or approve a citywide or neighborhood/district historic resources inventory, within the bounds of that survey this mitigation measure shall only apply to potentially significant historic resources identified by the inventory. Similarly, should a historic context statement be prepared for any historical themes in Rolling Hills Estates, the guidance and recommendations of the historic context statement shall supersede the requirements of this mitigation measure for potentially significant historic resources within that theme.</p> <p>MM-CUL-2: The Secretary of the Interior’s Standards for the Treatment of Historic Properties shall be used to the maximum extent possible to ensure that projects involving the relocation, conversion, rehabilitation, or alteration of a historical resource and its setting, or related new construction, will not impair the significance of the historical resource. Use of the Secretary’s Standards shall be overseen by an architectural historian or historic architect meeting the Secretary of the Interior’s Professional Qualification Standards. Evidence of compliance with the Secretary’s Standards shall be provided to the City in the form of a report identifying and photographing character-defining features and spaces and specifying how the proposed treatment of character-defining features and spaces and related construction activities will conform to the Secretary’s Standards.</p> <p>MM-CUL-3: If the City determines that significant impacts to historical resources cannot be avoided, the City shall require, at a</p>	

**Table ES-1
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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>minimum, that the affected historical resources be thoroughly documented before issuance of any permits, and may also require additional public education efforts and/or memorialization of the historical resource. Such recordation shall be prepared under the supervision of an architectural historian, historian, or historic architect meeting the Secretary of the Interior’s Professional Qualification Standards, and should take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation. At a minimum, this recordation shall include an architectural and historical narrative; archival photographic documentation; and any supplementary information available, such as building plans and elevations and/or historic photographs. The documentation package shall be produced on archival paper and made available to researchers and the public through accession by appropriate institutions, such as the Local History Center at the Peninsula Center Library, the South Central Coastal Information Center at California State University, Fullerton, and/or the HABS/HAER/HALS collection housed in the Library of Congress. Depending on the significance of the historical resource, the City, at its discretion, may also require public education about the historical resource in the form of an exhibit, web page, brochure, or other format and/or memorialization of the historical resource on or near the proposed project site. If memorialized, such memorialization shall be a permanent installation, such as a mural, display, or other vehicle that recalls the location, appearance, and historical significance of the affected historical resource, and shall be designed in conjunction with a qualified architectural historian, historian, or historic architect.</p>	
<p>While implementation of the goal and policies in the proposed GPU would reduce impacts to archaeological resources associated with buildout of the proposed GPU, future development and redevelopment may result in adverse impacts to undiscovered archaeological resources. Therefore, impacts to archaeological resources resulting from the buildout of the proposed GPU would be potentially significant.</p>	<p>MM-CUL-4: To ensure identification and preservation of archaeological resources and avoid significant impacts to those resources, prior to grading approval by the Rolling Hills Estates Planning Commission, each project requiring such approval shall be screened to determine whether an Archaeological Resources Assessment report is required. Screening shall consider the type</p>	<p>Significant and Unavoidable</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>of project and whether ground disturbance will occur in native soils (i.e., previously undisturbed soils). If so, prior to grading approval by the Rolling Hills Estates Planning Commission, the City shall require an Archaeological Resources Assessment be conducted under the supervision of an archaeologist that meets the Secretary of the Interior’s Professional Qualifications Standards.</p> <p>Archaeological Resources Assessments shall include a California Historical Resources Information System records search at the South Central Coastal Information Center and a Sacred Lands File search through the Native American Heritage Commission. The records searches will determine if the proposed development area has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. If unpaved surfaces are present within the development area, and the entire development area has not been previously surveyed within the past 10 years, a Phase I pedestrian survey shall be undertaken in proposed development areas to locate any surface cultural materials that may be present.</p> <p>MM-CUL-5: If the Archaeological Resources Assessment identifies potentially significant archaeological resources and impacts cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the Secretary of the Interior’s Standards to determine significance prior to any ground-disturbing activities. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be undertaken. These may include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the California Office of Historic Preservation’s “Archaeological Resource Management Reports (ARMR): Recommended Contents and Format” (1990) and “Guidelines for Archaeological Research Designs” (1991).</p> <p>MM-CUL-6: If the Archaeological Resources Assessment did not identify archaeological resources but found the area to be highly</p>	

**Table ES-1
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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's Standards, and tribal consultation shall be conducted in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials shall be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinterment in an area designated by the tribe.</p> <p>MM-CUL-7: If an Archaeological Resources Assessment does not identify potentially significant archaeological resources but the site has moderate sensitivity for archaeological resources, an archaeologist who meets the Secretary's Standards shall be retained on call. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The pre-construction training shall be held in conjunction with a future development project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. The resource shall be evaluated for significance and tribal consultation shall be conducted, in the case</p>	

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	of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant.	
<p>Future development and redevelopment projects in the Palos Verdes Peninsula have the potential to result in cumulative impacts related to the physical demolition, destruction, relocation, or alteration of historical resources or their immediate surroundings, such that the significance of the historical resources would be materially impaired. Regulations, policies, and mitigation measures would minimize the probability of historical resources being adversely affected but ultimately may not prevent the destruction or demolition of a historical resource if preservation is determined to be infeasible, or prevent the alteration of a historical resource such that it would not be materially impaired. Similarly, archaeological resources are non-renewable components of finite classes of resources; therefore, all adverse effects contribute to the erosion of a shrinking base of resources. The potential for the permanent loss of cultural resources cannot be known at this time, and future development and redevelopment projects under the proposed GPU would combine with cumulative impacts to cultural resources in the surrounding cities on the Palos Verdes Peninsula to be cumulatively considerable. Therefore, cumulative impacts to cultural resources would be significant.</p>	<p>Please refer to Mitigation Measures MM-CUL-1 through MM-CUL-7 above.</p>	<p>Significant and Unavoidable</p>
4.5 Energy		
<p>Implementation of the proposed GPU envisions additional development, which could result in energy consumption from new construction activities in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. Construction equipment used in the development of future projects under the proposed GPU would also be required to comply with the latest State requirements and efficiency-related USEPA and CARB engine emissions standards. In addition, the integration of green building materials can help reduce environmental</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature, and, as such, impacts would be less than significant.</p> <p>With regard to transportation energy consumption in the GPU planning area, daily trips generated by future development under the proposed GPU's low-range buildout scenario are estimated to consume approximately 659,147 gallons of fuel per year, which would increase the County's automotive fuel consumption by 0.0350 percent; under the high-range buildout scenario, approximately 1,742,184 gallons of fuel per year, which would increase the County's automotive fuel consumption by 0.0926 percent. The proposed GPU would promote implementation of the City's Climate Action Plan (CAP), which encourages the installation of electric vehicle (EV) charging stations in the Planning Area in compliance with CALGreen Code.</p> <p>With regard to building energy consumption in the GPU planning area, operational energy consumption of the implementation of proposed GPU would represent approximately 0.0455-percent increase in electricity consumption and 0.0566-percent increase in natural gas consumption over the current Countywide usage under the low-range buildout scenario; under the high-range buildout scenario, the energy consumption would be 0.0193-percent increase in electricity consumption and 0.0255-percent increase in natural gas consumption over the current Countywide usage. The increase in electricity would be significantly below California Energy Commission (CEC) forecasts and the current Countywide usage. As such, implementation of the GPU would not require additional energy capacity or supplies and would not result in unique or more intensive peak or base period electricity demand. Furthermore, the land development associated with the proposed GPU would be required to comply with 2019 Title 24 Building Energy Efficiency Standards. Also, electricity provider CPA is subject to California's Renewables Portfolio Standard (RPS) and provides the electricity generated by renewable sources to the Planning Area.</p>		

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
Therefore, implementation of the proposed GPU would not cause wasteful, inefficient, and unnecessary consumption of building energy and fuel associated with vehicle trips, and, as such, impacts would be less than significant.		
Implementation of the proposed GPU would comply with the applicable goals identified in Statewide energy plans, including California Building Energy Efficiency Standards, CALGreen Code, California Public Utilities Commission Long Term Energy Efficiency Strategic Plan. The representative projects themselves would also be consistent with Statewide energy plans and local goals and policies. In addition, the proposed GPU contains energy-efficient goals and policies that would help implement energy-efficient measures and would subsequently reduce energy consumption within the Planning Area. Therefore, impacts associated with renewable energy or energy efficiency plans would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
4.6 Geology and Soils		
The Commercial District is underlain by the Silver Spur Landslide Complex and is in proximity to the Cabrillo Fault. The precise location and boundaries of the Silver Spur Landslide Complex is unknown; however, there is potential for future developments within the Commercial District to be located on an unstable geologic unit. However, compliance with all applicable regulations and requirements would ensure that the implementation of the proposed GPU would not directly or indirectly cause potential substantial adverse effects, including to risk of loss, injury, or death involving landslides; and would ensure that future development as a result of the proposed GPU would not be located on a geologic unit that is unstable, or that would become unstable, and potentially result in landslide. Therefore, impacts related to landslides and unstable geologic units or soil would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
Ground-disturbing activities (e.g., excavation, grading, vegetation removal, and construction) associated with future development and redevelopment projects allowed under the proposed GPU would have the potential to unearth, damage, and/or destroy known or unknown	MM-GEO-1: To ensure identification and preservation of significant paleontological resources and avoid significant impacts to those resources, prior to the issuance of a grading approval by the City of Rolling Hills Estates Planning Commission, each	Less Than Significant After Mitigation

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Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>paleontological resources and have the potential to result in adverse impacts. Thus, impacts to paleontological resources or sites or unique geologic features would be potentially significant.</p>	<p>project requiring such approval shall be screened to determine whether a full paleontological resources assessment is required. Screening shall consider whether the proposed grading activity will extend into known undisturbed fossil-bearing strata (i.e., those of the Monterey Formation, including Lomita Marl Member, Valmonte Diatomite Member, and Altamira Shale Member). If so, the City shall require a paleontological resources assessment be conducted by a paleontologist that meets Bureau of Land Management or Society of Vertebrate Paleontology standards (i.e., a qualified paleontologist) prior to the issuance of a grading approval. If the paleontological resources assessment identifies the potential for destruction of significant paleontological resources, an avoidance and/or recovery plan shall be developed and implemented under the supervision of a qualified paleontologist to the satisfaction of the City of Rolling Hills Estates.</p> <p>MM-GEO-2: In the event that any prehistoric subsurface paleontological resources are encountered during future construction or the course of any ground disturbance activities, all such activities shall halt immediately, at which time the applicant shall notify the City and consult with a qualified paleontologist to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined to be unnecessary or infeasible by the City. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted.</p>	
<p>Cumulative growth in the Planning Area through 2040 would expose a greater number of people to seismic hazards, particularly within the City's Commercial District. However, with adherence to applicable regulations and any site-specific recommendations provided in the require geotechnical evaluations, the proposed GPU's contribution to</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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**Table ES-1
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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
impacts related to geology and soils would not be cumulatively considerable, and cumulative impacts would be less than significant.		
With regard to paleontological resources, in accordance with Mitigation Measures MM-GEO-1 and MM-GEO-2 , future development projects, depending on the proposed extent of ground disturbance activities, would be required to conduct a paleontological resources assessment and/or halt any ground disturbing activities in the event of discovery of paleontological resources during construction; to conduct an assessment to determine the significance of the discovered resource; and to implement avoidance or data recovery measures, if necessary. With implementation of these requirements, the proposed GPU's contribution to impacts related to paleontological resources would not be cumulative considerable, and cumulative impacts would be less than significant.	Please refer to Mitigation Measures MM-GEO-1 and MM-GEO-2 above.	Less Than Significant After Mitigation
4.7 Greenhouse Gas Emissions		
Under both low-range and high-range buildout scenarios of the GPU, implementation of the proposed GPU would result in a net reduction in total annual greenhouse gas (GHG) emissions from the Planning Area and a net reduction in annual GHG emissions on a per-service-population-basis when compared to the existing (2021) Planning Area emissions. The proposed GPU would also be consistent with the 2017 Scoping Plan, the GHG emission reduction strategies contained in the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the City's Climate Action Plan (CAP). Therefore, the proposed GPU's impacts related to GHG emissions would be considered less than significant, and the proposed GPU would not result in a considerable contribution to significant GHG emission impacts.	No mitigation is required.	Less Than Significant without Mitigation
4.8 Land Use and Planning		
Buildout of the proposed GPU has been determined to not conflict with Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and policies, as well as applicable provisions of the City's Zoning Code. Compliance with all applicable regulations and requirements	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
would ensure that land use impacts of any future development projects related to consistency with applicable plans, policies, and regulations would be less than significant.		
Cumulative projects would be evaluated on a project-by-project basis as they are implemented within the City of Rolling Hills Estates and other cities/communities. Each cumulative project would be analyzed to ensure that the goals, objectives, and policies of the respective general plans, and regulations and guidelines of the respective municipal codes are consistently upheld. Therefore, the combined cumulative land use/planning impacts associated with the proposed GPU's incremental effects and those of the cumulative projects would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
4.9 Noise		
<p>Implementation of the proposed GPU would generate noise from construction activities, roadway segments, and stationary noise sources. Noise from construction activities would be generated by two primary sources: (1) the transport of workers and equipment to construction sites and (2) the noise related to active construction equipment. Compliance with Rolling Hills Estates Municipal Code (RHEMC) would reduce short-term construction noise impacts to less-than-significant levels. With implementation of the proposed GPU, some residential uses would experience noise levels that would exceed the City's Noise and Land Use Criteria Compatibility Criteria due to the increase in roadway noise. However, compared to existing conditions, future noise levels would not increase by 3 dBA or more under either the low range or high range buildout scenarios. Since a 3 dBA change in noise levels is generally not perceptible, noise levels that do not exceed 3 dBA are considered less than significant. As none of the Project-induced changes would exceed 1 dBA, long-term mobile traffic noise impacts would be less than significant.</p> <p>The proposed GPU would generate noise from stationary noise sources, including residential and commercial uses, mechanical equipment, parking areas, and landscaping maintenance activities. All residential and commercial future projects, such as the representative</p>	No mitigation is required.	Less Than Significant without Mitigation

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**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>projects, and new parking areas would be required to comply with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City’s exterior and interior noise standards when measured on property line. The required compliance with the RHEMC would ensure that such potential noise impacts would be less than significant. With regard to mechanical equipment, as new development may include HVAC units, adjacent sensitive uses may experience noise levels from such equipment. However, compliance with RHEMC Section 8.32.200, which prohibits HVAC units generating noise levels exceeding the City’s exterior and interior noise standards, would reduce these impacts to less-than-significant levels. Landscape maintenance activities would be conducted during daytime hours for brief periods of time and would increase ambient noise levels. Compliance with RHEMC Section 8.32.215, which limits operation of leaf blowers to between 8 a.m. and 5 p.m. Monday through Friday and between 9 a.m. and 5 p.m. on Saturday, would reduce such impacts to less-than-significant levels.</p> <p>In conclusion, all mobile and stationary source impacts would be reduced to less-than-significant levels by complying with the City’s Noise Ordinance. In addition, proposed GPU Noise Element goals and policies also aim to maintain acceptable noise levels for each land use category in the City, and promote the control and reduction of noise created by transportation and technologies. Therefore, impacts would be less than significant.</p>		
<p>Construction activities that may result under the proposed GPU have the potential to generate low levels of ground-borne vibration. Based on typical vibration levels for construction equipment provided by the Federal Transit Administration (FTA), vibration levels could reach up to 87 VdB for typical construction activities (and up to 104 VdB if pile driving activities were to occur) at sensitive uses located within 25 feet of construction. For sensitive uses that are located at or within 25 feet of potential project construction sites, sensitive receptors at these locations may experience vibration levels during construction activities that exceed the FTA vibration impact threshold of 80 VdB for human annoyance. However, pursuant to Mitigation Measure MM-NOI-1,</p>	<p>MM-NOI-1: Projects with construction activities that use equipment with high vibration levels, including, but not limited to, pile drivers, vibratory rollers, large bulldozers, and loaded trucks, within 25 feet of an occupied sensitive use (i.e., historical buildings, residential, senior care facilities, hospitals, and schools/day care centers) shall be required to prepare a project-specific vibration impact analysis to identify the potential project-specific construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project’s construction bid documents to reduce such impacts.</p>	<p>Less Than Significant After Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>should certain construction activities take place within 25 feet of an occupied structure, a project-specific vibration impact analysis shall be conducted. In addition, Mitigation Measure MM-NOI-2 would prohibit pile driving within 50 feet of historic structures and instead utilize alternative installation methods; require a preconstruction survey of all designated historic buildings within 50 feet of proposed construction activities; and require vibration monitoring prior to and during pile driving operations occurring within 100 feet of historic structures. Therefore, implementation of Mitigation Measures MM-NOI-1 and MM-NOI-2 would reduce short-term vibration impacts to a less-than-significant level.</p> <p>Implementation of the proposed GPU would not involve land uses that include or require equipment, facilities, or activities that would result in perceptible groundborne vibration. Heavy duty trucks would travel through roadways across the City. However, according to the FTA, it is unusual for vibration from sources, such as buses and trucks, to be perceptible, even in locations close to major roads. As such, it can be reasonably inferred that operations associated with development projects under the proposed GPU would not create perceptible vibration impacts to the nearest sensitive receptors. Therefore, vibration impacts related to building damage and human annoyance during operation would be less-than-significant impact.</p> <p>In addition, implementation of Mitigation Measures MM-NOI-1 and MM-NOI-2 would reduce construction vibration impacts for representative projects to a less-than-significant level, and operational vibration impacts would be less than significant without mitigation.</p>	<p>Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.</p> <p>MM-NOI-2: Projects within 100 feet of a historic structure(s) shall implement the following measures to reduce the potential for architectural/structural damage resulting from elevated groundborne noise and vibration levels:</p> <ul style="list-style-type: none"> • Pile driving within 50 feet of any historic structure(s) shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, cast-in-place systems, and resonance-free vibratory pile drivers. • As accessible, a preconstruction survey of all eligible for listing or listed historic buildings under the National Register of Historic Places, California Register of Historic Resources, and/or local historic database(s) within 50 feet of proposed construction activities shall be conducted. Fixtures and finishes within 50 feet of construction activities susceptible to damage shall be documented photographically and in writing. The preconstruction survey shall determine conditions that exist before construction begins for use in evaluating any damage caused by construction activities. Construction vibration monitoring shall be conducted at the edges of these historic properties and construction activities shall be reduced, as needed, to ensure no damage occurs. <p>Vibration monitoring shall be conducted prior to and during pile driving operations occurring within 100 feet of the historic structure(s). Contractors shall limit construction vibration levels during pile driving and impact activities in the vicinity of the historic structure(s) in accordance with the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual, dated April 2020, or subsequent updates of this Manual.</p>	

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>The City of Rolling Hills Estates is almost fully developed, leaving little room for significant new development. Based on historical development patterns and reasonable assumptions of development, it is anticipated that new development would occur with only a limited number of parcels being developed at the maximum density or intensity. Short-term construction noise is a localized activity and would affect only land uses that are adjacent to, or in the immediate vicinity of, a specific project site. Each construction project would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible. Thus, the potential cumulative impacts of short-term construction noise are considered less than significant.</p> <p>Cumulative stationary noise sources would generally be less than significant with compliance with the City’s Noise Ordinance. Traffic noise tends to be the main source of noise within the City. As development assumed under the proposed GPU would not generate a significant audible noise level increase along any of the roadway segment, implementation of the GPU would result in a less-than-significant cumulative noise impact.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>Operational activities under the implementation of proposed GPU would not generate substantial groundborne vibration, and construction activities associated with developments under the GPU would cause less-than-significant vibration impacts with implementation of Mitigation Measures MM-NOI-1 and MM-NOI-2. Groundborne vibration generated from cumulative development projects would be required to implement any required mitigation measures on a project-by-project basis, as applicable, pursuant to CEQA provisions. Moreover, vibration generation is limited to areas within the immediate vicinity of the source (e.g., primarily within 25 feet of most construction activities); thus, vibration impacts are almost exclusively project-level impacts rather than cumulative. Therefore, implementation of the proposed GPU would result in a less-than-significant cumulative vibration impact.</p>	<p>Please refer to Mitigation Measures MM-NOI-1 and MM-NOI-2 above.</p>	<p>Less Than Significant After Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.10 Population and Housing		
<p>Implementation of the proposed GPU's low range buildout scenario for 2040 would result in a 20.8 percent population increase, a 27.8 percent increase in housing inventory, and a 20.3 percent decrease in employment when compared to existing conditions. Implementation of the proposed GPU's high range buildout scenario for 2040 would result in a 52.1 percent increase in population, a 68.4 percent increase in housing inventory, and a 10.1 percent decrease in employment. The proposed GPU's 2040 buildout scenarios would exceed SCAG's population forecast for the City under both the low and high range scenarios. Although buildout of the proposed GPU would accommodate greater population and housing than SCAG's forecast for the City, this is not considered substantial unplanned population growth. Rather, the proposed GPU would provide the capacity and flexibility to accommodate anticipated growth. The GPU would also be required to accommodate its share of SCAG's Regional Housing Needs Assessment (RHNA) allocation. In addition, the proposed GPU buildout scenario's exceedance of SCAG forecasts demonstrates that the City has more than adequate capacity to absorb any growth anticipated by SCAG and provide a variety of sites and options for future development. Furthermore, the proposed GPU contains goals and policies to accommodate anticipated population and housing growth.</p> <p>With regard to employment, the proposed GPU anticipates future declines based on the current vacancies in existing commercial buildings and the expected development trends reported in market studies. In addition, it should be noted that SCAG's forecast for employment in the City for 2016 and 2045 may not be a meaningful comparison since the numbers are significantly greater than the data provided by California Employment Development Department (EDD) for 2021, which are based on the Census data. However, in the event that employment projections in the City increase in the future, the proposed GPU would be able to accommodate the increase with the City's existing commercial vacancies and the acreage within the General Commercial, Commercial Office, and Neighborhood</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>Commercial designations, which would all continue to allow for additional commercial development.</p> <p>Therefore, the proposed GPU, including the representative projects, would not induce substantial unplanned population growth in an area, either directly through new housing or indirectly by increasing employment.</p>		
<p>The proposed GPU would accommodate anticipated future growth, including the City’s share of SCAG’s RHNA allocation. Thus, any displacement of existing people or housing that could occur during buildout of the proposed GPU could be replaced on land within the Planning Area that would allow for residential uses under the proposed GPU land use designations. To that end, both low range and high range buildout scenarios for the proposed GPU anticipate an increase in housing in the Planning Area. Therefore, impacts related to the displacement of substantial numbers of existing people or housing such that the construction of replacement housing would be necessary elsewhere would be less than significant.</p>	No mitigation is required.	Less Than Significant without Mitigation
<p>The cumulative context for population, housing, and employment growth is the SCAG region. Although buildout of the proposed GPU could accommodate greater population and housing than SCAG’s forecast for the City, this exceedance is not substantial unplanned population growth and demonstrates that the City has adequate capacity to absorb anticipated growth. The GPU would accommodate future planned growth to ensure that the City’s vision for the future is achieved, and the proposed GPU contains goals and policies to manage the anticipated growth under both the low and high range scenarios. Employment in the Planning Area under the proposed GPU is anticipated to decline and would not contribute to the region’s employment growth. Based on the above, the proposed GPU’s contribution to population and housing growth in the region is not cumulatively considerable and impacts are less than significant.</p> <p>With regard to displacement, while it is conceivable that certain projects building out the proposed GPU could displace persons or housing if such projects recycle properties that currently contain</p>	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
residential units, any necessary housing replacement could occur on land within the Planning Area that would allow for residential uses under the proposed GPU land use designations. Thus, the proposed GPU’s cumulative impact related to displacement would also be less than significant.		
4.11 Public Services—Fire Protection		
Implementation of the proposed GPU would result in additional demand on existing fire and emergency medical services as future development projects are implemented, resulting in increases in population. However, future development projects under the proposed GPU would be required to comply with the provisions of all applicable building and safety codes related to fire protection and prevention. Similarly, individual project development plans would be reviewed by the City and the Los Angeles County Fire Department (LACoFD) to determine specific fire requirements (e.g., fire flow capacities, emergency access, fuel modification plans) applicable to the specific development and to ensure compliance with these requirements. Therefore, impacts to fire protection and emergency medical services and facilities would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
Any new development in the Palos Verdes Peninsula would be required to comply with all applicable California Fire Code requirements for construction, access, water mains, fire flows, and hydrants. Individual projects would be reviewed by each jurisdictional city in the Palos Verdes Peninsula and LACoFD to determine the specific fire requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, compliance with regulatory requirements would maximize fire protection and encourage fire prevention, which, in turn, would reduce impacts to LACoFD resources. As such, the incremental effect of the proposed GPU on fire protection and emergency medical services within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to fire protection and emergency medical services resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.	No mitigation is required.	Less Than Significant without Mitigation

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.12 Public Services—Police Protection		
Implementation of the proposed GPU would result in additional demand on existing police protection and law enforcement services provided by Los Angeles County Sheriff's Department (LASD) as future development projects are implemented, resulting in increases in population. However, any future development under the proposed GPU would be required to comply with the provisions of the RHEMC related to public safety. Individual project development plans would be reviewed by the City and LASD to determine specific design requirements related to emergency access, lighting, and public safety that are applicable to the specific development and to ensure compliance with these requirements. Therefore, impacts to police protection and law enforcement services would be less than significant.	No mitigation is required.	Less Than Significant without Mitigation
Any new development in the Lomita Station service area would be required to comply with all applicable requirements related to public safety. Individual projects would be reviewed by each jurisdictional city and LASD to determine the specific design requirements related to emergency access, lighting, and public safety that are applicable to the specific development and to ensure compliance with these requirements. Overall, compliance with regulatory requirements would maximize public safety, which, in turn, would reduce demands on LASD resources. As such, the incremental effect of the proposed GPU on police protection and law enforcement services within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to police protection and law enforcement services resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.	No mitigation is required.	Less Than Significant without Mitigation
4.13 Public Services—Schools		
Buildout of the proposed GPU would have the potential to increase student generation within the Palos Verdes Peninsula Unified School District (PVPUSD). However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in demand for	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>school services would occur gradually as additional development occurs in the Planning Area. Regardless, the estimated increase in students within the PVPUSD, when compared to student enrollment in the last three school years prior to the COVID-19 pandemic, would remain less than the historical maximum enrollment experienced by the PVPUSD in the last two decades. In addition, pursuant to Senate Bill (SB) 50, payment of fees to the PVPUSD is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for school facilities. Therefore, impacts to PVPUSD would be less than significant.</p>		
<p>Implementation of the proposed GPU, along with other future development projects in the Palos Verdes Peninsula, would potentially generate new students within the PVPUSD. PVPUSD would be able to accommodate future growth projected by the proposed GPU and would have excess capacity beyond projected growth when compared to historical maximum student enrollment over the last two decades. Additionally, pursuant to SB 50, payment of fees to PVPUSD is considered full mitigation for project impacts associated with the need to provide new or altered school facilities to serve new students generated by future development. Therefore, the incremental effect of the proposed GPU on school facilities within the PVPUSD would not be cumulatively considerable, and cumulative impacts to schools resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>4.14 Public Services—Parks and Recreation</p>		
<p>Future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in demand for parks and recreational facilities would occur gradually as additional development occurs in the Planning Area. The addition of new residents would reduce the City’s parkland to residents ratio. However, when compared to other cities throughout Los Angeles County (i.e., providing an average of 3.3 acres of parkland per</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>1,000 residents), the City would still provide more parkland per resident. In addition, the City has planned three new mini parks for development between mid-2021 and end of 2023. Furthermore, the Commercial District Vision Plan, as described in the update to the Land Use Element, envisions plaza spaces/gathering areas to be incorporated in future development in the Commercial District. The Brick Walk property along Deep Valley Drive is also envisioned to be developed with significant green space due to development limitations posed as a result of the geological configuration of this property.</p> <p>Developers of future development projects under the proposed GPU would be required to pay park fees or dedicate land in accordance with RHEMC requirements. Payment of fees would partially offset the deterioration of existing parks and recreation facilities by allocating these fees to the development of new or rehabilitation of existing neighborhood or community park or recreational facilities. Overall, continued cooperation and coordination between the City and developers of future development projects under the proposed GPU would ensure adequate provision and/or maintenance of parks and recreational facilities throughout the Planning Area and would not result in significant impacts to parks and recreational facilities.</p>		
<p>The proposed GPU does not involve any modifications to existing Open Space Land Use Designations. While not directly included in the proposed GPU, the proposed GPU would allow for and encourage development of community open spaces as part of future development projects, such as plazas and community gathering spaces, which would further contribute to the City’s existing recreational amenities and open space. Therefore, adoption and implementation of the proposed GPU would not result in adverse physical effects on the environment not otherwise evaluated in this PEIR, and, as such, impacts would be considered less than significant.</p>	No mitigation is required.	Less Than Significant without Mitigation
<p>Future development projects under the proposed GPU would result in additional demands on existing parks and recreation facilities. Impacts to existing parks and recreational facilities would be offset following compliance with the goals and policies included in the update to the Open Space and Recreation Element, as well as compliance with</p>	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>RHEMC requirements regarding payment of park fees or land dedication for park space to allow for new parks and recreational facilities to be constructed, if necessary, or the rehabilitation and maintenance of existing parks and recreational facilities. As such, the incremental effect of the proposed GPU on parks and recreational facilities within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to parks and recreational facilities resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.</p>		
<p>4.15 Public Services—Libraries</p>		
<p>Buildout of the proposed GPU is anticipated to result in the development of additional residential uses in the Planning Area. However, future development is assumed to occur over approximately two decades through 2040; as such, any increase in demand for library facilities would occur gradually as additional development and associated population growth is added to the Planning Area.</p> <p>As development occurs, a proportional increase in property tax, charges for library services, and other funding sources, such as those provided by the Peninsula Friends of the Library, would offset impacts of new development on the Palos Verdes Library District (PVL) services in the Planning Area. In addition, new residential units are expected to be equipped to receive individual internet service to provide information and research capabilities, which studies have shown to reduce demand on physical library locations. Therefore, buildout of the proposed GPU would not be anticipated to result in substantial increase in demand that would necessitate new or physically altered library facilities, the construction of which would cause significant environmental impacts. As such, the proposed GPU's impact on library facilities would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>Implementation of the proposed GPU, along with other future development projects in the Palos Verdes Peninsula, would potentially generate new residents within the PVL service area, which would result in additional demand on existing library facilities provided by the</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>PVLD. However, PVLD funding for library services would continue to be provided through property taxes, which would incrementally increase as new development occurs; charges for library services; and other funding sources. As such, the incremental effect of the proposed GPU on library facilities within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to library facilities resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.</p>		
<p>4.16 Transportation</p>		
<p>The proposed GPU involves updates to the City’s seven General Plan Elements, including three that are related to transportation, namely the Mobility Element (formerly Transportation Element), Land Use Element, and Open Space and Recreation Element, as well as the addition of an eighth element (Sustainability Element). The proposed GPU is intended to minimize impacts to the public right-of-way and enhance the user experience by integrating multimodal transportation options. The proposed GPU would also accommodate pedestrian activity with its access locations and open space and contribute to overall walkability through enhancements to the Planning Area streetscape. In addition, the proposed GPU would be consistent with regional transportation goals, policies, and actions of the 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS that are intended to guide development of planned multimodal transportation systems in Southern California. Therefore, future development projects implemented under the proposed GPU would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities and, as such, impacts would be less than significant. Cumulative impacts related to conflict with plans would also be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>Under the low-range buildout scenario, the proposed GPU is projected to have a significant vehicle miles traveled (VMT) impact for the residential VMT per capita metric and the work VMT per employee metric. While the low-range buildout scenario results in a net decrease in non-residential square footage (15 percent) compared</p>	<p>MM-TRAN-1: The City shall work with future developers of multi-family housing, commercial projects, and mixed-use projects to ensure they provide the following as TDM measures for mitigating VMT:</p>	<p>Significant and Unavoidable</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>to the 2021 baseline and, hence, fewer number of employees in the City, the City does not perform well for commuting trips given the existing imbalanced flow of workers, relatively long average commute trip lengths, and a lack of comparable/alternative modes of travel and infrastructure, including walking, biking, and/or taking public transit. Under the high-range buildout scenario in which the majority of the housing is allocated to the Commercial District, the work VMT per employee would no longer result in an impact given the model's improved jobs-housing balance, along with overall growing trends towards more telecommuting. However, in the high-range buildout scenario the proposed GPU is projected to have a significant VMT impact for the residential VMT per capita metric. Therefore, the proposed GPU, inclusive of the representative projects, would be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be significant. The combination of the strategies identified in Mitigation Measure MM-TRAN-1 would yield approximately a 1-2 percent VMT reduction for the buildout scenarios. Mitigation Measure MM-TRAN-2 would primarily target reducing the work VMT per employee metric (or home-based work attraction trips), whereas the VMT impact for both buildout scenarios is for the residential VMT per capita efficiency metric. While Mitigation Measure MM-TRAN-3 aims to target transit investments in the Commercial District, after considering all viable TDM strategies to reduce the VMT impact of the proposed GPU under both buildout scenarios, the proposed GPU would still result in a significant and unavoidable VMT impact. VMT impacts associated with the proposed GPU would also be cumulatively considerable.</p>	<ul style="list-style-type: none"> • Provision of Pedestrian Network Improvements: Create a connected pedestrian network within the development and connect to nearby destinations. • Construction or Improvements to Bike Facility or Expand Bikeway Network: Enhance bicycle network Citywide (or at similar scale), such that a building entrance or bicycle parking is within 200 yards walking or bicycling distance from a bicycle network that connects to at least one of the following: at least 10 diverse uses; a school or employment center, if the project total floor area is 50 percent or more residential; or a bus rapid transit stop, light or heavy rail station, commuter rail station, or ferry terminal. <p>MM-TRAN-2: For future projects that exceed the VMT significance thresholds shown in Table 4.16-2, or the VMT significance thresholds in place at the time of the application, the City shall require conditions of approval to reduce the project's VMT. In developing such conditions of approval, the City shall minimally consider the following:</p> <ul style="list-style-type: none"> • Expansion of Car Share Program: Implement a car-sharing program to (1) lower vehicle ownership rates to encourage a general shift to non-driving modes and (2) allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis as a supplement to trips made by non-single-occupancy vehicle (SOV) modes. • Provision of Ridesharing Program: Provide ride-sharing programs through a multi-faceted approach, such as designating a certain percentage of parking spaces for ride-sharing vehicles or designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles. • Implementation of Commute Trip Reduction Program: Implement a commute trip reduction (CTR) program, which shall include all of the following to be effective: <ul style="list-style-type: none"> ▪ Carpooling encouragement 	

EXECUTIVE SUMMARY

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> ▪ Ride-matching assistance ▪ Preferential carpool parking ▪ Flexible work schedules for carpools ▪ Half-time transportation coordinator ▪ Vanpool assistance ▪ Bicycle end-trip facilities (e.g., parking, showers, and lockers) <p>MM-TRAN-3: The City of Rolling Hills Estates shall coordinate with neighboring cities and LA Metro to seek additional transit opportunities and resources in the Planning Area and on the Palos Verdes Peninsula. Should a transit station or similar facility be sought on the Peninsula, the Peninsula Center Commercial District shall be a target location for such a facility to align the City’s highest density development with transit opportunities.</p>	
<p>Under the proposed GPU, access locations for each future development project would be designed to comply with City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City’s requirements to protect pedestrian safety. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets. Moreover, goals and policies identified in the proposed GPU, including the Mobility Element, Land Use Element, and Open Space and Recreation Element, address the provision of a safe, multimodal, efficient transportation system (encompassing automobile circulation, pedestrian facilities, bridle trails and mixed-use paths) that meets the current and future needs of the Planning Area, while continuing to recognize the distinct, rural feel of the Planning Area. Accordingly, implementation of the proposed GPU, inclusive of the representative projects, would not result in increased hazards due to a geometric design feature or incompatible uses or</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
result in inadequate emergency access. GPU-level impacts and cumulative impacts would be less than significant.		
4.17 Tribal Cultural Resources		
Ground-disturbing activities (e.g., excavation, grading, vegetation removal, and construction) associated with future development and redevelopment projects allowed under the proposed GPU would have the potential to unearth, damage, and/or destroy known or unknown tribal cultural resources and have the potential to result in adverse impacts. Therefore, impacts to tribal cultural resources would potentially be significant.	Please refer to Mitigation Measures MM-CUL-4 through MM-CUL-7 above.	Significant and Unavoidable
Future development and redevelopment projects allowed by the proposed GPU would have the potential to result in a cumulative impact associated with the loss of unknown tribal cultural resources through ground-disturbing activities that could cause a substantial adverse change in the significance of tribal cultural resources. These projects would be regulated by applicable federal, State, and local regulations and would be subject to Mitigation Measures MM-CUL-4 through MM-CUL-7 . However, the potential loss of tribal cultural resources on a regional level may not be adequately mitigated through data recovery and collection methods specified in these mitigation measures as the value of a tribal cultural resource lies in cultural values and religious beliefs of associated tribes. Therefore, cumulative impacts to tribal cultural resources would be potentially significant.	Please refer to Mitigation Measures MM-CUL-4 through MM-CUL-7 above.	Significant and Unavoidable
4.18 Utilities and Service Systems—Water Supply		
Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Commercial District, where the most intense land uses and most dense development currently occur in the City. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net increase in water demand in the Planning Area. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus,	No mitigation is required.	Less Than Significant without Mitigation

EXECUTIVE SUMMARY

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>any increase in water demand would occur gradually as additional development occurs in the Planning Area. Furthermore, these increases at buildout of the proposed GPU represent only a small percentage of the total projected water demand for the California Water Service (Cal Water) Palos Verdes District in 2040 (0.6 percent for the low range development scenario and 1.9 percent for the high range development scenario). Therefore, given the relatively small percentage of water demand associated with buildout of the proposed GPU, which would occur gradually through 2040, and given the Cal Water’s Urban Water Management Plan’s determination that water purchased by the District will be sufficient to serve all water demand within the District through 2045 under all hydrologic conditions, there would be sufficient water supplies available to serve development associated with buildout of the proposed GPU during normal, single dry, and multiple dry years. As such, impacts would be less than significant.</p>		
<p>The geographic context for the cumulative analysis of water supply is the Planning Area, as served by the District. Since the City has determined that future cumulative development citywide as allowed under the proposed GPU would not result in the need for relocation or construction of new or expanded water facilities or an increase in water demand beyond available supplies, the proposed GPU’s cumulative impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>4.19 Utilities and Service Systems—Wastewater</p>		
<p>Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Commercial District, where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers and existing structures, and where the larger sewer lines (i.e., 15-inch lines) are located to accommodate the land use intensification. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net increase in wastewater generation in the Planning Area. However, future development under the proposed GPU is anticipated to occur gradually</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>through 2040 and would be largely based on market demand. Thus, any increase in wastewater generation would occur gradually as additional development occurs in the Planning Area. Furthermore, these increases at buildout of the proposed GPU represent only a small percentage of the Joint Water Pollution Control Plant's (JWPCP) remaining capacity at 0.07 percent under the low range scenario and 0.21 percent under the high range scenario. In addition, developers of future development projects under the proposed GPU would be required to pay sewer construction permit fees and connection charges. A portion of the sewer connection permit fee is allocated toward the determination of capacity to ensure that there is capacity available to serve such future development project. Furthermore, the Districts are authorized by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is used by the Districts to upgrade or expand the Sewerage System. Payment of a connection fee may be required before a project is permitted to discharge to the Districts' Sewerage System. Accordingly, buildout of the proposed GPU would not result in a determination by the City, the Districts, or the JWPCP that there would be inadequate capacity to serve the projected wastewater treatment demands or require the construction of new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects. Therefore, the proposed GPU's impacts on wastewater facilities (i.e., local collection infrastructure and regional treatment facilities) would be considered less than significant.</p>		
<p>The geographic context for this cumulative analysis is the Planning Area, as served by the Districts and JWPCP. Since the City has determined that future cumulative development citywide as allowed under the proposed GPU would not result in the need for expansion of or construction of wastewater treatment plants, the proposed GPU's cumulative impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
4.20 Utilities and Service Systems—Solid Waste		
<p>The projected net growth in the Planning area would generate additional solid waste that would require disposal at regional landfills. The majority of the City’s solid waste is collected and transported by WM, the City’s exclusive waste hauler, to El Sobrante in Riverside County. Conservatively assuming that the maximum amount of solid waste that could be generated by the implementation of the GPU under the high range scenario would be taken to the El Sobrante landfill, the total amount of 8,419 tons per year would represent less than 0.006 percent of its remaining capacity. Future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in solid waste generation would occur gradually as additional development occurs in the Planning Area. Buildout of the proposed GPU would not generate solid waste in excess of state or local standards, or in excess of the capacity of the landfills serving the City, or otherwise impair the attainment of solid waste reduction goals. As such, impacts related to solid waste would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>Future development proposed under the GPU would be required to comply with the RHEMC, including Sections 8.20.260, Section 8.20.70, Section 8.24, and Chapter 15.04. Compliance with RHEMC would ensure that implementation of the proposed GPU complies with Assembly Bill (AB) 341, AB 939, AB 1826, AB 1327, and CALGreen Code. Furthermore, the proposed GPU contains goals and policies that address solid waste management and diversion to ensure that State and local solid waste reduction goals are met. Therefore, the proposed GPU would comply with federal, State, local management and reduction statutes and regulations related to solid waste. As such, impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>The increase in solid waste generated by the proposed GPU and other future development projects together may significantly impact the finite resources associated with solid waste disposal. However, all future development projects, including those within the Planning Area of the proposed GPU, would be required to meet State and local recycling goals at the time of development, which would reduce the amount of</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>solid waste disposed of at the landfills. In addition, California continues to implement source reduction measures, such as recycling and converting waste to energy, that would divert solid waste away from landfills. Furthermore, implementation of the proposed GPU would not significantly impact the remaining capacities of regional landfills., As such, the incremental increase in solid waste from the proposed GPU would not be cumulatively considerable, and cumulative impacts to solid waste facilities would be considered less than significant.</p>		
<p>4.21 Utilities and Service Systems—Energy and Telecommunications Infrastructure</p>		
<p>Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Commercial District, where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net increase in electricity and natural gas consumption and use of telecommunications facilities in the Planning Area. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any net increase in electricity and natural gas consumption and use of telecommunications facilities in the Planning Area would occur gradually as additional development occurs in the Planning Area.</p> <p>Furthermore, future development projects under the proposed GPU would be expected to incorporate energy conservation features and comply with applicable regulations, including the CALGreen Code and State energy standards under Title 24. Accordingly, future development projects would be more energy-efficient than existing buildings to minimize the increase in demand for energy supply and infrastructure. Therefore, buildout of the proposed GPU would not be anticipated to require or result in the relocation or construction of new or expanded electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. As such, the proposed GPU's impact on</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

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**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
electrical power, natural gas, or telecommunications infrastructure would be less than significant.		
<p>Electricity and natural gas infrastructures are typically expanded in response to increasing demand, and system expansion and improvements by energy providers are on-going. In addition, future development projects under the proposed GPU, as well as other development projects, would be expected to incorporate energy conservation features and comply with applicable regulations, including the CALGreen Code and State energy standards under Title 24. Accordingly, the incremental effect of the proposed GPU on energy infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant.</p> <p>Similarly, the City is well-served by telecommunications facilities, and no restrictions on the expansion of service, as necessary, to meet future demands is anticipated anywhere in the Planning Area. Any future expansion of telecommunications facilities would be required to adhere to existing State and local requirements related to telecommunication service. As such, the incremental effect of the proposed GPU related to the provision of telecommunication infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant.</p>	No mitigation is required.	Less Than Significant without Mitigation
4.22 Wildfire		
<p>Future development would be required to adhere to strict design standards regarding fire resistance and circulation and would be concentrated in the City's Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. Accordingly, the proposed GPU would not result in a substantial increase in the potential for wildfires to move through developed areas of the Planning Area and substantially impair the City's emergency response and emergency evacuation plan along the Planning Area's street network through the Multi-Jurisdictional Hazard Mitigation Plan (HMP). As such, impacts would be less than significant.</p>	No mitigation is required.	Less Than Significant without Mitigation
The majority of sites envisioned for potential intensification through buildout of the proposed GPU are located on underutilized parcels that	No mitigation is required.	Less Than Significant without Mitigation

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>are characterized by suburban development, thus, reducing overall wildfire risk by concentrating future development in areas that are not characterized by mature, dense tree stands, or native or non-native vegetation that could fuel spread of a wildfire. Additionally, as future development would consist primarily of commercial and residential development, future development is not expected to store, use, or dispose of significant quantities of hazardous materials. However, it is possible that future commercial development within the Planning Area could include development of a gas station, which would handle and store automotive fuels. Such uses would be required to adhere to federal, state, and local regulations for the safe storage and handling of such materials, which would be adequate to ensure that wildfire impacts would be less than significant. For other retail commercial, office, or residential uses anticipated through buildout of the proposed GPU, there would be no significant sources of hazardous materials that could add to the fuel load and potential pollutant burden in the event of an on-site fire. Therefore, buildout of the proposed GPU would not substantially exacerbate wildfire risks, and impacts would be less than significant.</p>		
<p>Individual projects constructed through implementation of the proposed GPU would be required to comply with more stringent standards to resist ignition and slow the spread of fire per LACoFD standards, and no building permits would be issued by the City until construction plans have been reviewed and determined to be in full compliance with all applicable standards for development in a Very High Fire Hazard Severity Zone (VHFHSZ). Such standards include requirements for incorporating fire-resistant building materials, sprinkler systems, certain water flow pressures for fire hydrants, adequate internal circulation, and site access for fire engines and crews.</p> <p>Further, no wildfire-resistant design measures, such as emergency water storage facilities, additional fire roads or fuel breaks, or additional power facilities, are anticipated to support buildout of the proposed GPU. Therefore, the proposed GPU would not exacerbate fire risks or result in temporary or ongoing impacts to the environment related to the</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

EXECUTIVE SUMMARY

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
<p>installation or maintenance of associated infrastructure, and impacts would be less than significant.</p>		
<p>The majority of future development associated with buildout of the proposed GPU would be located within the Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. In the event that future development were to occur in close proximity to sloped areas characterized by flammable vegetation, such development would be required to adhere to strict design guidelines, such as fuel modification activities required by LACoFD, which would remove some of the flammable vegetation in close proximity to a proposed combustible structure and replace it with irrigated and/or fire-resistant vegetation. Such fire resistant vegetation would be less likely to burn during a wildfire event and would serve to stabilize slopes in a post-fire scenario. As such, buildout of the proposed GPU would not expose people or structures to significant risks associated with post-fire slope instability or drainage changes, and impacts would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>
<p>Any new development in the Palos Verdes Peninsula would be required to comply with all applicable California Fire Code requirements, as well as each jurisdictional city's and LACoFD design standards and oversight requirements for construction, access, water mains, fire flows, hydrants, construction materials, and fuel modification. Overall, compliance with regulatory requirements would encourage fire prevention and fire-resistant communities, which, in turn, would reduce wildfire risks within the Palos Verdes Peninsula.</p> <p>The City, in consultation with LACoFD, would continue to consider the wildfire impacts of individual projects and require fuel modification as necessary, given that all future development would be located within a VHFHSZ. Further, while development construction activities near open space areas can result in a temporary increase in wildfire risks, intensification of already developed land uses, as would predominantly occur through implementation of the proposed GPU, would serve to further reduce the fuel load within the Planning Area through mandatory fuel modification activities for projects in close proximity to flammable vegetation. As such, the incremental effect of the proposed GPU on</p>	<p>No mitigation is required.</p>	<p>Less Than Significant without Mitigation</p>

**Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Mitigation Measures	Level of Significance After Mitigation
wildfire risks within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts regarding wildfire risks resulting from the implementation of the proposed GPU in consideration of other projects on the Palos Verdes Peninsula would be considered less than significant.		

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1.0 INTRODUCTION

This section of the Draft Program Environmental Impact Report (PEIR) discusses the potential aesthetic impacts associated with the implementation of the proposed GPU. This section includes a discussion of the aesthetic characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this Draft PEIR), this section of the Draft PEIR evaluates the potential aesthetics impacts that may result from the proposed GPU. Aesthetics impacts are addressed in terms of potential effects involving alterations of or obstruction of views of scenic resources and changes to the visual character and quality of the site and surrounding environment.

1.1 PURPOSE AND LEGAL AUTHORITY

The purpose of this Environmental Impact Report (EIR) is to evaluate the environmental consequences that could result from adoption and implementation of the City of Rolling Hills Estates' (City) proposed General Plan Update (proposed GPU or Proposed Project). The Proposed Project is a comprehensive update of the City's General Plan, updating the City's seven existing General Plan Elements (Land Use Element, Transportation [Mobility] Element, Housing Element, Conservation Element, Open Space and Recreation Element, Noise Element, and Public Safety [Safety] Element) and the addition of an eighth element (Sustainability Element). A complete project description is contained within Section 2.0, Project Description, of this EIR.

The City of Rolling Hills Estates has prepared this EIR for the following purposes:

- To satisfy the requirements of the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.) as amended; the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.); and the City of Rolling Hills Estates' rules, regulations, and procedures for the implementation of CEQA.
- To inform the general public, the local community, and responsible, trustee and interested public agencies of the nature of the Proposed Project, its possible environmental effects, possible measures to mitigate those effects, and alternatives to the Proposed Project.
- To enable the City to consider environmental consequences when deciding whether to approve the Proposed Project.

CEQA requires public agencies to avoid or substantially lessen significant environmental impacts, where feasible, when approving projects. If an agency decides to approve a project despite its unavoidable significant environmental impacts, the public agency is required to balance the project's significant impacts on the environment with other conditions, including economic, social, technological, legal, and other benefits and adopt a statement of overriding considerations. This EIR is an informational document, the purpose of which is to identify the significant impacts of the Proposed Project on the environment and to indicate the manner in which those significant impacts can be avoided or significantly lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated; and to identify reasonable and potentially feasible alternatives to the Proposed Project that would avoid any significant adverse environmental impacts or reduce such impacts to a less-than-significant level.

1.0 INTRODUCTION

CEQA Guidelines Section 15382 defines a significant effect to the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

This EIR was prepared in accordance with CEQA Guidelines Section 15151 which defines the standards for EIR adequacy as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.

1.2 LEAD AGENCY

The City of Rolling Hills Estates is the lead agency for this project, with primary responsibility for conducting the environmental review process and approving or denying the Proposed Project. This EIR reflects the independent judgment of the City regarding the Proposed Project’s potential environmental impacts, the level of significance of the impacts both before and after mitigation, and the mitigation measures proposed to reduce impacts.

1.3 TYPE OF EIR

This EIR considers broad general plan level issues and evaluates the environmental effects of the proposed GPU at a program level. This EIR addresses environmental impacts from the proposed GPU to the level that they can be assessed without undue speculation, in light of the scope of the proposed GPU as a long-range plan for the City of Rolling Hills Estates’ entire incorporated area and sphere of influence (i.e., the Planning Area) with an approximate 20-year planning horizon. In addition to broad general plan level issues, the proposed GPU includes a Vision Plan for the Commercial District, which is where the majority of growth in the Planning Area is anticipated to occur. Thus, in many instances, this EIR provides more specific detail and characterization of the potential environmental impacts that could occur from buildout of the Commercial District area than for other parts of the City, while still evaluating such potential impacts at the program level.

1.4 USE OF THIS EIR WITH FUTURE PROJECTS

The adoption of the proposed GPU does not constitute a commitment to any specific development project. It is contemplated that future site-specific approvals in the City/Planning Area may be evaluated with consideration of this EIR under one or more of the following CEQA provisions:

1.4.1 USE OF A PROGRAM EIR WITH LATER ACTIVITIES

Section 15168(c) of the CEQA Guidelines describes the use of a program EIR with later activities. This section states:

(c) Use with Later Activities. Later activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

(1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration. That later analysis may tier from the program EIR as provided in Section 15152. [See below under the heading "Tiering.]"

(2) If the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR. [See below under the heading "Subsequent or Supplemental CEQA Documentation and Addendums" for the relevant parts of CEQA Guidelines Section 15162, as referenced in this section.]

(3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into later activities in the program.

(4) Where the later activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR.

(5) A program EIR will be most helpful in dealing with later activities if it provides a description of planned activities that would implement the program and deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed project description and analysis of the program, many later activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

In the spirit of Section 15168 in general and Section 15168(c)(5) in particular, this EIR considers the potential environmental impacts of three representative projects that represent some of the types of development/redevelopment that could occur in the City's Commercial District to implement the proposed GPU and Commercial District Area Vision Plan.

1.0 INTRODUCTION

1.4.2 TIERING

Section 15152 of the CEQA Guidelines describes the process of tiering. This section states:

(a) “Tiering“ refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.

(b) Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration. Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration. However, the level of detail contained in a first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.

(c) Where a lead agency is using the tiering process in connection with an EIR for a large-scale planning approval, such as a general plan or component thereof (e.g., an area plan or community plan), the development of detailed, site-specific information may not be feasible but can be deferred, in many instances, until such time as the lead agency prepares a future environmental document in connection with a project of a more limited geographical scale, as long as deferral does not prevent adequate identification of significant effects of the planning approval at hand.

(d) Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

- (1) Were not examined as significant effects on the environment in the prior EIR; or*
- (2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.*

(e) Tiering under this section shall be limited to situations where the project is consistent with the general plan and zoning of the city or county in which the project is located, except that a project requiring a rezone to achieve or maintain conformity with a general plan may be subject to tiering.

(f) A later EIR shall be required when the initial study or other analysis finds that the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR. A negative declaration shall be required when the provisions of Section 15070 are met.

(1) *Where a lead agency determines that a cumulative effect has been adequately addressed in the prior EIR, that effect is not treated as significant for purposes of the later EIR or negative declaration, and need not be discussed in detail.*

(2) *When assessing whether there is a new significant cumulative effect, the lead agency shall consider whether the incremental effects of the project would be considerable when viewed in the context of past, present, and probable future projects. At this point, the question is not whether there is a significant cumulative impact, but whether the effects of the project are cumulatively considerable. For a discussion on how to assess whether project impacts are cumulatively considerable, see Section 15064(i).*

(3) *Significant environmental effects have been “adequately addressed” if the lead agency determines that:*

(A) they have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report; or

(B) they have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

(g) When tiering is used, the later EIRs or negative declarations shall refer to the prior EIR and state where a copy of the prior EIR may be examined. The later EIR or negative declaration should state that the lead agency is using the tiering concept and that it is being tiered with the earlier EIR.

(h) The rules in this section govern tiering generally. Several other methods to streamline the environmental review process exist, which are governed by the more specific rules of those provisions. Where multiple methods may apply, lead agencies have discretion regarding which to use. These other methods include, but are not limited to, the following:

(1) General plan EIR (Section 15166).

(2) Staged EIR (Section 15167).

(3) Program EIR (Section 15168).

(4) Master EIR (Section 15175).

(5) Multiple-family residential development / residential and commercial or retail mixed-use development (Section 15179.5).

(6) Redevelopment project (Section 15180).

(7) Projects consistent with community plan, general plan, or zoning (Section 15183). [See below under Subsection 1.4.4, Projects Consistent with a Community Plan or Zoning, of this PEIR for more information.]

(8) Infill projects (Section 15183.3).

1.0 INTRODUCTION

1.4.3 SUBSEQUENT OR SUPPLEMENTAL CEQA DOCUMENTATION AND ADDENDUMS

Sections 15162 through 15164 of the CEQA Guidelines explain when subsequent or supplemental CEQA documentation is required and when an Addendum to a previously certified EIR is appropriate. As noted above, when considering the use of a program EIR with a later activity, "If the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required." Sections 15162 through 15164 state:

15162. SUBSEQUENT EIRS AND NEGATIVE DECLARATIONS

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

(d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

15163. SUPPLEMENT TO AN EIR

(a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and

(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

(b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

(c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.

(d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.

(e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

15164. ADDENDUM TO AN EIR OR NEGATIVE DECLARATION

(a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

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(d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

1.4.4 PROJECTS CONSISTENT WITH A COMMUNITY PLAN OR ZONING

Section 15183 of the CEQA Guidelines provides an exemption for projects that:

1. Are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified (in this case the GPU for which this EIR was prepared).
2. Do not cause project-specific significant effects which are peculiar to the project or its site.
3. Do not cause significant effects that the prior EIR (in this case this EIR) failed to analyze as significant effects.
4. Do not cause potentially significant off-site and/or cumulative impacts which were not discussed in the prior EIR (in this case this EIR).
5. Do not cause more severe adverse impacts than discussed in the prior EIR (in this case this EIR) as a result of substantial new information.

Section 15183 of the CEQA Guidelines states:

15183. PROJECTS CONSISTENT WITH A COMMUNITY PLAN OR ZONING

(a) CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

(b) In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

- (1) Are peculiar to the project or the parcel on which the project would be located,*
- (2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,*
- (3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or*
- (4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.*

(c) If an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by subdivision (e) below, then an additional EIR need not be prepared for the project solely on the basis of that impact.

(d) This section shall apply only to projects which meet the following conditions:

(1) The project is consistent with:

(A) A community plan adopted as part of a general plan,

(B) A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or

(C) A general plan of a local agency, and

(2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

(e) This section shall limit the analysis of only those significant environmental effects for which:

(1) Each public agency with authority to mitigate any of the significant effects on the environment identified in the EIR on the planning or zoning action undertakes or requires others to undertake mitigation measures specified in the EIR which the lead agency found to be feasible, and

(2) The lead agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken.

(f) An effect of a project on the environment shall not be considered peculiar to the project or the parcel for the purposes of this section if uniformly applied development policies or standards have been previously adopted by the city or county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR. Such development policies or standards need not apply throughout the entire city or county, but can apply only within the zoning district in which the project is located, or within the area subject to the community plan on which the lead agency is relying. Moreover, such policies or standards need not be part of the general plan or any community plan, but can be found within another pertinent planning document such as a zoning ordinance. Where a city or county, in previously adopting uniformly applied development policies or standards for imposition on future projects, failed to make a finding as to whether such policies or standards would substantially mitigate the effects of future projects, the decision-making body of the city or county, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the city or county decides to apply the standards or policies as permitted in this section.

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(g) Examples of uniformly applied development policies or standards include, but are not limited to:

- (1) Parking ordinances.*
- (2) Public access requirements.*
- (3) Grading ordinances.*
- (4) Hillside development ordinances.*
- (5) Flood plain ordinances.*
- (6) Habitat protection or conservation ordinances.*
- (7) View protection ordinances.*
- (8) Requirements for reducing greenhouse gas emissions, as set forth in adopted land use plans, policies, or regulations.*

(h) An environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it.

(i) Where the prior EIR relied upon by the lead agency was prepared for a general plan or community plan that meets the requirements of this section, any rezoning action consistent with the general plan or community plan shall be treated as a project subject to this section.

(1) "Community plan" is defined as a part of the general plan of a city or county which applies to a defined geographic portion of the total area included in the general plan, includes or references each of the mandatory elements specified in Section 65302 of the Government Code, and contains specific development policies and implementation measures which will apply those policies to each involved parcel.

(2) For purposes of this section, "consistent" means that the density of the proposed project is the same or less than the standard expressed for the involved parcel in the general plan, community plan or zoning action for which an EIR has been certified, and that the project complies with the density-related standards contained in that plan or zoning. Where the zoning ordinance refers to the general plan or community plan for its density standard, the project shall be consistent with the applicable plan.

(j) This section does not affect any requirement to analyze potentially significant offsite or cumulative impacts if those impacts were not adequately discussed in the prior EIR. If a significant offsite or cumulative impact was adequately discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that offsite or cumulative impact.

The CEQA provisions described above are not intended to be an exhaustive list of all of the potential ways that this General Plan EIR can be used with future projects. Future projects are not precluded from using this EIR in any manner allowed by CEQA or the CEQA Guidelines, including any future streamlining or similar opportunity added to CEQA or the CEQA Guidelines after the certification of this EIR.

1.5 SCOPE AND ORGANIZATION OF THIS DRAFT EIR

This Draft EIR is organized into 10 sections, as follows:

Executive Summary. This section provides a summary of the Proposed Project and its potential environmental impacts, proposed mitigation measures where applicable, and the level of significance of the impact before and after mitigation. Areas of controversy and issues to be resolved are also discussed.

1. Introduction. This section contains an overview of the purpose the EIR, the identification of the lead agency, a description of the type of EIR and the level of environmental analysis, the use of this EIR with future projects, a description of the organization and scope of the EIR, and a discussion of the CEQA process.

2. Project Description. This section describes the Proposed Project, including the Proposed Project's location, objectives, and characteristics. The intended uses of the EIR are also identified.

3. Environmental Setting. This section describes the physical environmental conditions in the vicinity of the project site.

4. Environmental Analysis. This section analyzes the potential environmental impacts of the Proposed Project, with a separate section provided for each environmental topic identified for further analysis through the Notice of Preparation/Scoping process. Each environmental topic of this section discusses the environmental setting (in more detail than Chapter 3), regulatory framework, thresholds of significance, methodology, impact analysis, and mitigation measures relevant to the specific environmental topic. Each environmental topic makes conclusions of the significance of the Project's environmental impacts relative to that topic both before and after mitigation. The topics evaluated in this EIR, as determined through the Notice of Preparation/Scoping process are:

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Biological Resources
- 4.4 Cultural Resources
- 4.5 Energy
- 4.6 Geology and Soils
- 4.7 Greenhouse Gas Emissions
- 4.8 Land Use and Planning
- 4.9 Noise
- 4.10 Population and Housing
- 4.11 Public Services—Fire Protection
- 4.12 Public Services—Police Protection

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4.13 Public Services—Schools

4.14 Public Services—Parks and Recreation

4.15 Public Services—Libraries

4.16 Transportation

4.17 Tribal Cultural Resources

4.18 Utilities and Service Systems—Water Supply

4.19 Utilities and Service Systems—Wastewater

4.20 Utilities and Service Systems—Solid Waste

4.21 Utilities and Service Systems—Energy and Telecommunications Infrastructure

4.22 Wildfire

5. Alternatives to the General Plan Update. This section provides analysis of a range of reasonable alternatives to the Proposed Project. The range of alternatives considered is based on their ability to feasibly attain most of the project objectives and avoid or substantially lessen any of the significant effects of the Proposed Project.

6. Other CEQA Considerations. This section provides a discussion of the Proposed Project's (1) significant unavoidable adverse impacts, (2) significant irreversible environmental changes, (3) growth-inducing impacts, and (4) effects found not to be significant.

7. Organizations and Persons Consulted. This section lists the organizations and persons that were consulted in the preparation of this EIR.

8. References. This section identifies the references relied upon in this EIR.

9. List of Prepares. This section identifies the lead agency, firm, and persons that prepared this EIR.

1.6 SUMMARY OF THE EIR PROCESS

To initiate the EIR process for the Proposed Project, the City prepared an Initial Study and a Notice of Preparation (IS/NOP) in compliance with CEQA Guidelines Section 15082, which was released for a 30-day public review period beginning on May 14, 2021. The IS/NOP was submitted to the State Clearinghouse, posted at the Los Angeles County Clerk's office, and distributed to interested agencies, individuals, and organizations. A public scoping meeting, held virtually due to the COVID-19 pandemic, was conducted on June 3, 2021 to solicit input from interested agencies, organizations, and individuals. A copy of the IS/NOP and comments received on the IS/NOP are included in **Appendix A** of this PEIR.

After the NOP/Scoping process, the Draft PEIR was prepared, which was released for a 45-day public review period beginning on October 22, 2021. The Draft PEIR was circulated to the State Clearinghouse with a corresponding Notice of Completion (NOC) and Notice of Availability of a Draft EIR (NOA). The NOC and NOA were also posted at the Los Angeles County Clerk's office and distributed to interested agencies, individuals, and organizations.

2.0 PROJECT DESCRIPTION

This section describes the proposed Rolling Hills Estates General Plan Update (GPU); identifies the objectives the proposed GPU aims to achieve; describes the proposed land use, mobility, housing, conservation, open space and recreation, noise, safety, and sustainability elements; outlines potential General Plan buildout scenarios and representative projects; and lists the discretionary approvals required to adopt the proposed GPU.

2.1 PROJECT TITLE AND SUMMARY

The proposed project is the “Rolling Hills Estates General Plan Update.” Throughout this EIR, it will be simply referred to as either the “proposed GPU” or the “Proposed Project.”

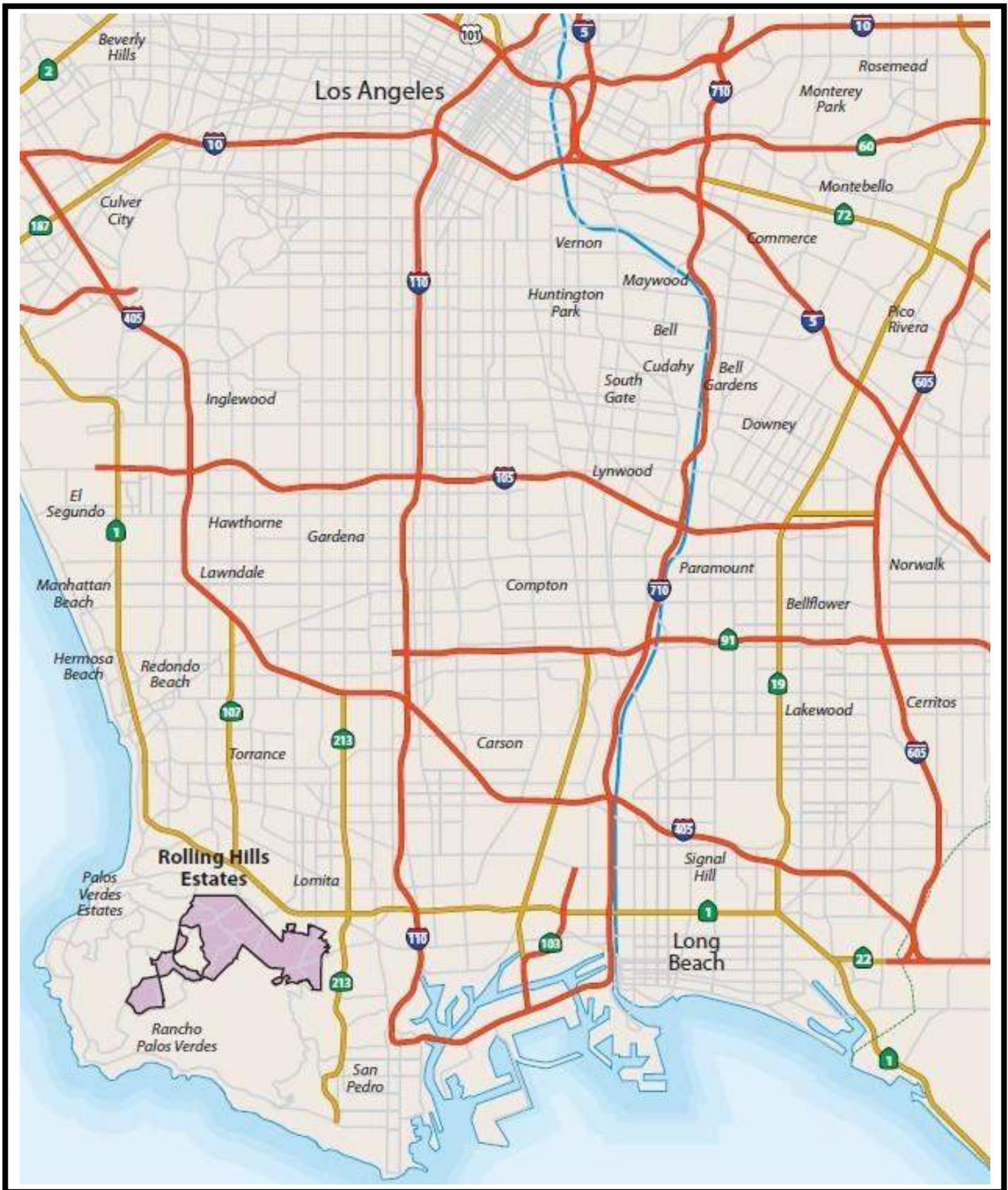
The City is updating its existing General Plan, which was adopted in 1992, with the Housing Element having been updated most recently in 2014. The General Plan has had various amendments since its adoption to address emerging issues and community priorities to ensure compliance with State law and to revise implementing policy frameworks to focus on goals and policy objectives. The proposed GPU would incorporate new and updated assumptions, data, and analysis, as well as establish an updated long-term vision for the City overall and the Commercial District in particular.

2.2 PROJECT LOCATION

The City of Rolling Hills Estates is located in the center of the Palos Verdes Peninsula in the southwestern portion of the County of Los Angeles, as shown in **Figure 2.2-1**. The General Plan Planning Area (Planning Area) is the land area addressed by the City of Rolling Hills Estates (City) GPU, which encompasses approximately 2,378 acres, including all of the land within City limits (84 percent) and the unincorporated Sphere of Influence (SOI) (16 percent). As shown in **Figure 2.2-2**, the boundaries of the Planning Area generally follow the borders of the City. The City is bounded by the City of Rancho Palos Verdes on the west and south, the City of Rolling Hills on the south, the City of Palos Verdes Estates on the north, the City of Torrance on the north and northeast, the City of Lomita on the north and east, and unincorporated Los Angeles County on the south and southeast.

2.3 BACKGROUND – EXISTING GENERAL PLAN

State law (California Government Code Section 65300) requires that each city and county adopt a comprehensive, long-term general plan for its physical development. Seven elements are required for every general plan: land use, circulation, housing, conservation, open space, noise, and safety. The City of Rolling Hills Estates adopted its current General Plan in 1992, with amendments having occurred as needed. Consistent with State requirements, the current (1992) General Plan includes the following elements: Land Use, Transportation, Housing (comprehensively updated in 2014), Conservation, Open Space and Recreation, Noise, and Public Safety, as described in the following paragraphs:

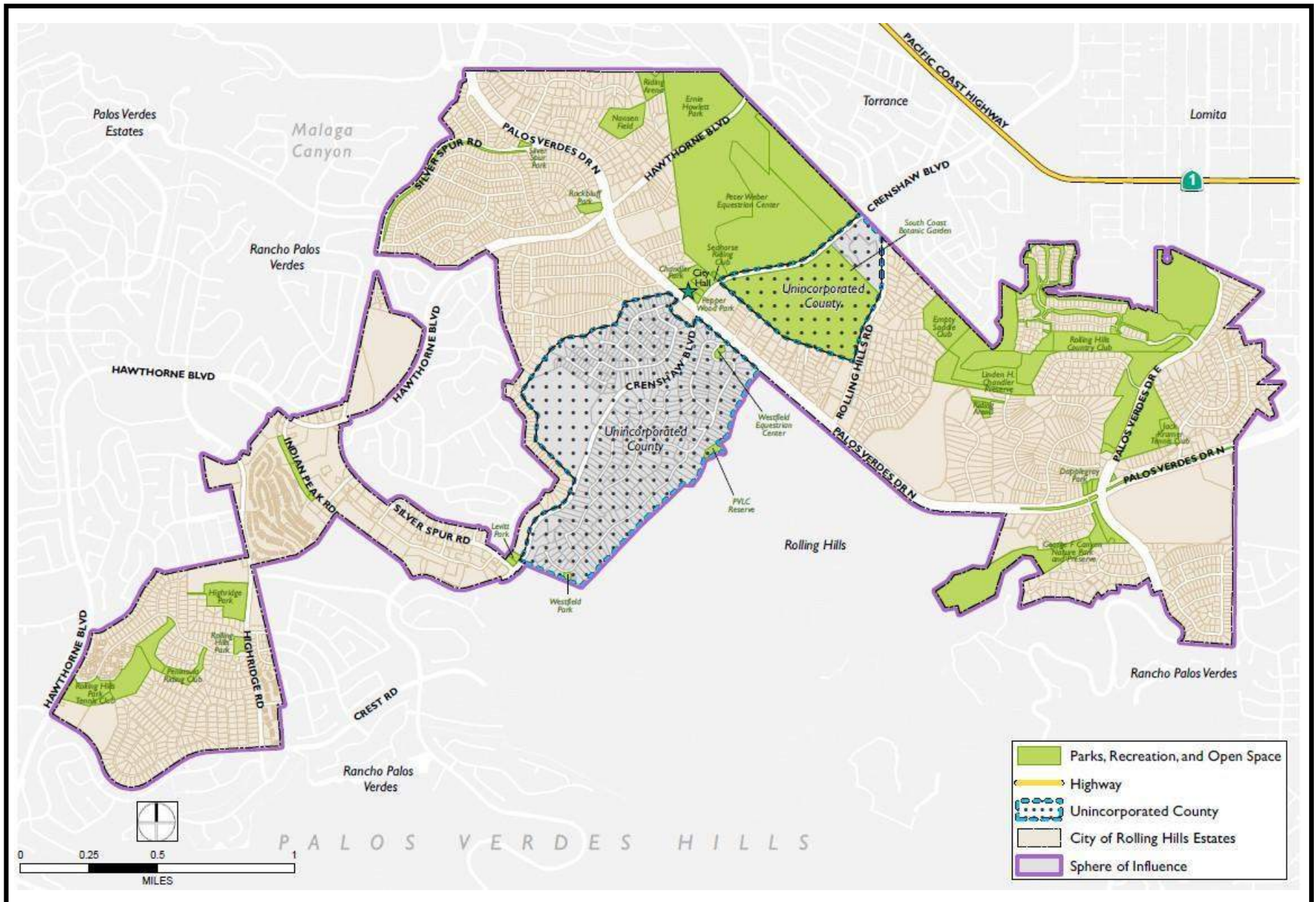


Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017; Dyett & Bhatia, 2017.



Planning Area

FIGURE 2.2-1
Regional Location Map



Source: City of Rolling Hills Estates, 2017; Dyett & Bhatia, 2017.

FIGURE 2.2-2
Planning Area Map

2.0 PROJECT DESCRIPTION

2.3.1 LAND USE ELEMENT

The Land Use Element establishes a land use plan for the City that identifies land use designations for all parcels in the Planning Area, along with goals and policies for the types and forms of land uses in the City. The land use plan both regulates land uses and provides guidance for the City's land use related decisions. The City's current (1992) General Plan land use designations are depicted in **Figure 2.3-1** and consist of the following:

VERY LOW DENSITY RESIDENTIAL AND ESTATE DENSITY

The Very Low Density Residential and Estate Density designations include single-family detached residential units with a maximum density of 1 unit per 5 acres or 1 unit per acre and a population density of 3 persons per acre. Very Low Density Residential areas include the parcels along Strawberry Lane.

LOW DENSITY RESIDENTIAL

The Low Density Residential designation includes single-family detached residential with a maximum density of 2 units per acre and a population density of 6 persons per acre. Most areas designated as Low Density Residential correspond to areas within the City's equestrian overlay.

MEDIUM DENSITY RESIDENTIAL

The Medium Density Residential designation includes single-family detached residential with a maximum density of between 2 to 4 units per acre, depending on the applicable zoning district. Population density ranges from 6 to 11 persons per acre. Most of the area designated as Medium Density Residential is located in the Rollingwood area; an area on Crest Road, west of The Ranch; and in an area adjacent to Hawthorne Boulevard.

HIGH DENSITY RESIDENTIAL

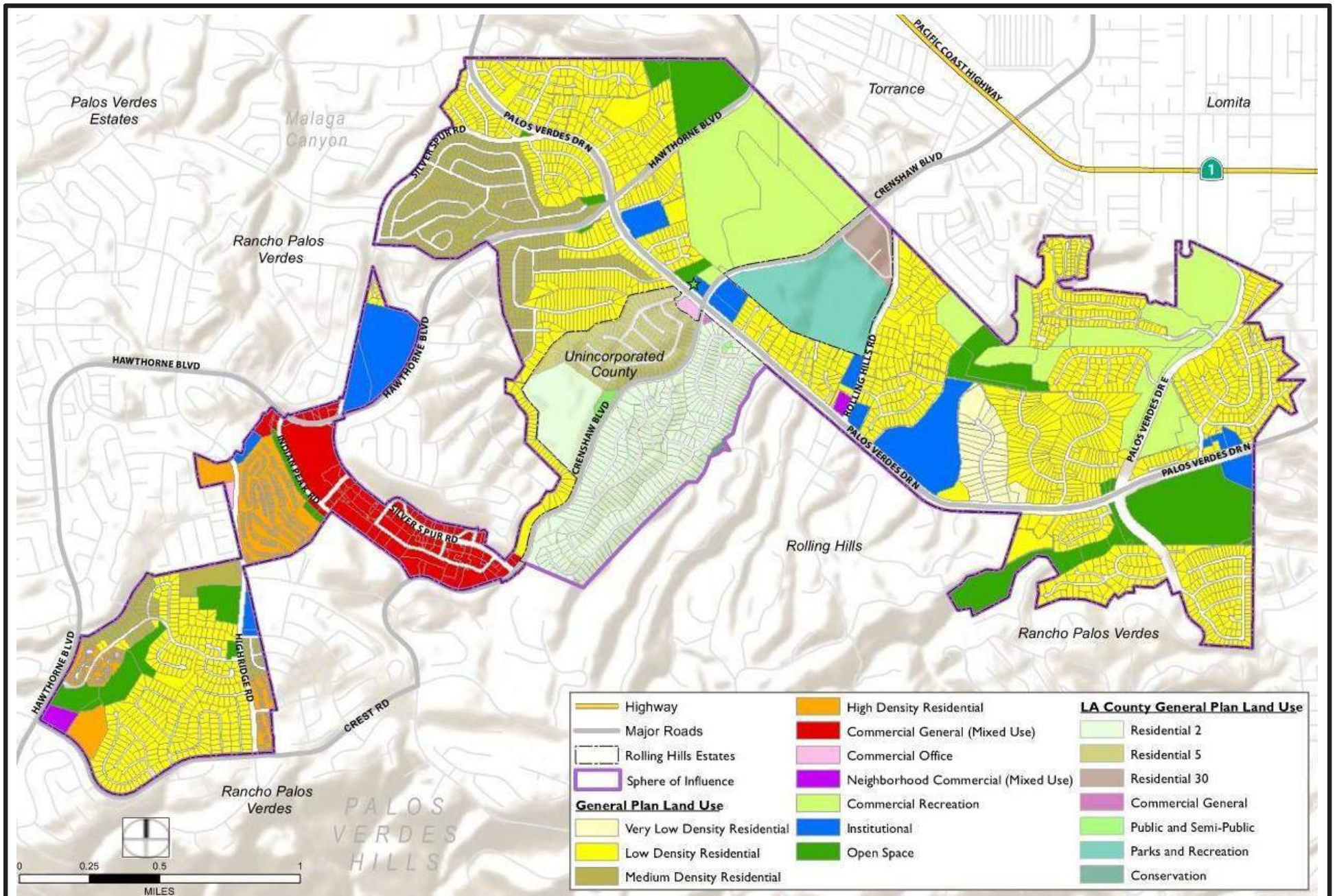
The High Density Residential designation includes multi-family attached residential development with a maximum density of 8 units per acre and a population density of 22 persons per acre. Most of the areas designated as High Density Residential are located in the western portion of the City (i.e., The Terraces, Cresta Palos Verdes, Rolling Hills Park Villas and the Seaview Drive area).

COMMERCIAL GENERAL

The Commercial General designation includes retail commercial with a maximum floor area ratio of 3 to 1. The main commercial district of the City along Silver Spur Road is designated as Commercial General on the land use plan.

COMMERCIAL OFFICE

The Commercial Office designation includes professional and administrative office uses with a maximum floor area ratio of 1 to 1. Two parcels of land in the City are identified as Commercial Office at the intersections of (1) Crenshaw Boulevard and Palos Verdes Drive North and (2) Highridge Road and Via Granada.



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017.

FIGURE 2.3-1
Existing General Plan Land Use Designations

2.0 PROJECT DESCRIPTION

NEIGHBORHOOD COMMERCIAL

The Neighborhood Commercial designation includes business and professional services and retail with a maximum floor area ratio of 4 to 1.¹ This designation refers to smaller single commercial uses located at key intersections.

COMMERCIAL RECREATION

The Commercial Recreation designation includes archery ranges, tennis courts, equestrian facilities, riding clubs, golf courses, and country clubs with a maximum floor area ratio of 0.25 to 1.

OPEN SPACE

The Open Space designation refers to public parks and private land reserved for open spaces.

INSTITUTIONAL

The Institutional designation includes schools, churches, and other public institutional uses with a maximum floor area ratio of 0.75 to 1.

OVERLAYS

In addition to the land use designations, the current (1992) General Plan includes Overlay Designations, which identify additional development standards that must be considered in future planning and development. The overlay designations included in the current (1992) General Plan are:

- Cultural Resources Overlay. This designation applies to a portion of the City where archaeological resources are known or suspected to exist. The Conservation Element details appropriate actions that must be followed when a property is included within this designation. All areas designated as having a high sensitivity in the Conservation Element are included within this overlay designation.
- Horse Overlay. This designation applies to a substantial portion of the City, where keeping of horses is permitted and where horse keeping areas are required to be preserved. This designation is identical to the Horse Overlay zone district outlined in the Zoning Ordinance.
- Scenic Corridor Overlay. The Conservation Element includes a Scenic Corridor Overlay designation, which applies to a number of arterial roadways in the City, specifically Hawthorne Boulevard, Palos Verdes Drive North, Crenshaw Boulevard, and Silver Spur Road. This overlay designation applies to all properties abutting the designated roadways. The Conservation Element outlines specific guidelines that need to be adhered to in future development along these corridors.
- Parks Development Overlay. This designation applies to those areas of the City where new park facilities development may occur pursuant to General Plan Land Use Policy. This overlay designation is different from the other overlay zones in that it functions like a floating zone. The designation indicates a general area where future development is likely without identifying

¹ The current (1992) General Plan identifies the maximum floor area ratio for Neighborhood Commercial as 4 to 1; however, this appears to be a typographical error. The proposed GPU would correct this error by changing this maximum floor area ratio to 0.4 to 1.

specific parcels. Three areas of the City have been included in this designation: Dapplegray School, Palos Verdes Landfill, and George F. Canyon.

- **Ecological Resource Overlay.** This overlay designation applies to those portions of the City where sensitive habitats are located. Any areas within the City identified as having a high ecological sensitivity in the Conservation Element is located within this overlay designation. The Conservation Element indicates specific guidelines that must be adhered to when planning and developing in these areas.
- **Multi-use Trail Overlay.** The Open Space and Recreation Element contains a Master Plan of Trails, which identifies both existing and future trails. This designation is consistent with the Trails Master Plan in terms of location and classification of the trail.
- **Hazards Management Overlay.** The Public Safety Element indicates those areas of the City that may be subject to some type of environmental hazard. These areas subject to seismic risk, flood hazard, or slope stability are included within the Hazards Management Overlay. The Public Safety Element outlines the guidelines that must be adhered to when this designation applies.
- **Mixed-Use Overlay.** This land use designation is very site specific and applies only to those areas included with the Commercial General land use designations. The designation permits residential development to be constructed in areas with this land use designation. The residential units may either share the structure or parcel. The development density cannot exceed 22 units per acre and all applicable parking standards must be met. This designation is designed to promote mixed use development in and around the Peninsula Center commercial district and at the corner of Hawthorne and Crest, adjacent to Cresta Verdes.

2.3.2 TRANSPORTATION ELEMENT

The Transportation Element establishes the City's master plan of roads, which is intended to create a roadway system that is able to accommodate existing and future traffic in the City. The Transportation Element contains goals and policies that emphasize the need for providing an efficient circulation system to handle traffic increases due to both regional and local growth. The Transportation Element designates each roadway in the City as one of the following roadway classifications:

- **Major Arterial streets** are the most important roadways in the Arterial category and are designed to carry through-traffic on four or more moving lanes of traffic, with controlled access to any area of development.
- **Secondary Arterial streets** are of less importance than Major Arterial streets but still designed to carry through-traffic. Their function is to transfer traffic from local streets to the Major Arterials from local traffic generators, such as schools and shopping centers. Streets in this category are generally designed for two or four moving lanes of traffic.
- **Collector Streets** terminate at an Arterial Street so that traffic generated on the local streets can have easy access to the primary street system consisting of the arterial roadways.

2.0 PROJECT DESCRIPTION

- Local Streets are designed to carry traffic to individual parcels and should be designed to discourage through-traffic. Their primary function is to provide access to the property, which abuts the street. They also act as open space and firebreaks.

2.3.3 HOUSING ELEMENT

The Housing Element consists of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. It also identifies adequate sites for housing and makes adequate provision for the existing and projected needs of all economic segments of the community.

2.3.4 CONSERVATION ELEMENT

The Conservation Element considers natural and cultural resources within the City's jurisdiction. This element serves as a management guide for the use of water, land, and earth resources; protection of native plant and animal life; preservation of cultural resources; maintenance of healthy air quality; and preservation of aesthetic and scenic resources within the jurisdictional area.

2.3.5 OPEN SPACE AND RECREATION ELEMENT

The Open Space and Recreation Element considers open space and recreational facilities within the City's jurisdiction, both of which help exemplify the unique Rolling Hills Estates rural character and way of life. This Element also includes a plan for the City's Equestrian Trails. This element serves as a management guide for preserving, maintaining, and expanding both open space and recreational facilities.

2.3.6 NOISE ELEMENT

The Noise Element considers existing and potential noise sources and identifies noise exposure associated with major transportation systems within the City's jurisdiction. This information serves as a guide for establishing land use patterns, site design, and development standards and addressing existing or potential noise problems within the jurisdictional area.

2.3.7 PUBLIC SAFETY ELEMENT

The Public Safety Element focuses on the safety and security of Rolling Hills Estates residents and businesses. The City strives to provide a safe and enjoyable environment for citizens, and properly addressing and reducing risks associated with natural and human-induced hazards further this goal. The information in the Public Safety Element serves as a guide for hazard mitigation, emergency planning, and preparedness throughout the City's jurisdiction.

2.4 PROJECT OBJECTIVES

The proposed GPU is intended to reflect the City's Vision of tomorrow, while complying with changes in State law and improving the usefulness of the plan. The proposed GPU is organized around Guiding Principles that are intended to preserve the unique character and identity of Rolling Hills Estates and the neighborhoods that make up the community. The Vision and Guiding

Principles of the proposed GPU, along with the City's required housing goals, together constitute the Project objectives, and are as follows:

VISION

Rolling Hills Estates in 2040 has maintained a rural feel and equestrian identity, while becoming a more vibrant and connected community. The commercial district is an attractive and thriving destination for residents and visitors from the Palos Verdes Peninsula, providing ample opportunities for shopping, outdoor dining, entertainment, and living. Rolling Hills Estates is a model for sustainable practices and is admired for its quality local environment, natural semi-rural setting, and recreational amenities, including trails, parks, and open spaces. Residents and visitors can conveniently walk, ride horses, bike, and take transit to and within the community. Rolling Hills Estates is a family-, youth-, and senior-friendly City, with safe places for people of all ages to gather, play, and learn.

GUIDING PRINCIPLES

1. Preserve the community's distinctive rural character and high quality of life.
2. Improve mobility and emphasize a spectrum of transportation choices.
3. Promote a vibrant commercial district.
4. Maintain equestrian character.
5. Provide quality parks, trails, open spaces, and community facilities.
6. Enhance the public realm and promote quality design.
7. Become a more sustainable city.

HOUSING

The proposed Housing Element states:

Meeting the housing needs established by the State of California is an important goal for the City of Rolling Hills Estates. As the population of the State continues to grow and scarce resources decline, it becomes more difficult for local agencies to create adequate housing opportunities while maintaining a high standard of living for all citizens in the community. State law recognizes that housing needs may exceed available resources and, therefore, does not require that the City's quantified objectives be identical to the identified housing needs. This recognition of limitations is critical, especially during this period of financial uncertainties in both the public and private sectors.

2.5 PROJECT CHARACTERISTICS

The proposed GPU involves updates to the City's seven General Plan Elements and the addition of an eighth element (Sustainability Element). The subsections below describe the proposed changes to Land Use, Mobility (formerly Transportation), Housing, Conservation, Open Space and Recreation, Noise, and Safety (formerly Public Safety) Elements and the proposed new Sustainability Element.

2.0 PROJECT DESCRIPTION

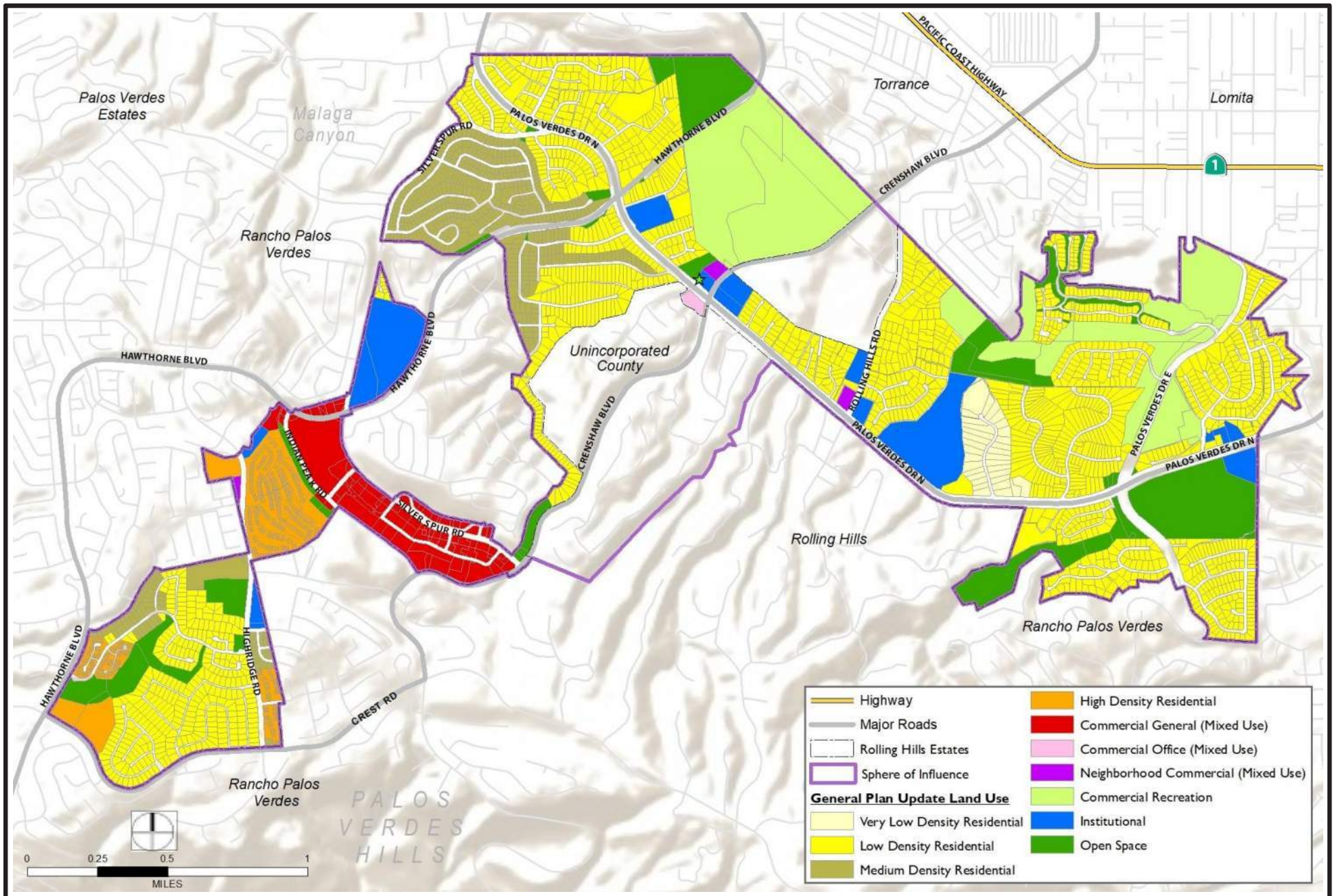
2.5.1 LAND USE ELEMENT

The proposed GPU includes a revised General Plan Land Use Map, shown herein as **Figure 2.5-1**. **Figure 2.5-2** and **Table 2.5-1** describe the proposed changes to the Land Use Map. Since land use patterns in the City are well-established and the City's developable parcels are largely built out, proposed changes in the Land Use Plan are targeted to the Commercial District and select parcels. The intentions of such changes include (1) guiding and spurring redevelopment in the Commercial District to aid the City in fostering a walkable mixed-use district, (2) providing additional housing opportunities to aid the City in meeting its housing obligations, (3) guiding redevelopment of select parcels that have garnered development interest, and (4) changing land use designations to reflect existing uses that are not expected or desired to change. No new land use designations are proposed, although one new overlay, CD Mixed-Use Overlay, is proposed.

In addition to the proposed changes to the General Plan Land Use Map described above, the proposed GPU includes modifying the Overlay Zones included in the current (1992) General Plan.

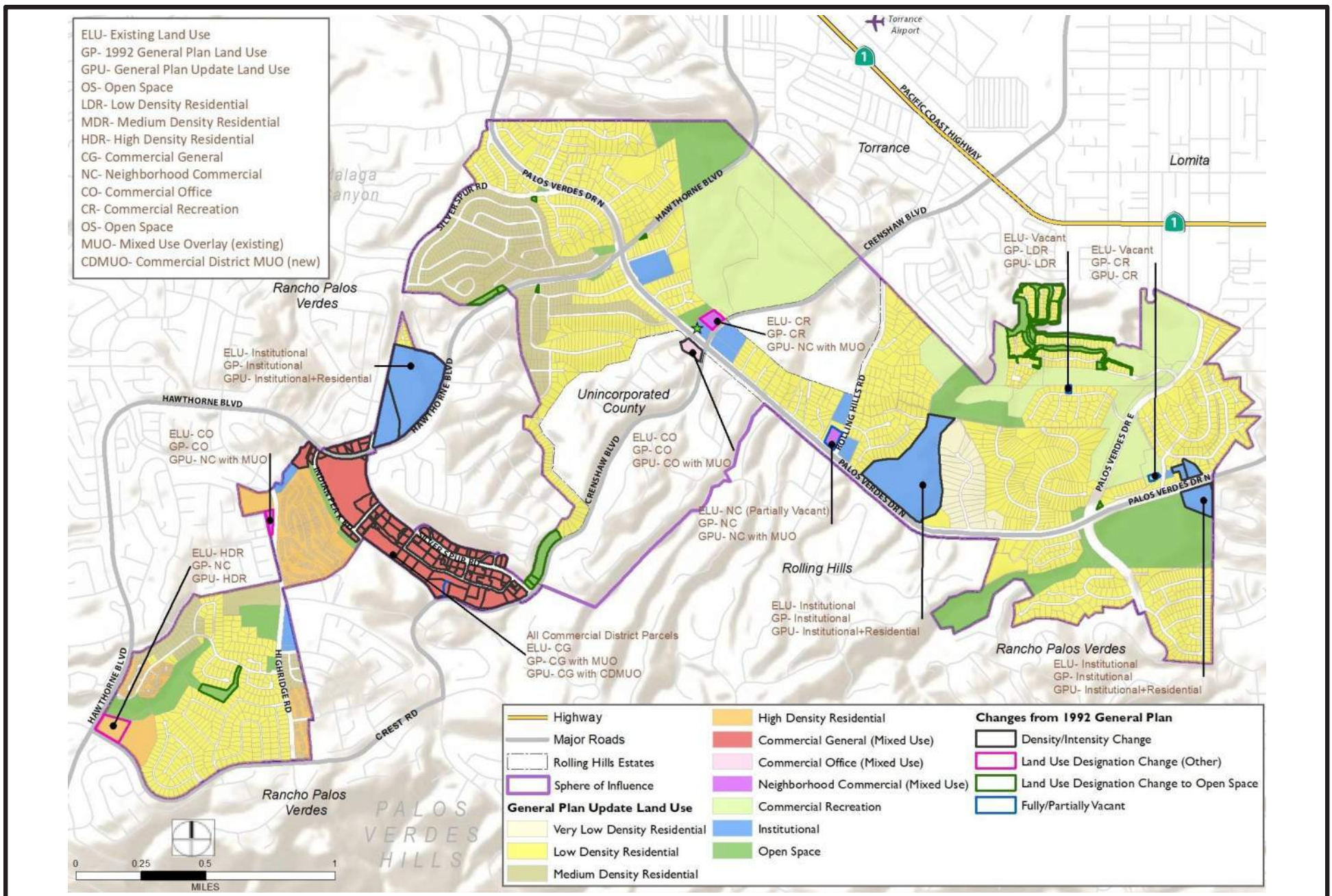
There are eight overlays identified in the 1992 General Plan Land Use Element. Six of the eight overlays are included in principle in the General Plan Update, while two are excluded since they are now obsolete. The General Plan Update also clarifies the remaining overlays. Generally, the term "overlay" is used for Zoning districts (rather than in a General Plan) and can create confusion when both the City's General Plan and Zoning code/map contain disparate overlays. The changes to the overlays from the 1992 General Plan to the General Plan Update are described in the following bullets:

- **Cultural Resources Overlay:** The Cultural Resource Overlay designation identified in the 1992 General Plan applies to a portion of the City where archaeological resources are known or suspected to exist. The General Plan Update renames this designation to "Cultural Resource Sensitivity Area," while maintaining the same mapped area.
- **Horse Overlay:** A substantial portion of the City is located within a Horse Overlay Zone district which identifies those areas where the keeping of horses is permitted and where horse keeping areas are required to be preserved. The General Plan's Horse Overlay designation is identical to that outlined in the Zoning Ordinance. With the approval of The Chandler Ranch/Rolling Hills Country Club Project, both the General Plan Horse Overlay and Zoning Ordinance Horse Overlay were modified to omit the majority of the development area (approximately 210 acres) from the Horse Overlay. There is no change to either the General Plan Horse Overlay or the Zoning Ordinance Horse Overlay is included in the proposed GPU.
- **Scenic Corridor Overlay:** The 1992 Conservation Element includes a Scenic Corridor Overlay designation which applies to Hawthorne Boulevard, Palos Verdes Drive North, Crenshaw Boulevard, and Silver Spur Road. The 1992 Overlay applies to all properties abutting the designated roadways. While the intent of the 1992 Overlay is preserved in the General Plan Update Conservation Element, the name has been changed to Scenic Corridors. A framework for the development of Guidelines has been suggested in the Conservation Element.
- **Parks Development Overlay:** The 1992 Park Development Overlay covered three areas of the City that were contemplated for future park development: Dapplegray School, Palos Verdes Landfill, and George F. Canyon. Dapplegray School was retained by the School District and is no longer a candidate for park development. Similarly, Los Angeles County has



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017; Los Angeles County Office of the Assessor, 2020.

FIGURE 2.5-1
Proposed Land Use Policy Map



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017; Michael Baker International, 2021.

FIGURE 2.5-2

Proposed Changes to the 1992 Land Use Policy Map

**Table 2.5-1
Proposed Changes to the General Plan Land Use Map**

Land Use Designation	Existing GP Acreage	Proposed GPU Acreage	Proposed Change
Very Low-Density Residential	39	39	None
Low-Density Residential	900	874	Decrease in acreage from 900 to 874 acres resulting from the redesignation of greenspace to Open Space in proposed GPU.
Medium-Density Residential	168	166	Decrease in acreage from 168 to 166 acres resulting from the redesignation of greenspace to Open Space in proposed GPU.
High-Density Residential	97	102	Increase in acreage from 97 to 102 acres resulting from the redesignation of the parcel in the northeastern corner of Hawthorne Boulevard and Crest Road from neighborhood commercial to match the existing land use of High Density Residential.
Commercial General	94	93	Decrease in FAR from 3.0 to 2.5 and decrease in acreage from 94 to 93 acres due to redesignation of Levitt Park from Commercial General to Open Space.
Commercial Office	4	2	Decrease in acreage from 4 to 2 acres due to redesignation of office property on the northeastern corner of Highridge Road and Armaga Spring Road to Neighborhood Commercial.
Neighborhood Commercial	7	6	Correction of FAR from 4.0 to 0.4 and decrease in acreage from 7 to 6 acres. Changes include (i) redesignation of parcel in the northeastern corner of Hawthorne Boulevard and Crest Road from Neighborhood Commercial to its existing land use of High Density Residential, (ii) redesignation of the commercial office property on the northeastern corner of Highridge Road and Armaga Spring Road to Neighborhood Commercial, (iii) redesignation of the Seahorse Riding Club parcel along Crenshaw Boulevard from Commercial Recreation to Neighborhood Commercial.
Commercial Recreation	309	307	Decrease in acreage from 309 to 307 acres resulting from redesignation of the Seahorse Riding Club parcel along Crenshaw Boulevard from Commercial Recreation to Neighborhood Commercial.
Institutional	128	128	No change in acreage. Revise allowable land uses to include affordable residential uses at 1 to 2 units per acre concentrated in small portions of Institutional properties.
Open Space	208	237	Increase of acreage from 208 to 237 acres due to the redesignation of parcels from other land use designations to Open Space to reflect their current use as open space.

2.0 PROJECT DESCRIPTION

**Table 2.5-1
Proposed Changes to the General Plan Land Use Map**

Land Use Designation	Existing GP Acreage	Proposed GPU Acreage	Proposed Change
Mixed-Use Overlay	102	8	Changes include (i) removal of Mixed-Use Overlay from the Commercial General land use designation, (ii) removal of the property at the northeastern portion of Hawthorne Boulevard and Crest Road, and (iii) addition of Mixed-Use Overlay to the Commercial Office land use designation and the Seahorse Riding Club.
CD Mixed-Use Overlay	0	93	Creation of a new CD Mixed-Use Overlay, which would be applied to the Commercial General land use designation. The CD Mixed-Use Overlay would allow for a base residential density of 30 dwelling units per acre with an opportunity for a 50-percent density bonus (to a maximum of 45 dwelling units per acre) for projects that provide certain community benefits. The State's affordable housing density bonus (currently 50 percent) would apply after the City's density bonus, resulting in an ultimate maximum residential density of 68 dwelling units per acre for projects that achieve the maximum City and State density bonuses.
Horse Overlay	1266	1266	No change.

maintained control of the Palos Verdes Landfill site and the potential for development of the site is remote and speculative. George F. Canyon is already developed for recreational use and, while improvements may occur on this site, broad direction from the General Plan on such potential future improvements is not necessary or warranted. Since the Overlay has served its purpose, it is now obsolete and is not included in the General Plan Update.

- **Ecological Resource Overlay:** The 1992 General Plan applies this Overlay to those portions of the City where sensitive habitats are located. Any areas within the City identified as having high ecological sensitivity in the Conservation Element were included within this Overlay designation. While the intent of this Overlay is preserved in the General Plan Update Conservation Element, specific areas are identified, documented, and mapped instead of one overlay zone. These include:
 - Species Occurrence
 - Critical Habitat
- **Multi-use Trail Overlay:** A Multi-use Trail Overlay was included in the 1992 Open Space and Recreation Element with the intent of identifying a Master Plan of Trails to map both existing and future trails. Since then, the trail system has been built out. The General Plan Advisory Committee indicated that there is no need for further development of trails in the City. Hence, this Overlay is replaced with City's Trails Map.
- **Hazards Management Overlay:** The 1992 Hazards Management Overlay covered those areas of the City which may be subject to some type of environmental hazard, including

seismic risk, flood hazard, or slope stability. While the intent of the Overlay is preserved in the General Plan Update Safety Element, specific hazards are separated, explained, and mapped instead of one overlay zone. These include:

- Wildfire Hazard Areas
 - Earthquake Fault, Landslide, and Liquefaction Zones
 - Geology
 - FEMA Flood Zones
 - Reservoir Inundation Areas
- **Mixed- Use Overlay:** The 1992 Mixed-Use Overlay Zone land use designation covered only to those areas included in the Commercial General and Neighborhood Commercial land use designations. The designation permits residential development to be constructed in areas with these land use designations at a density of 22 dwelling units per acre. The residential units may share the structure or parcel. The General Plan Update recommends changes to the Mixed-use Overlay Zone. These include the removal of the Commercial General zoned parcels from the Overlay and the addition of the Commercial Office zoned parcels to the Overlay Zone. The General Plan Update also recommends a new Mixed-Use Overlay Zone specifically for the Commercial District with increased density (30 dwelling units per acre, plus opportunities for a density bonus up to 45 dwelling units per acre).

In addition to these overlays, the City established a Landmark Overlay Zone as a part of the Zoning code. The Landmark Overlay zone identifies the structures, sites, and areas that are to be protected, enhanced, or perpetuated for historical or architectural importance. No changes to the Landmark Overlay Zone are proposed.

2.5.2 MOBILITY ELEMENT

Previously known as the Transportation Element, the Mobility Element defines the City's transportation network, including streets, transit routes, equestrian trails, bikeways, and sidewalks and describes how people move throughout the City. Pursuant to Senate Bill 743, this element considers approaches to improve the performance of the local transportation system to reduce vehicle miles traveled (VMT). No changes to the City's master plan of roads are proposed except the following:

- Silver Spur Road is the primary connector through the Commercial District. The proposed Commercial District Area Vision Plan (described below) envisions changing Silver Spur Road from a four-lane street to a two-lane street, narrowing it to a "main street" scale street. This reconfiguration would free up street space to provide angled parking (instead of parallel parking) and buffered bike lanes. Beyond the capacity changes, the Commercial District Area Vision Plan reimagines Silver Spur Road as a two-sided commercial street with buildings flanking both sides of the street. This vision includes streetscape design elements, such as banners, landscaping, benches, bike parking, outdoor dining spaces, and other amenities (see **Figure 2.5-3**). To fully realize the two-sided commercial street vision of Silver Spur Road, a reconfiguration of the Silver Spur Road/Bart Earle Way corridor would be required, as described in the next bullet.
- Bart Earle Way is a slip road accessed by and parallel to Silver Spur Road. Its presence creates redundancy and sets buildings wide apart along the Silver Spur Road/Bart Earle Way corridor.



Source: Michael Baker International, 2021.

FIGURE 2.5-3
Proposed Vision for Silver Spur Road

The proposed Commercial District Vision Area Plan envisions the removal of Bart Earle Way (replaced by a rear entry drive aisle to access parking) and providing the roadway space for development as an addition to existing parcels along the north side of Bart Earle Way. The removal of Bart Earle Way would change the roadway width from approximately 144 feet between the buildings to approximately 100 feet, creating a traditional two-sided commercial main street corridor along Silver Spur Road (see **Figure 2.5-4**).

- Deep Valley Drive is currently interrupted by the Promenade Mall. The proposed Commercial District Area Vision Plan envisions reconnecting Deep Valley Drive if and when redevelopment of the Promenade Mall site occurs.

2.5.3 HOUSING ELEMENT

As required, the proposed Housing Element update includes identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. It is also required to identify adequate sites for housing and to make adequate provision for the existing and projected needs of all economic segments of the community. A new requirement in the current (6th) cycle,² is the inclusion of an analysis of how existing and future policies, plans, programs, rules, practices and related activities, affirmatively further fair housing (AFFH) in the City. The City's Regional Housing Needs Assessment (RHNA) allocation that the proposed Housing Element update satisfies is shown in **Table 2.5-2**.

Table 2.5-2
City of Rolling Hills Estates 6th Cycle RHNA Allocation

Income Category	RHNA Allocation (Units)
Very Low Income	82
Low Income	42
Moderate Income	38
Above Moderate Income	29
Total	191

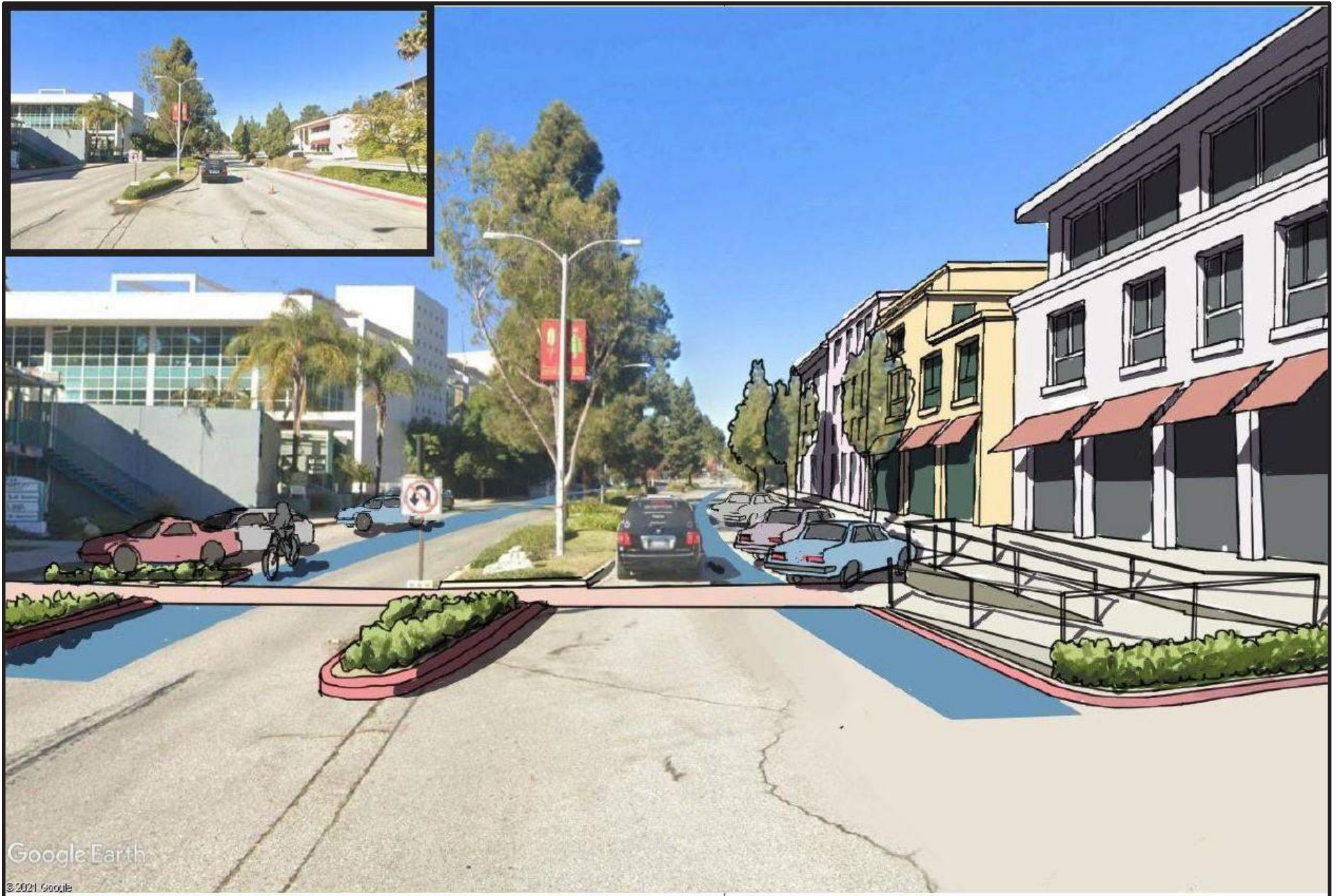
2.5.4 CONSERVATION ELEMENT

The proposed Conservation Element update would continue to serve as a management guide for the use of water, land, and earth resources; protection of native plant and animal life; preservation of cultural resources; maintenance of healthy air quality; and preservation of aesthetic and scenic resources within the jurisdictional area.

2.5.5 OPEN SPACE AND RECREATION ELEMENT

The proposed updated Open Space and Recreation Element describes how open spaces and parks in the City would continue to be defined, managed, used, and preserved. This element designates open spaces in the City by purpose and establishes standards related to the availability of public parks and open space.

² To date, there have been five previous housing element update "cycles." California is now in its sixth "housing element update cycle." (California Department of Housing and Community Development, Housing Elements, <https://www.hcd.ca.gov/community-development/housing-element/index.shtml>, accessed June 25, 2021.)



Source: Michael Baker International, 2021.

FIGURE 2.5-4

Proposed Vision for the Silver Spur Road/Bart Earle Way Corridor

Generally, the City Planning Area is well served by parks and recreation facilities. However, the proposed updated Open Space and Recreation Element identifies three planned mini-parks to expand the percent of residences within the Planning Area that are within a 10-minute walkshed. These three planned mini-parks are described in **Table 2.5-3**. In addition, the Commercial District Vision Plan, as described in the Land Use Element, envisions plaza spaces/gathering areas and green spaces in various locations in the Commercial District, including plazas on the Promenade Mall and Peninsula Center sites, a green space on the Brick Walk Property, and a potential interim greenway/park space along the Bart Earle Way right-of-way. See Section 2.5.9 below for more details.

**Table 2.5-3
Planned Mini-Parks**

Name	Location	Amenities	Status
Butcher Park	Northeast corner of Palos Verdes Drive North and Palos Verdes Drive East	Passive park with benches, climbing features, and swings	To be constructed by the end of 2021/ early 2022
Tabor Grove	Westside of Palos Verdes Drive East just north of Harbor Sight Drive	Passive park with no structures	To be constructed by the summer of 2021
Name - to be decided	Southside of Palos Verdes Drive North just east of Ranchview Road	Passive park with no structures	To be constructed by the end of 2023

2.5.6 NOISE ELEMENT

The proposed updated Noise Element describes the existing noise environment in the City; identifies noise sources and issues affecting community health and safety; and establishes standards, goals, and policy objectives that limit community exposure to excessive noise levels. This element would continue to establish guidance for acceptable noise levels for various land uses and provides guidance on how to balance the noise created by an active and economically healthy community with residents' desire for peace and quiet.

2.5.7 SAFETY ELEMENT

Previously referred to as the Public Safety Element, the proposed Safety Element would continue to set forth long-range City policies and programs to protect people and property from harm resulting from natural and human-caused hazards and criminal activity. Priority issues in this element include fire hazards, geologic and seismic hazards, human-caused and other hazards, emergency readiness, and crime prevention. The element fully integrates the Local Hazard Mitigation Plan.

2.5.8 SUSTAINABILITY ELEMENT

The proposed GPU includes a Sustainability Element, which would be a new element of the Rolling Hills Estates General Plan. The purpose of the Sustainability Element is to identify potential opportunities for the City to engage the community in establishing a blueprint for steady, responsible action in addressing the effects of climate change, so we leave a cleaner, more

2.0 PROJECT DESCRIPTION

resilient environment for future generations in terms of air quality, greenhouse gas emissions, energy use, water resources, quality of life, land use, mobility, and waste management and recycling. The Sustainability Element would also integrate the City's 2017 Climate Action Plan and the South Bay City Council of Governments' 2019 Sub-Regional Climate Adaptation Plan.

2.5.9 COMMERCIAL DISTRICT AREA VISION PLAN

In addition to the elements described above, the proposed GPU includes a Vision Plan for the Commercial District Area. The Vision Plan is not a blueprint for the development of the area but rather provides direction and inspiration for future development based on community aspirations and needs, with the intent of realizing the following GPU's Guiding Principle for the Commercial District:

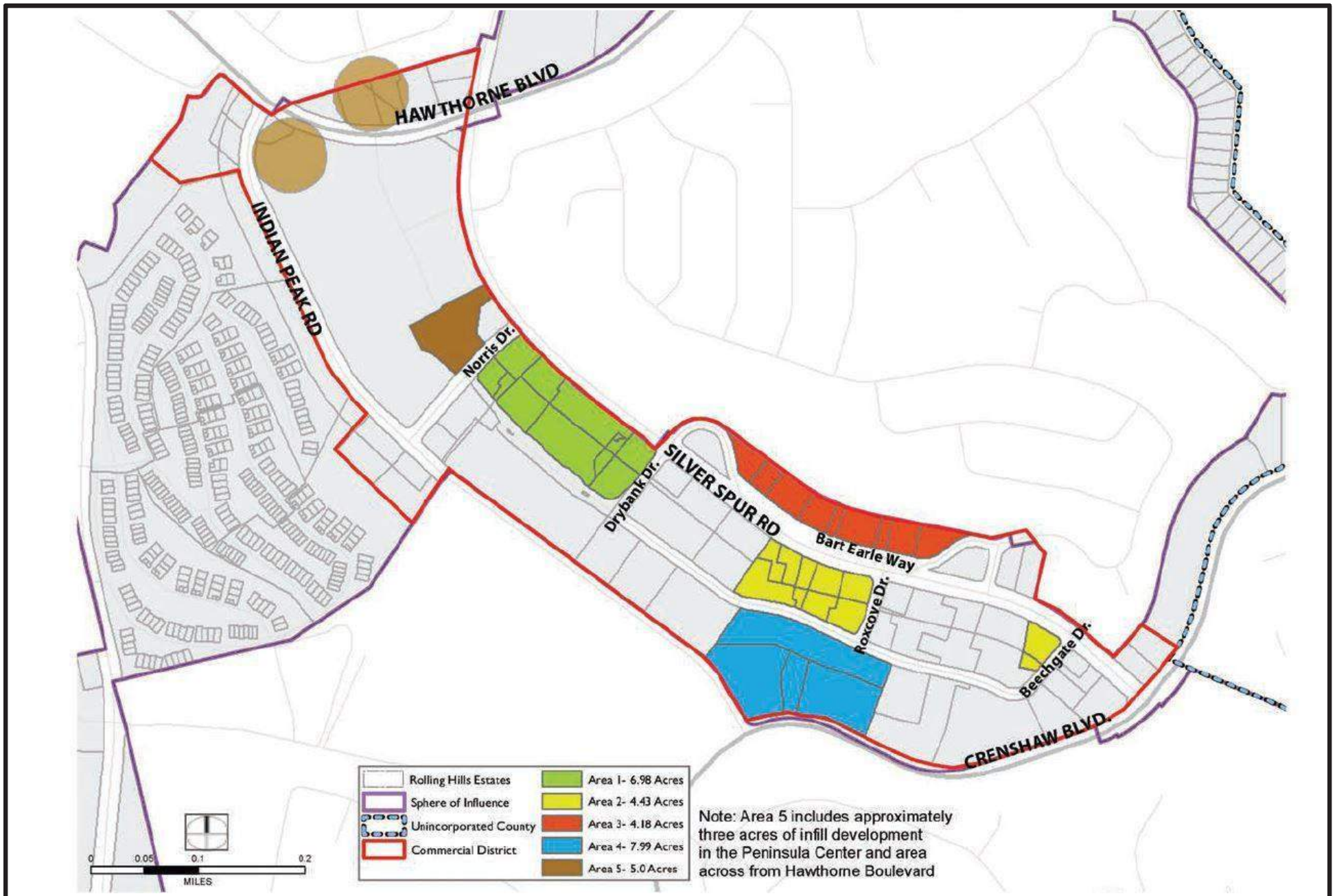
Promote a Vibrant Commercial District. *The General Plan promotes a rich array of activities and uses in the Commercial District, including neighborhood- and region-serving retail, housing, offices, dining, hotels, entertainment, and other compatible uses to foster a walkable mixed-use district. The Commercial District has something for everyone; new commercial and entertainment uses to attract visitors of all ages—including youth, seniors, and families—and are closely aligned with local consumer preferences. New and retrofitted office buildings provide flexible workspaces. A central community gathering space is the hub of the Commercial District and is programmed with public events and activities. Smaller public gathering spaces distributed throughout the Commercial District give residents the opportunity to relax, play, and connect with others.*

The primary elements of the proposed Commercial District Area Vision Plan include:

- **Desired Urban Form.** The Vision Plan identifies and describes elements of the desired urban form for the Commercial District, including:
 - Building design elements, such as street frontage (i.e., façades that engage the sidewalk/street), minimal ground floor setbacks, upper floor setbacks (i.e., stepbacks), flexible ground floor spaces, and architectural style and variety;
 - Land use types and density, with a focus on infill development with mixed-use buildings at a desired scale of 3 to 4 stories;
 - Block patterns with a desire to break up the very large existing blocks in the Commercial District with mid-block passages and strategically-located and -oriented driveways and drive aisles; and
 - The creation and improvement of public spaces in the Commercial District, including a central community space, plazas, park spaces, and active street spaces.
- **Circulation and Connectivity.** The smaller block pattern and active street spaces described in the bullet above would allow for a circulation strategy that provides frequent and interconnected networks for cars, pedestrians, and multimodal users. The proposed Vision Plan mainly focuses on three primary connections within the Commercial District: (1) Silver Spur Road—a reduction from four to two travel lanes with bicycle lanes and angled parking to create a main street feel; (2) Bart Earle Way—replace this frontage road with a rear drive aisle through the parking lots to reduce the width and excessive capacity of the Silver Spur Road/Bart Earle Way corridor and make more land available for development; and (3) Deep Valley Drive—reestablish as a

vehicular road through the Promenade Mall site. See the description of the proposed Mobility Element (Circulation Element update) above for more details.

- **Opportunity Areas.** The proposed Vision Plan identifies five opportunity areas and provides guidance for potential development/redevelopment in these areas. The five opportunity areas are depicted in **Figure 2.5-5** and consist of:
 - **Area 1: Promenade Mall Area.** This opportunity area comprises 6.98 acres and includes the Promenade Mall (excluding the parking structure) and the property to the west. Two redevelopment options are envisioned for the Promenade Mall Area—adaptive reuse of the existing building and redevelopment of the entire site. In the adaptive reuse scenario, the proposed Vision Plan envisions the Promenade block as a mixed-use site with internal connections that break up the large massing and create public spaces to complement the buildings around them. Contemplated connections include reopening Deep Valley Drive and creating a paseo from Silver Spur Road by dividing the existing structure. A public plaza/green space could also be created by removing the two existing central structures. In the redevelopment scenario, the Promenade Mall would be demolished and replaced with mixed-use buildings with interior courtyards and a public plaza. In both scenarios, a narrow, one-story retail building is envisioned along the parking structure facing Deep Valley Drive to make a two-sided streetscape and retail experience. Similarly, in both scenarios, the Silver Spur Road frontage is envisioned to be improved/redeveloped in a manner that engages and activates the street.
 - **Area 2: Roxcove and Town and Country Area.** This opportunity area includes two large blocks. The Roxcove block lies between Silver Spur Road and Deep Valley Drive to the north and south, respectively; the library building to the west; and Roxcove Drive to the east. This 3.76-acre block has highly varied land use patterns, architectural style, and urban form, with small parcels under different ownership. The proposed Vision Plan envisions infill development in this area with a mix of uses. The Town and Country block has several existing businesses that are well-utilized and perform well in the market. The proposed Vision Plan envisions complementing these existing uses with an enhanced Silver Spur Road streetscape and potential new mixed-use building along Silver Spur Road that preserves the visibility of the existing shopping center, while improving the site's engagement with Silver Spur Road. The Vision Plan also envisions improved connectivity between Silver Spur Road and Deep Valley Drive in this area.
 - **Area 3: Bart Earle Way Area.** As previously discussed, the proposed GPU and Vision Plan consider removing the Bart Earle Way frontage road along Silver Spur Road, which would consolidate the roadway space, reduce the pavement width from approximately 144 feet to 100 feet, and provide additional land for redevelopment of the parcels along Bart Earle Way. The Vision Plan envisions the redevelopment of these parcels with three- to four-story buildings that engage Silver Spur Road. In the interim and as parcels redevelop, the additional available land can be treated as a greenway/park space.
 - **Area 4: Brick Walk Property.** This opportunity area comprises 7.99 acres along the south side of Deep Valley Drive near the Roxcove Drive intersection. The existing development along Deep Valley Drive consists of one- to two-story buildings with offices, retail, and some living units. The hill behind this development is vacant. The top of the hill has a



Source: Los Angeles County GIS, 2017; City of Rolling Hills Estates, 2017; Michael Baker International, 2021.

FIGURE 2.5-5
Commercial District Opportunity Areas

couple of buildings that are used as educational/training centers. The site faces particular geological challenges and has experienced a landslide in the past. While most of this area is vacant, any development would need to address the geotechnical considerations of the site. The proposed Vision Plan envisions infill development on this site with potential hospitality, entertainment, commercial, and/or housing uses. In addition, the Vision Plan considers an additional multi-tenant building to complement the existing building fronting Deep Valley Drive. Additional improvements considered in the Vision Plan include maintaining part of the slope as a greenspace or natural passive park with a view pathway connecting Deep Valley Drive with the top of the hill.

- **Area 5: Peninsula Center.** While the Peninsula Center is currently performing well in the market and is not in need of redevelopment, the proposed Vision Plan recognizes the potential for infill development and/or limited redevelopment in the Peninsula Center area. The Vision Plan identifies approximately five acres of infill development potential at the Peninsula Center site and the properties across Hawthorne Boulevard to the north. Two acres are identified at the southwestern corner of the intersection of Norris Drive and Silver Spur Road, which has seen developer interest for residential mixed-use development. The rest is left to be determined as land becomes available for infill development. The Vision Plan envisions buildings that improve the entryways and frame spaces, including a central green space in the middle of the Peninsula Center that can serve as a main plaza for the site.

2.5.10 BUILDOUT SCENARIOS AND REPRESENTATIVE PROJECTS

The City has developed two (low and high) 2040 buildout scenarios for the Planning Area based on the proposed changes to the Land Use Map, the proposed allowable uses and densities, known development/redevelopment interest, and historical and current development trends. **Table 2.5-4** presents these estimated low and high buildout scenarios. The intent of these two scenarios is to frame the anticipated 2040 buildout of the Planning Area with the low estimate being the least amount of development reasonably anticipated in the Planning Area and the high estimate being the greatest amount reasonably anticipated. These estimates are for planning and analysis purposes only and do not compel the construction or redevelopment of any property. The assumptions and calculations used to develop these buildout scenarios are provided in **Appendix B**.

In consideration of the Vision Plan for the Commercial District, to provide more context and information and to allow for a more detailed evaluation of potential environmental impacts that could result from buildout of the Commercial District, the City has developed three representative projects: small site project, medium site project, and hotel project. These representative projects are not intended to embody all types and scales of projects that could occur in the Commercial District over the course of implementation of the proposed GPU or represent the worst-case or largest projects that could potentially be built. Rather, the representative projects are intended to portray some of the potentially common or anticipated types and scales of potential future projects that could be built in the Commercial District. They are intended for analysis purposes only, to aid the public and decision makers in understanding the potential environmental consequences of implementation of the proposed GPU in general and the Commercial District Vision Plan in particular.

**Table 2.5-4
Estimated 2040 Buildout of the Planning Area (Low and High Range Scenarios)**

Land Use Designation	Maximum Allowed Density	Maximum Intensity	Existing Units	Existing Commercial/Office	Expected Additional New Units (Low)	Expected Additional New Units (High)	At Built-out Non-Residential (Low Range)	At Built-out Non-Residential (High Range)	At Built-out Residential (Low Range)	At Built-out Residential (High Range)	
Unit	DU/Acre	FAR	#	SF	#	#	SF	SF	#	#	
Very Low Density Residential	1		32	0					32	32	
Low Density Residential	2		1,840	0	1	301			1,841	2,141	
Medium Density Residential	4		551	0					551	551	
High Density Residential	8		679	0					679	679	
Commercial General	30 to 45 ^a	2.5	232	1,495,462	643	1,458	1,274,371	1,362,807	875	1,690	
Commercial Office	22 ^b	1.0	0	40,000	52	78	15,486	15,486	52	78	
Neighborhood Commercial	22	0.4	3	23,856	86	129	32,735	32,735	89	132	
Commercial Recreation		0.25 to 0.75	0	35,995			35,995	35,995	0	0	
Open Space		na	0						0	0	
Institutional	1 to 2 ^c	0.3	0		96	192			96	192	
TOTALS			3,337	1,595,313	878	2,158	1,358,587	1,447,023	4,215	5,495	
Commercial District Change from Existing							Total	(221,091)	(132,655)	643	1,458
							Percent	(15%)	(9%)	277%	628%
Citywide Change from Existing							Total	(236,726)	(148,290)	878	2,158
							Percent	(15%)	(9%)	26%	65%

Notes: na = not applicable

^a The proposed CD Mixed-Use Overlay allows 30 du/ac plus a maximum 50% density bonus for projects with substantial community benefit.

^b The proposed GPU would apply the existing Mixed-Use Overlay to CO parcels.

^c The proposed GPU would allow certain affordable workforce housing to be built on Institutional parcels.

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While the representative projects allow for a more detailed evaluation of certain potential environmental impacts and are intended to provide more characterization of the potential environmental impacts that could result from buildout of the Commercial District, the environmental analysis in this EIR is still conducted at a program level. For example, the representative projects do not correspond to any specific sites and location-specific environmental conditions cannot be evaluated at this stage without undue speculation. Finally, it is important to point out that adoption of the proposed GPU does not constitute a commitment to any of the representative projects or any other specific development project. Many future projects in the Commercial District will require discretionary approval of the City and, thus, will be subject to individual CEQA consideration at the time they are proposed.³

The three representative projects are described in the following paragraphs:

- **Small Site Project:** There are multiple parcels in the Commercial District that are less than one acre. Based on the Commercial District Area Vision Plan, market trends, and recent development applications and patterns in the City, it is conceivable that development/redevelopment of such sized parcels would consist of residential-focused mixed-use buildings with multi-family dwelling units atop of ground floor commercial space. Given the residential density and floor-area ratio limits included in the proposed CD Mixed-Use Overlay, a potential development on a 0.5- to 1-acre parcel would likely consist of 25 to 35 residential units and 2,500 to 5,000 square feet of commercial space. Such a mixed-use building would likely be two to four stories in height with subterranean, surface, and/or tuck-under parking.
- **Medium Site Project:** In addition to various smaller parcels in the Commercial District developing individually, there is the potential for the consolidation of smaller parcels into project sites of approximately two to three acres. Similarly, some of the large parcels in the Commercial District are underutilized, with surplus land area that could accommodate a mix of uses over two to three acres. Given the market conditions and the need for housing in Southern California, medium-sized project sites could conceivably be developed primarily with multi-family residential uses complemented with commercial space at the ground floor or on a separate pad(s) on the same site (e.g., ground floor retail/restaurants, stand-alone restaurants, etc.). Considering the residential density and floor-area ratio limits included in the proposed CD Mixed-Use Overlay, a potential development on a two- to three-acre parcel would likely consist of 60 to 125 residential units (depending on the target residential market) and 5,000 to 15,000 square feet of commercial space. Building heights would likely be three to five stories for multi-family and mixed-use buildings and single story for separate retail/restaurant buildings. Parking could be provided in subterranean levels, tuck-under parking at the ground level, surface lots, or a combination thereof.
- **Hotel Project:** This representative project is based on the development interest that the City has seen from the hotel industry in recent years. Given the lack of hotels on the Palos Verdes Peninsula, a boutique or select-service hotel is a potentially complimentary use to the existing mix of uses in the Commercial District and could satisfy an existing unmet demand on the Peninsula. Based on past applications/preliminary plans for such uses, a hotel project in the

³ The types of CEQA review for future projects may include exemptions, negative declarations/mitigated negative declarations, EIRs, or a variety of other CEQA provisions, including those described in Section 1.4, Use of This EIR with Future Projects in the Planning Area, of this PEIR.

commercial district would likely consist of 75 to 125 rooms, with services that could include banquet facilities, conference/meeting rooms, a restaurant/bar, and various guest amenities (e.g., fitness center, pool, café, continental breakfast space, business center, etc.). Such a hotel would likely require a two- to three-acre site and would likely be three to six stories in height with subterranean and/or surface parking.

The potential future development/redevelopment of sites greater than three acres is not specifically considered in this EIR, as there are only several parcels of such size in the Commercial District and each large parcel has unique site conditions and constraints. There is not a hypothetical project or development scenario that could meaningfully represent the potential development/redevelopment of these parcels. Therefore, analysis of a sample project for these sites would not provide meaningful information, given the wide range of the types and scales of development that could occur on such parcels, the degree of speculation involved, and the unique conditions and constraints of each such site. The environmental analysis of future development/redevelopment of such sites would occur at the project level pursuant to CEQA at the time applications are considered for the development/redevelopment for such parcels.

2.6 INTENDED USES OF THIS PEIR

Pursuant to Article 4 of the CEQA Guidelines, the City of Rolling Hills Estates is the lead agency for this Project, taking primary responsibility for conducting environmental review and approving or denying the proposed GPU. There are no responsible or trustee agencies with any approval authority for the Proposed Project. In order to adopt the proposed GPU, the City would have to take the following actions:

- Certify the Final EIR
- Amend the General Plan and adopt the GPU

Additionally, while not required for approval of the proposed GPU, but associated with the actions to be taken as part of this Project, the City's Zoning Code would need to be updated for consistency with the proposed GPU and to implement certain components of the proposed GPU. This PEIR may also be used, as appropriate, for future projects consistent with and/or implementing the updated General Plan and other later activities pursuant to Sections 15168(c) (use of a program EIR with later activities), 15152 (tiering), 15162-15164 (subsequent or supplemental CEQA documentation and addendums), 15183 (projects consistent with a community plan or zoning), and/or other sections of the State CEQA Guidelines that provide for streamlined environmental review. See Section 1.4, Use of this EIR with Future Projects, of this PEIR, for further details.

3.0 ENVIRONMENTAL SETTING

3.1 INTRODUCTION

The purpose of this section is to describe the physical environmental conditions in the vicinity of the Project as they exist at the time the Notice of Preparation was published from both a local and a regional perspective pursuant to CEQA Guidelines Section 15125(a). Additional details of the environmental setting for each environmental topic analyzed in this PEIR are provided in each topical section in Section 4.0, Environmental Analysis. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed Project.

3.2 REGIONAL ENVIRONMENTAL SETTING

3.2.1 REGIONAL LOCATION

The City of Rolling Hills Estates is located in the center of the Palos Verdes Peninsula in the southwestern portion of the County of Los Angeles, as shown in the regional location map in **Figure 2.2-1** in Section 2.0, Project Description, of this PEIR. The General Plan Planning Area (Planning Area) is the land area addressed by the proposed GPU, which encompasses approximately 2,378 acres, including all of the land within City limits and the unincorporated Sphere of Influence (SOI). As shown in the map of the Planning Area in **Figure 2.2-2** in Section 2.0, Project Description, of this PEIR, the boundaries of the Planning Area generally follow the borders of the City. The Planning Area is approximately 20 miles south of Downtown Los Angeles and 10 miles west of the City of Long Beach.

3.2.2 REGIONAL PLANNING CONSIDERATIONS

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY MANAGEMENT PLAN

The Planning Area is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and State law. Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants and include ozone (O₃), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O₃, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet the AAQS for that pollutant. The Basin is designated nonattainment for O₃, PM_{2.5}, and lead (Los Angeles County only) under the National AAQS (NAAQS) and nonattainment for O₃, PM₁₀, and PM_{2.5} under the California AAQS (CAAQS). The SCAQMD's 2016 Air Quality Management Plan (AQMP), which was adopted in March 2017, proposes policies and measures to achieve the NAAQS and CAAQS for improved air quality in the Basin. The proposed GPU's consistency with SCAQMD's Air Quality Management Plan (AQMP) is discussed in Section 4.3, Air Quality, of this PEIR.

3.0 ENVIRONMENTAL SETTING

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS REGIONAL TRANSPORTATION PLAN/ SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally-designated metropolitan planning organization (MPO) for the Southern California region and is the largest MPO in the United States. Growth projections included in the AQMPs form the basis for the projections of air pollutant emissions and are based on general plan land use designations and the SCAG's 2016-2040 RTP/SCS demographics forecasts. While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS)*, the SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The population, housing, and employment forecasts within the 2016-2040 RTP/SCS are based on local general plans, as well as input from local governments, such as the City of Rolling Hills Estates. SCAG is responsible under the federal Clean Air Act for determining conformity of projects, plans, and programs with the AQMP. The proposed GPU's consistency with AQMP and the 2016-2040 RTP/SCS and 2020-2045 RTP/SCS are discussed in Section 4.3, Air Quality, and Section 4.8, Land Use and Planning, of this PEIR, respectively.

GREENHOUSE GAS EMISSIONS REDUCTION LEGISLATION

Various Statewide and local initiatives to reduce California's contribution to greenhouse gas (GHG) emissions have raised awareness that, even though the various contributors to and consequences of GHG emissions are not yet fully understood, there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation would be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Current State guidance and goals for reductions in GHG emissions are generally established in Executive Orders S-03-05 and B-30-15; Senate Bill 32 (SB 32); Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2006); and Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act.

Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

AB 32 was passed by the State legislature in August 2006, to establish regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and codified the target of reducing Statewide GHG emissions to 1990 levels by 2020.

Executive Order B-30-15 added the interim target to reduce Statewide GHG emissions 40 percent below 1990 levels by 2030 and required CARB to update the AB 32 Scoping Plan to identify

measures to meet the 2030 target. SB 32 was signed into law in September 2016 to codify this interim target.

Executive Order B-55-18 establishes a new Statewide goal to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter. However, to date, this goal has not been codified by the State Legislature.

SB 375, signed into law in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires MPOs to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that integrates land use and transportation strategies in that MPOs regional transportation plan in order to achieve GHG emissions reductions targets.

The proposed GPU's ability to contribute to meeting these GHG emissions reduction target goals is analyzed in Section 4.7, Greenhouse Gas Emissions, of this PEIR.

SENATE BILL 743

On September 27, 2013, California Governor Jerry Brown signed Senate Bill 743 (SB 743) into law, which resulted in a requirement to analyze VMT to identify transportation impacts in a project's environmental impact study. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (CEQA) and the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service (LOS). These revisions include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Additionally, parking impacts are no longer considered significant impacts on the environment. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." In November 2018, the California Natural Resources Agency (CNRA) finalized the updates to the CEQA Guidelines, including the addition of Section 15064.3 for determining the significance of transportation impacts, and the updated guidelines became effective on December 28, 2018. The proposed GPU's transportation impacts related to VMT are analyzed in Section 4.16, Transportation of this PEIR.

3.3 LOCAL ENVIRONMENTAL SETTING

3.3.1 LOCATION AND LAND USE

At the local level, the Planning Area is bounded by the City of Rancho Palos Verdes on the west and south, the City of Rolling Hills on the south, the City of Palos Verdes Estates on the north, the City of Torrance on the north and northeast, the City of Lomita on the north and east, and unincorporated Los Angeles County on the south and southeast. The Planning Area is generally located south of Pacific Coast Highway, east of Silver Spur Road and Hawthorne Boulevard, west of Crenshaw Boulevard and Western Avenue.

Residential land uses are the most common use in the Planning Area and account for approximately 60 percent of uses on the ground. Most neighborhoods consist of single-family

3.0 ENVIRONMENTAL SETTING

residential development though a few neighborhoods consist of single-family attached/townhomes or multifamily residential development.

Most commercial land uses in the Planning Area include offices, mixed commercial and office uses, and general commercial areas located along or near Silver Spur Road, forming the community's primary commercial district. A few other commercial uses are located throughout the Planning Area, including small clusters at the intersections of Palos Verdes Drive North with Rolling Hills Road and Montecillo Drive. Commercial land represents a very small portion of the community as only 4.5 percent of land in the Planning Area is used for commercial purposes.

Public and community facilities, including churches, City administrative buildings, schools, medical facilities, and utilities, account for 11 percent of all land uses in the Planning Area. Schools/educational facilities, including Palos Verdes Peninsula High School, Dapplegray Elementary School, and Chadwick School, are distributed throughout the community. Public facilities include the Peninsula Center Library, located at 701 Silver Spur Road, and Rolling Hills Estates City Hall, located at 4045 Palos Verdes Drive North. The Palos Verdes Reservoir, located at the southeastern corner of Palos Verdes Drive North and Palos Verdes Drive East in Rolling Hills Estates, represents most of the land categorized as utilities in the Planning Area.

Parks and recreational uses represent about 24 percent of land in the Planning Area. This category includes City-managed parks, open spaces, horse arenas, and private properties and parks not managed by the City, including the Rolling Hills Country Club, the South Coast Botanic Garden (in the SOI), and parks in the SOI.

3.3.2 ENVIRONMENTAL RESOURCES AND INFRASTRUCTURE

AESTHETICS

The Planning Area is situated on a landscape of hills, canyons, and valleys, many of which are vegetated to result in varying vistas that add to the panoramic views of the Planning Area. North-facing views from the City are dominated by the varying townscape of the Los Angeles Basin, while to the south are the California coastline and the Pacific Ocean. These views are afforded from many vantage points throughout the Planning Area. The equestrian orientation of the community has lent the Planning Area a semi-rural, bucolic, pastoral character.

Residential developments in the Planning Area, which are characterized by large houses enclosed within white rail fences, have filled the hillsides. The semi-rural atmosphere of the Palos Verdes Peninsula, including the Planning Area, has remained with large lot residential developments and a generally low intensity of development.

Most commercial land uses in the Planning Area are located in the Peninsula Center Commercial District (Commercial District), which includes the Peninsula Shopping Center, the Promenade on the Peninsula, The Village Shopping Center, and the Silver Spur Town & Country Center. Structures within the Commercial District generally range from one to four stories in height. These commercial structures do not convey a consistent architectural style or theme and have varying setback distances from the surrounding streets, including Silver Spur Road and Deep Valley Drive. Commercial structures, particularly on the south side of Deep Valley Drive between Drybank Drive and just east of Roxcove Drive, have low-rise storefronts that offer a more-pedestrian feel. However, sidewalks along Deep Valley Drive are generally narrow.

Further description of the aesthetic characteristics of the existing environment is presented in Section 4.1, Aesthetics, of this PEIR.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

The Planning Area is located in the South Coast Air Basin (Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate, which is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and/or dispersion of pollutants throughout the Basin.

Further description of the air quality characteristics of the existing environment is presented in Section 4.2, Air Quality, of this PEIR.

BIOLOGICAL RESOURCES

The Planning Area is primarily developed with suburban development arranged within and atop natural hills and interlaced with canyon and other open space areas. The most common wildlife species that occur within the Planning Area include mourning dove, spotted dove, house finch or linnet, hummingbirds, striped skunk, cottontail rabbit, jack rabbit, opossum, pocket gopher, grey fox, red fox, coyote, frog, California king snake, foothill alligator lizard, California slender salamander, and western fence lizard. Other species, such as the cactus wren, may occur within the Planning Area; however, these species require specialized habitats that are not naturally occurring within the Planning Area and may only be found in landscaped gardens. As such, species like the cactus wren are unlikely to be found in the Planning Area. The Planning Area is also home to special status species, U.S. Fish and Wildlife Service- (USFWS) identified critical habitat, various vegetation communities, and wetland habitats. According to the California Department of Fish and Wildlife (CDFW) and the USFWS, special-status species that have occurred in the Planning Area include the Palos Verdes blue butterfly, two avian species (coastal California gnatcatcher and least Bell's vireo), as well as two plant species (aphanisma and mesa horkelia).

Further description of the biological characteristics of the existing environment is presented in Section 4.3, Biological Resources, of this PEIR.

CULTURAL RESOURCES

The Planning Area is understood to be within the ancestral territory of the Gabrieliños. Although no Gabrieliño villages are known to be within the Planning Area, the place name *Haraasnga* is located approximately 2.5 miles south of the Planning Area and the records search conducted at the South Central Coastal Information Center (SCCIC) identified 12 prehistoric archaeological resources recorded within the Planning Area.

The Planning Area has a long development history dating back to the Spanish period with the establishment of Rancho San Pedro in the 1780s. The area remained largely rural in character, and supported agricultural activities through the mid-twentieth century. Rolling Hills Estates incorporated

3.0 ENVIRONMENTAL SETTING

in 1957, and residential and commercial construction increased thereafter. No known historical resources listed in the National Register, California Register, designated State Historical Landmarks, or State Points of Historical Interest are located within the Planning Area. However, three City-designated Landmark Overlay Zone properties have been identified within the Planning Area, including The General Store (Kelly's Korner), Empty Saddle Club, and Peninsula Heritage School.

Further description of the existing cultural resources conditions in the Planning Area is presented in Section 4.4, Cultural Resources, of this PEIR.

GEOLOGY AND SOILS

The Planning Area is located on the Palos Verdes Peninsula, an uplifted tectonic fault block of seafloor sediments and volcanics rising from sea level along the west and south faces, up to approximately 1,470 feet above mean sea level (amsl) along the crest of the Palos Verdes Hills, and down to approximately 100 feet amsl along the floor of the Los Angeles Basin in the vicinity of the Torrance Airport.¹ The City ranges in elevation from approximately 300 feet amsl in the canyons and gullies located throughout the City to approximately 1,200 feet amsl at the southwestern portion of the City along the northern slopes of the Palos Verdes Hills.

The Planning Area is not located within a designated Alquist-Priolo Earthquake Fault Zone, and no Special Studies Zones have been designated within its boundaries.² However, the Planning Area is located in the seismically active region of Southern California. Numerous active and potentially active faults with surface expressions (fault traces) have been mapped adjacent to, within, and beneath the Planning Area. In addition, the majority of the Planning Area is underlain by shale and siltstone units of the Monterey Formation (Altamira Shale), which are conducive to landsliding and slope instability characteristic of the Palos Verdes Peninsula. According to the seismic hazard zone maps for the Redondo Beach and Torrance Quadrangles, the Planning Area encompasses numerous earthquake-induced landslide zones, particularly along Crenshaw Boulevard, along the northern boundary of the Planning Area, and the areas south of Palos Verdes Drive North between Crenshaw Boulevard and Silver Spur Road.

Furthermore, the Palos Verdes Peninsula was submerged beneath the Pacific Ocean and uplifted three times. Consequently, potential fossil-bearing units are present either at the surface or in the subsurface soils in the Planning Area. Thus, the Planning Area is sensitive for paleontological resources.

Further description of the existing geologic and soils conditions and paleontological resources in the Planning Area is presented in Section 4.6, Geology and Soils, of this PEIR.

NOISE

Automobile, buses, and trucks dominate transportation noise in the City. Major transportation noise sources include traffic on roadways that traverse the City, including Hawthorne Boulevard, Crenshaw Boulevard, Palos Verdes Drive North, Palos Verdes Drive East, Silver Spur Road, and Highridge Road. In addition, stationary noise sources within the City also generate noise that affect noise-sensitive uses located nearby. These stationary noise sources may include a wide range of recreational, commercial, and business activities. Current land uses located within the

¹ Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

² California Department of Conservation, California Geological Survey, AQ Zapp: California Earthquake Hazards Zone Application, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed January 21, 2021.

3.0 ENVIRONMENTAL SETTING

City that are sensitive to intrusive noise include residential uses, schools, churches, and natural areas.

Further description of the existing noise conditions in the Planning Area is presented in Section 4.9, Noise, of this PEIR.

PUBLIC SERVICES AND UTILITIES AND SERVICE SYSTEMS

Public services in the City include fire protection services provided by the Los Angeles County Fire Department (LACoFD), police protection services provided by the Los Angeles County Sheriff's Department (LASD), public school facilities provided by Palos Verdes Peninsula Unified School District (PVPUSD), parks and recreation provided by the City and maintained by the City's Community Services Division, and library facilities provided by the Palos Verdes Library District (PVLDD).

Public utility and service systems in the City include water supply provided by California Water Service (Cal Water); wastewater collection and treatment provided by the City and the Los Angeles County Sanitation Districts (Districts), respectively; solid waste collection and disposal provided by Waste Management and landfills in Los Angeles, Orange, Riverside, and Ventura counties, respectively; energy infrastructure provided by Southern California Edison (SCE) for electricity and Southern California Gas Company (SoCalGas) for natural gas; and telecommunications infrastructure provided by a number of private telecommunications service providers, including Cox Communications, AT&T and DIRECTV, Frontier, Viasat, HughesNet, and Spectrum.

Further description of the each of these services is presented in Sections 4.11 through 4.15 of this PEIR for public services, including fire protection, police protection, schools, parks, and libraries, and Sections 4.19 through 4.21 of this PEIR for utilities and service systems, including water supply, wastewater, solid waste, and energy and telecommunications infrastructure.

TRANSPORTATION

The City is located in the Palos Verdes Peninsula and is primarily accessed by Palos Verdes Drive North to the north, Hawthorne Boulevard to the west, Palos Verdes Drive South to the south, and Crenshaw Boulevard to the east. Silver Spur Road is the main access roadway for the Commercial District. Regional access to/from the City is provided via the Pacific Coast Highway (Highway 1) to the north and Interstate 110 (I-110 or Harbor Freeway) to the east.

Pedestrian circulation and access within Rolling Hills Estates is provided primarily through sidewalks, crosswalks, and pedestrian trails found throughout the City. Mixed-use paths and bridle trails also serve as pedestrian facilities along arterials, including along portions of Palos Verdes Drive North and Hawthorne Boulevard. Discontinuous sidewalks, steep grades, long distances between crossings and high auto speeds can make it difficult and uncomfortable to navigate Rolling Hills Estates as a pedestrian.

Equestrian and bicycle facilities in Rolling Hills Estates includes approximately 10 miles of designated bike facilities, 25 miles of bridle trails, some bike and horse parking, and equestrian crossings on Rolling Hills Road and Palos Verdes Drive North.

Rolling Hills Estates is served by three different transit providers: Los Angeles County Metropolitan Transportation Authority (Metro), Los Angeles Department of Transportation

3.0 ENVIRONMENTAL SETTING

(LADOT) Commuter Express, and Palos Verdes Peninsula Transit Authority (PVPTA). Metro Line 344 connects to the Harbor Gateway Transit Center, which provides connections to Downtown Los Angeles via the Metro Silver Line. LADOT also provides service to Downtown Los Angeles with a Commuter Express route that operates during the morning and evening peak hours only. PVPTA provides more localized weekday-only service with connections throughout the Palos Verdes Peninsula.

Further description of the existing transportation setting in the Planning Area is presented in Section 4.16, Transportation, of this PEIR.

TRIBAL CULTURAL RESOURCES

Native American archaeological resources in the region have been found near sources of water, including perennial and intermittent streams and springs, on mid-slope terraces and elevated knolls above the flood plain, and near ecotones and other productive environments. The Planning Area contains several perennial and intermittent streams, mid-slope terraces, and ecotones. Given the similarity of these environmental factors, coupled with the number of known habitation sites in the area, there is a high likelihood that unrecorded Native American archaeological sites exist within the Planning Area.

Further description of the existing tribal cultural resources conditions in the Planning Area is presented in Section 4.17, Tribal Cultural Resources, of this PEIR.

WILDFIRE

Wildfires can impact the Planning Area because of the undulating terrain and prevalence of undeveloped hillsides and natural areas located throughout the Planning Area. The Planning Area is largely developed with low- and medium-density residential uses, with small portions of the Planning Area designated for high-density residential and commercial uses, such as the Commercial District. The California Department of Forestry and Fire Protection's (CAL FIRE) FRAP has identified the Palos Verdes Peninsula, including the entire Planning Area, as being located within a Very High Fire Hazard Severity Zone (VHFHSZ). The identified fire hazard areas in the Planning Area include the open space canyon area in the southwestern portion of the Planning Area, north of Crest Road and east of Hawthorne Boulevard; the sloped, undeveloped hillside on the southwest side of the Commercial District along Indian Peak Road and near the Vista Del Norte Reserve in Rancho Palos Verdes; the undeveloped hillside on the west side of Crenshaw Boulevard between Silver Spur Road and Palos Verdes Drive North; the neighborhood located south of Palos Verdes Drive North between Crenshaw Boulevard and Hawthorne Boulevard near Ranchview Road; the area near Ernie Howlett Park and Nansen Field north of Hawthorne Boulevard and east of Palos Verdes Drive North; and the George F. Canyon Nature Preserve.

Further description of the existing wildfire conditions in the Planning Area is presented in Section 4.22, Wildfire, of this PEIR.

3.3.3 LOCAL PLANNING CONSIDERATIONS

GENERAL PLAN

The City of Rolling Hills Estates adopted its current General Plan in 1992, with amendments having occurred as needed. Consistent with State requirements, the current (1992) General Plan

includes the Land Use, Transportation, Housing (comprehensively updated in 2014), Conservation, Open Space and Recreation, Noise, and Public Safety Elements. The City's current (1992) General Plan land use designations are depicted in **Figure 2.3-1** in Section 2.0, Project Description, of this PEIR.

ZONING

In 1992, the City adopted the adopted the *Rolling Hills Estates Code of Ordinances* (codified through Ordinance No. 734), which is known and referred to as the Rolling Hills Estates Municipal Code (RHEMC) and includes Title 17, Zoning. The RHEMC divides the City into zoning districts, as shown in **Figure 4.8-1** in Section 4.8, Land Use and Planning, of this PEIR.

3.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

As stated in Section 15130(b) of the CEQA Guidelines, the following elements are necessary for an adequate discussion of cumulative impacts:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide contributions to cumulative project conditions.

The cumulative impact analysis in this PEIR generally uses the second method. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this PEIR analyzes the environmental impacts of development in accordance with the proposed GPU, including projections of buildout of the proposed GPU as described in Subsection 2.5.10, Buildout Scenarios and Representative Project, in Section 2.0, Project Description, of this PEIR. As a result, this PEIR considers the cumulative impacts of development in the Planning Area and the Palos Verdes Peninsula, as appropriate. In most cases, the potential for cumulative impacts is contiguous with the Palos Verdes Peninsula since the service providers for various local services and public utilities are similar for all the four cities on the Peninsula. The geographic scope for cumulative considerations of air quality is the South Coast Air Basin, which is the air basin where the Planning Area is located. Potential cumulative impacts related to traffic, and resulting air quality and noise implications, which have the potential for impacts beyond the Planning Area boundary, have been addressed through use of a traffic model. The City utilizes a traffic model to forecast cumulative growth in the City and regionally. Regional growth outside of the City has accounted for traffic, air quality, and noise impacts through use of this socioeconomic traffic model that utilizes regional growth projections to calculate future traffic volumes. The growth projections for the City and surrounding area are used for the cumulative impact analyses of this PEIR. Please refer to each of the environmental topics in Section 4.0 of this PEIR for a discussion of the cumulative impacts associated with development and growth in the Planning Area and the relevant larger area.

3.0 ENVIRONMENTAL SETTING

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4.0 ENVIRONMENTAL ANALYSIS

Sections 4.1 through 4.22 of this Program Environmental Impact Report (PEIR) contain discussions of the existing conditions, Project impacts (including direct/indirect, short-term/long-term, and cumulative), and recommended mitigation measures. The PEIR sections listed below examine the environmental issues, pursuant to Appendix G of the California Environmental Quality Act Guidelines (CEQA Guidelines), that the Project's Initial Study (included in **Appendix A** of this PEIR) concluded warranted further analysis.

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Biological Resources
- 4.4 Cultural Resources
- 4.5 Energy
- 4.6 Geology and Soils
- 4.7 Greenhouse Gas Emissions
- 4.8 Land Use and Planning
- 4.9 Noise
- 4.10 Population and Housing
- 4.11 Public Services—Fire Protection
- 4.12 Public Services—Police Protection
- 4.13 Public Services—Schools
- 4.14 Public Services—Parks and Recreation
- 4.15 Public Services—Libraries
- 4.16 Transportation
- 4.17 Tribal Cultural Resources
- 4.18 Utilities and Service Systems—Water Supply
- 4.19 Utilities and Service Systems—Wastewater
- 4.20 Utilities and Service Systems—Solid Waste
- 4.21 Utilities and Service Systems—Energy and Telecommunications Infrastructure
- 4.22 Wildfire

Each environmental issue/section is organized into subsections, as follows:

ENVIRONMENTAL SETTING

- “Regulatory Setting” identifies and summarizes the laws, ordinances, regulations, standards, and policies that apply to the proposed GPU at the federal, State, and local levels as they exist at the time the Notice of Preparation (NOP) was published.
- “Existing Conditions” describe the physical environmental conditions in the Planning Area that may influence or affect the issue under investigation, from both a local and regional perspective. For purposes of the proposed GPU and this PEIR, baseline conditions are 2021

4.0 ENVIRONMENTAL ANALYSIS

when existing conditions were identified to support and inform the proposed GPU. The environmental conditions constitute the baseline physical conditions by which the determination of significance is made.

IMPACT ANALYSIS

- “Thresholds of Significance” provide the thresholds that are the basis of conclusions of significance. Primary sources used in identifying the thresholds and criteria include Appendix G of the CEQA Guidelines (California Code of Regulations, Sections 15000 – 15387); federal, State, local, or other standards applicable to an impact category; and officially adopted significance thresholds.
- “Methodology” identifies the process by which environmental impacts were evaluated and how the CEQA Guidelines Appendix G threshold questions were addressed.
- “Project Impacts and Mitigation” presents the impact analysis, mitigation measures, and level of significance after mitigation.
 - The “Impact Analysis” evaluates the proposed GPU’s environmental impacts by identifying the potential changes to the existing physical environmental conditions, which may occur if the proposed GPU is implemented. Potential direct and reasonably foreseeable indirect effects are considered to determine their significance.

The proposed GPU’s environmental effects are categorized as either “less than significant” or “potentially significant impact.” For the less-than-significant category, a brief discussion is provided of the reasons that the proposed GPU’s possible significant effects were found not to be significant. For the potentially significant category, the discussion identifies and focuses on the proposed GPU’s direct and indirect significant environmental effects, giving due consideration to both the short- and long-term effects.

- The “Mitigation Measures” are measures that would be required of the project to avoid a significant adverse impact or to minimize a significant adverse impact.
 - The “Level of Significance After Mitigation” presents the significance determination. This statement identifies which impacts would remain after the application of mitigation measures and whether the remaining impacts are or are not considered significant. When impacts, despite the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as “significant unavoidable impacts.”
- “Cumulative Impacts” describe potential environmental changes to the existing physical conditions that may occur as a result of the proposed GPU together with all other reasonably foreseeable, planned, and approved future projects producing related or cumulative impacts, as set forth in Section 3.4, Assumptions Regarding Cumulative Impacts, of this PEIR. A cumulative impact analysis is provided for those thresholds that result in a less-than-significant, potentially significant, or significant unavoidable impact. A cumulative impact analysis is not provided for Effects Found Not to be Significant, which result in no Project-related impacts.

4.1 AESTHETICS

This section of the PEIR discusses the potential aesthetic impacts associated with the implementation of the proposed GPU. This section includes a discussion of the aesthetic characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates the potential aesthetics impacts that may result from the proposed GPU. Aesthetics impacts are addressed in terms of potential effects involving alterations of or obstruction of views of scenic resources and changes to the visual character and quality of the site and surrounding environment.

4.1.1 ENVIRONMENTAL SETTING

4.1.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU regarding scenic resources or light and glare.

STATE

California Streets and Highways Code

In 1963, the State Legislature established the California Scenic Highway Program through Senate Bill 1467 (SB 1467). According to SB 1467, the development of scenic highways plays an important role in encouraging the growth of recreation and tourism, upon which the economy of many areas of California depend on. SB 1467 added Sections 260 through 263 to the California Streets and Highways Code. In these statutes, the State established its responsibility for the protection and enhancement of California's natural scenic beauty by identifying the portions of the State highway system, which, together with adjacent scenic corridors, require special conservation treatment.¹

SB 1467 also assigned responsibility for the regulation of land use and development along scenic highways to the appropriate State and local governmental agencies. A county highway component was later added to the Scenic Highway Program in California Streets and Highways Code Section 154.²

The State scenic highway program identifies those highways that are officially designated as State scenic highways by the California Department of Transportation (Caltrans) and those that are eligible for such designation. The scenic designation is based on the amount of natural landscape

¹ California Department of Transportation, Scenic Highways: California State Scenic Highways, <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed May 17, 2021.

² California Department of Transportation, Scenic Highways: California State Scenic Highways, <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed May 17, 2021.

4.1 AESTHETICS

visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes upon the motorist's enjoyment of the view.

California Code of Regulations, Title 24

The California legislature passed a bill in 2001 requiring the California Energy Commission (CEC) to adopt energy efficiency standards for public and private outdoor lighting. In November 2003, the CEC adopted changes to the California Code of Regulations (CCR), Title 24, Parts 1 and 6, Building Energy Efficiency Standards. These standards are intended to improve the quality of outdoor lighting and to reduce the impacts of light pollution, light trespass, and glare. The standards regulate lighting characteristics, such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 17.37 – Mixed-Use Overlay District

RHEMC Chapter 17.37 establishes the City's mixed-use over zone to provide a range of housing opportunities to meet the needs of the age distribution and income of the community. According to RHEMC Section 17.37.010, mixed-use projects and their increased diversities can help establish an area as the community's central place with a mix of uses and opportunities for everyone in the community to enjoy. However, care is required to ensure that new projects do not disturb the existing character of the City.

RHEMC Sections 17.37.030 and 17.37.040 establish the design and development guidelines of mixed-use projects and the development standards that apply to mixed-use projects within commercial zones, respectively. More specifically, RHEMC Section 17.37.030 states that the design of mixed-use projects must be compatible (in terms of height, setback, proportion, landscaping, materials, etc.) within the existing environment. Increased densities in mixed-use development are required to consider privacy, security, access to open space, natural light, etc. Site planning of a mixed-use project requires special attention to four primary guidelines, including (a) the compatibility of existing site conditions and neighboring uses; (b) the functional and aesthetic relationships of buildings to each other (particularly height) and to the surrounding open space; (c) the functional and aesthetic design of open space as related to both residential and commercial uses; and (d) the distribution, layout, and character of parking.

Development standards for mixed-use projects in commercial zones (i.e., C-G and site-specific C-L zones) established in RHEMC Section 17.37.040 that are related to aesthetics include, but are not limited to, the following:

- At least three hundred square feet of usable outdoor open space per dwelling unit must be provided, except for single room occupancy (SRO) facilities. This area may include private "open" balconies/terraces and common outdoor spaces. Parking and loading areas (including required landscaping in parking and setback areas), recreation/community rooms and laundry/mechanical rooms will not be considered usable open space.
- Adequate internal and external lighting shall be provided for security purposes. The lighting shall be energy efficient, stationary, deflected away from adjacent properties and public rights-of-way, and of an intensity compatible with the underlying zone.

- Solid waste receptacle(s) of sufficient size to accommodate the solid waste generated shall be provided on the premises. The receptacle(s) shall be within an enclosure and adequately screened from public view. The enclosure shall be architecturally compatible with the building and located within close proximity to the residential units which they are intended to serve. Commercial loading areas and solid waste storage areas shall not be shared with residential uses unless so determined during project review.

Chapter 17.42 – Lighting

RHEMC Chapter 17.42 provides for the regulation of lighting to permit the maximum enjoyment of property use and the maximum safety and security of the population, while preserving and protecting the rural character of the community. RHEMC Sections 17.42.020 and 17.42.030 establish lighting requirements for commercial and residential districts, respectively. More specifically, both RHEMC sections state that lighting shall be directed only onto the property where the light source is located and that no lighting shall be permitted which results in the direct illumination of other properties. In addition, any indirect illumination of neighboring properties shall not exceed one foot-candle at the property line for commercially zoned neighboring properties (for commercial districts only) and four-tenths foot-candle for all other adjoining properties (for both commercial and residential districts). RHEMC Section 17.42.030 further states that individual light fixtures shall be permitted only if the power/light intensity of the individual fixtures does not exceed 150 watts or 2,000 lumens, whichever is most restrictive. The total intensity of all such fixtures shall not exceed 1,000 watts or 13,333 lumens plus 150 watts or 2,000 lumens for each 1,500 square feet of lot area beyond 15,000 square feet, up to an aggregate maximum of 1,500 watts or 20,000 lumens, whichever is less intense. In addition, no outdoor lighting shall be permitted where the light source or fixture is more than 12 feet above grade.

Chapter 17.54 – View Protection (View Protection Ordinance)

The City's hillsides constitute a limited natural resource in their scenic value to all of the City's residents and visitors and their potential for vista points and view lots. It is found that the public health, safety and welfare require prevention of needless destruction and impairment of the blockage and misuse of such sites and view lots. The purpose of this RHEMC chapter is to promote the health, safety and general welfare of the public through the protection, enhancement, perpetuation, and use of sites and view lots that offer views to the residents because of the (1) unique topographical features which the Palos Verdes Peninsula offers, (2) unique and irreplaceable assets to the City and its neighboring communities, and (3) unique physical surroundings which are characteristic of the City.

Chapter 17.55 – View Preservation

The purpose of RHEMC Chapter 17.55 is to (1) establish a process for property owners to preserve or restore view equity within the immediate vicinity of their property; (2) establish procedures and criteria for the resolution of view equity disputes; (3) discourage duplicative, repetitive, or serial claims for view equity; and (4) discourage damage to trees/vegetation and promote proper landscaping establishment and maintenance. RHEMC Section 17.55.130 establishes a set of criteria to be considered in determining an unreasonable obstruction of a view, including, but not limited to, the following:

- The vantage point(s) from which the view is observed;
- The extent of the view obstruction, both currently and at tree/vegetation maturity;

4.1 AESTHETICS

- The quality of the view, including the existence of landmarks, vistas, or other unique view features;
- The extent to which the tree(s) and/or vegetation have grown to obscure the enjoyment of the view from the view seeker's property since the view seeker's acquisition of his or her property; and
- The extent to which the view has been or is diminished by factors other than tree(s) and/or vegetation.

RHEMC Section 17.55.140 establishes a set of criteria for determining appropriate preservation action if unreasonable obstruction of views has occurred, including, but not limited to, the following:

- The number of existing trees or amount of vegetation in the area and the current effects of the tree(s) and their removal on the neighboring vegetation;
- The extent to which the tree(s) and/or vegetation provide screening or privacy; aesthetics; community/neighborhood quality, value, or significance; shade; historical context due to the age of the tree/vegetation; blending, buffering, or reduction in the scale and mass of architecture;
- Any hazards posed by the tree(s) or vegetation including, but not limited to, fire danger or the danger of falling limbs or trees; and
- The age, projected rate of growth, and maintenance requirements of the tree(s) or vegetation.

Chapter 17.58 – Precise Plan of Design

RHEMC Chapter 17.58 establishes a precise plan of design to regulate non-residential development to ensure controlled, orderly growth as required within the City's General Plan. The precise plan of design shall be utilized to afford each applicant enjoyment of his/her property rights as afforded him/her by the zoning on the subject property while at the same time imposing a uniformity of regulations and conditions to protect the use and enjoyment of surrounding properties.

Chapter 17.60 – Signs

The purpose of RHEMC Chapter 17.60 is to preserve and enhance the City's rural residential character by protecting neighborhoods from commercial intrusions and by ensuring that signs contribute to the betterment of the City's established commercial districts by accomplishing the following:

- Coordinating the type, placement and dimensions of signs located on property other than the public right-of-way;
- Recognizing the identification needs of the business community and their customers
- Ensuring the use of designs that are consistent with the goals of the City's General Plan;
- Promoting both the renovation and proper maintenance of all signs; and
- Promoting consistent enforcement of all sign regulations.

Chapter 17.62 – Neighborhood Compatibility (Neighborhood Compatibility Ordinance)

RHEMC Chapter 17.62 identifies design criteria for new residential construction within existing residential neighborhoods to protect and maintain the established character of all residential

neighborhoods in the City. It is important that established patterns of development within the various neighborhoods be respected by future proposals for new construction because such patterns are integral elements of the City's rural character. More specifically, RHEMC Section 17.62.030 identifies objectives for consideration in residential construction proposals to maintain neighborhood compatibility, including, but not limited to, natural amenities, neighborhood character, scale, style, privacy, landscaping, and views.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law. The elements, along with their goals and policies, that are related to aesthetics are presented below.

Land Use Element

The Rolling Hills Estates General Plan Land Use Element (Land Use Element) is a State-mandated element and fulfills the requirements of Section 65302(a) of the California Government Code. The Land Use Element contains the goals and policies regulating future development and a land use plan to implement these goals. These goals and policies promote limited, orderly growth, while, at the same time, minimizing the potential for land use conflicts. The Land Use Element also provides the framework for land use regulations that govern the location, type, and character of existing and future development in the City. The Land Use Element indicates opportunities for growth and development in the City, while being sensitive to the topography, earthquake faults, geology, flooding potential, and availability of services and infrastructure. The Land Use Element goals and policies related to aesthetics are as follows:

Goal 1: Ensure that future development in the City is compatible with the existing character of the City and that this development will be sensitive to the local environment.

Policy 1.1: Development that does not preserve and enhance the quality of the local environment will be discouraged.

Policy 1.2: Future development must be compatible with and comply with adopted land use plans and standards, traffic facilities, open space requirements and neighborhood compatibility requirements.

Goal 2: Growth in the City shall be limited and the objective of future planning shall be directed towards preserving low density and the rural character of the City.

Policy 2.1: Ensure that the character and design of new residential development is consistent with existing development located nearby.

Policy 2.5: Encourage and work with other cities on the peninsula to promote the protection of the rural residential character of the area through policies in their General Plans, local coastal programs and trail network plans.

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- Policy 2.6: Develop view preservation guidelines for use within the City and enforce height controls to lessen potential view impacts.
- Policy 2.7: Continue to implement the City's Neighborhood Compatibility Ordinance and any supporting guidelines and policies.
- Policy 2.8: Implement the Neighborhood Compatibility Ordinance and the Precise Plan of Design Ordinance for residences and businesses requiring that all roofing on a structure or multiple structures in the same development be compatible.

Goal 3: Maintain and preserve the existing land area within the commercial district designated on the General Plan land use map so that the needs of area residents are served.

- Policy 3.1: Continue to concentrate retail commercial uses in the Peninsula Center Commercial district and ensure that future commercial development reflects the rural character of Rolling Hills Estates. This development must reflect the City's rural character in terms of site plan design, architecture (use of wood, landscape buffering, etc.) and landscaping.
- Policy 3.2: Ensure that commercial developments are compatible with and buffered from surrounding land uses that are sensitive to commercial development so that they are protected from potentially adverse impacts.

Conservation Element

The Rolling Hills Estates General Plan Conservation Element (Conservation Element) is a State-mandated element and fulfills the requirements of Section 65302(d) of the California Government Code. The Conservation Element, in part, contains the goals and policies that address the preservation of aesthetic amenities of the City. One of the overlay zones identified in the Conservation Element is the Scenic Corridor Overlay Zone, which encompasses the major roadways in the City that have been designated as scenic corridors. The criteria used in designating scenic corridors in the City include (1) areas that characterize the rural or urban form of the City; (2) significant historic places or sites of interest; (3) outstanding topographic features or unique natural features; (4) urban design and architecture unique to the City; and (5) important viewsheds where preservation is warranted. According to the Conservation Element, the guidelines that apply to all scenic roadways and corridors are as follows: (1) the designated route must traverse an aesthetically significant viewing corridor; (2) the route should be a significant entry into the City and those entryways should be marked with appropriate landmarks; (3) the establishment of a Scenic Route must be consistent with traffic circulation and will not affect the integrity of the area it traverses; (4) the scenic route system must be consistent with the capability of existing street systems and will not necessitate expansion; and (5) any improvement associated with a scenic route will be consistent with the character of the community and not result in any significant environmental impacts.

The Conservation Element goals and policies related to aesthetics are as follows:

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

Policy 1.1: Maintain the natural canyons and hillside areas for passive open space and/or for incorporation into the Citywide trails system.

Policy 1.3: Discourage the excessive grading of slopes in those areas of the City that are undeveloped such as canyons, archaeological sites, and areas with established vegetation.

Goal 5: Preserve the aesthetic quality of the area through the regulation of developments along view corridors and scenic roadways.

Policy 5.1: Encourage the preservation of view corridors and discourage developments and additions which obstruct view corridors.

Policy 5.2: Implement the General Plan criteria for the designation of scenic roadways, with consideration for the visibility of scenery, major landform, vegetation, structures, and panoramas, and develop a plan for the undergrounding of existing telephone and electrical poles.

Policy 5.3: Preserve the existing rural road character of Palos Verdes Drive North by maintaining the roadway's designation as a scenic corridor/roadway part of a peninsula wide loop.

Policy 5.4: Implement criteria for the designation of scenic roadways in the City and evaluate existing roadways for their qualities as local scenic routes.

Policy 5.5: Implement criteria and procedures for the preservation and beautification of present and future roadways and for the designated scenic roadways.

Policy 5.6: Continue to promote the rural environment of the City by discouraging light and glare except where lighting is required for public safety.

Goal 6: Minimize grading and significant changes in the natural topography and grading activities should be designed to preserve the unique and significant cultural and biologic features to maintain the identity, image and environmental qualities of the City.

Policy 6.3: Preserve natural land forms, vegetation, and wildlife by requiring more stringent regulations for the development and alteration of slopes greater than 2 to 1.

Open Space and Recreation Element

The Rolling Hills Estates General Plan Open Space and Recreation Element (Open Space and Recreation Element) is a State-mandated element and fulfills the requirements of Sections 65302(e) and 65560 through 65570 of the California Government Code. Areas preserved as open space are valuable resources for both outdoor recreation and scenic enjoyment, as well as the preservation of natural resources. The Open Space and Recreation Element goals and policies related to aesthetics are as follows:

Goal 1: Maintain existing natural open spaces, parks and recreational facilities.

Policy 1.1: Preserve natural open space areas and design future recreational facilities to protect the local natural environment for present and future generations.

4.1 AESTHETICS

- Policy 1.2: Maintain the rural and lower density character of Rolling Hills Estates which is defined by the presence of wide open spaces and low density development.
- Policy 1.3: Preserve and enhance the natural environmental and cultural heritage of the Peninsula and of the City of Rolling Hills Estates.
- Policy 1.5: All efforts should be made to preserve existing open space areas and other undeveloped land where appropriate.

4.1.1.2 EXISTING CONDITIONS

SCENIC VISTAS AND CORRIDORS

A scenic vista, or viewshed, may include views of natural features, such as watercourses, rock outcrops, natural vegetation, prominent natural landforms, and notable man-made features in the landscape. In the current Open Space and Recreation Element, areas designated as open space are considered valuable resources due in part to their scenic value. The Planning Area's open space includes multiple features that can provide scenic vistas, including seven parks, 25 miles of equestrian trails, Chandler Preserve, George F. Canyon Nature Park and Reserve and Stein/Hale Nature Trail, South Coast Botanic Garden, Rolling Hills Country Club, and scattered views of the Pacific Ocean to the west and south.

The location and topography of the Planning Area provide views of the Pacific Ocean from the southern portion of the Planning Area and of the Los Angeles Basin from the northern portion of the Planning Area, as shown in **Figure 4.1-1**. In addition, the extensive trail network provides an interconnected series of greenbelts that provide residents and visitors additional views of the natural landscape. North-facing views from the City are dominated by the varying townscape of the Los Angeles Basin, while to the south are the California coastline and the Pacific Ocean. These views are afforded from many vantage points throughout the Planning Area. Many wooded hills and canyons, which result in varying views add to the panoramic views of the Planning Area. The City has long recognized the need to preserve these views and has enacted legislation, which regulates land uses, structures, and signage, to prevent the obstruction of these valuable aesthetic resources.

In addition, the current Conservation Element has identified Hawthorne Boulevard, Palos Verdes Drive North, Crenshaw Boulevard, and Silver Spur Road as scenic corridors (see **Figures 4.1-2a and 4.1-2b**), which have been placed within the City's Scenic Corridor Overlay Zone.

URBAN/SUBURBAN FORM

The Planning Area is situated on a landscape of hills and valleys. Streets conform with the contours of the hillsides, resulting in a curvilinear neighborhood street pattern, which also extends to relatively flat neighborhoods, as well as commercial areas. In hillier neighborhoods, houses are situated on the peaks of hills, while equestrian trails run through the valleys. In addition to shaping urban/suburban form, the Planning Area's topography provides dramatic views for residents and visitors to enjoy.

Urban/suburban form in the Planning Area varies from neighborhood to neighborhood. Many residential streets end in cul-de-sacs, resulting in little connectivity between various neighborhoods. Street patterns, lot sizes, lot shapes, and building footprints, as well as urban/suburban design features, such as sidewalks, curbs, and street width, vary dramatically



View of the Los Angeles basin from Avocado Lane, looking northeast.



View of the Pacific Ocean from the Scenic Crest Trail, looking west.

FIGURE 4.1-1
Views of the Los Angeles Basin and the Pacific Ocean



View of intersection of Palos Verdes Drive North and Rolling Hills Road, with Kelly's Korner on the right side of the photo, looking west.



View of commercial uses along Silver Spur Road, looking southeast.

FIGURE 4.1-2a
Scenic Corridors in the Planning Area



View of Hawthorne Boulevard north of Blackhorse Road.



View of Crenshaw Boulevard and Indian Peak Road, looking west.

Source: Google StreetView.

FIGURE 4.1-2b
Scenic Corridors in the Planning Area

4.1 AESTHETICS

among the different neighborhoods in the Planning Area, giving each of the neighborhoods an entirely unique feel and identity. Most of the residential streets in Rolling Hills Estates do not include curbs, gutters, or sidewalks, thus contributing to the semi-rural character of the community.

In some neighborhoods with equestrian uses, proximity to equestrian trails greatly impacts neighborhood form. Houses in neighborhoods with a strong equestrian identity are placed close to residential streets, screening the view of horse corrals and stables in the rear of the lot. In addition, the narrow lot shapes allow for a separation of residential and equestrian uses on the same lot.

COMMUNITY CHARACTER

With the landscape consisting of hills, canyons, and valleys and the equestrian orientation of the community, Rolling Hills Estates has a semi-rural, bucolic, pastoral character. Though not all residents of the Planning Area are equestrians and not all neighborhoods allow horse keeping, many neighborhoods were designed with equestrians in mind with trails running throughout the neighborhood to accommodate equestrians. In addition, as shown in **Figures 4.1-3a and 4.1-3b**, trails meander along busy roads, through parks and secluded valleys, and behind houses in residential neighborhoods. The comprehensive system of trails connects equestrians to most parts of the City. Trails are demarcated with white three-railed fences, which simultaneously serve a functional purpose and visually reinforce the community's equestrian identity. The three-railed fence is mirrored in other placemaking features of the City, as also shown in **Figures 4.1-3a and 4.1-3b**. Community facilities and parks are marked with white signs with signposts that closely resemble the posts of the fences.

Residential Areas

Residential developments in the Planning Area, which are characterized by large houses enclosed within white rail fences, have filled the hillsides, as shown in **Figures 4.1-4a and 4.1-4b**. The semi-rural atmosphere of the Palos Verdes Peninsula, including the Planning Area, has remained with large lot residential developments and a generally low intensity of development.

Many residential neighborhoods are characterized by tree-lined, curvilinear arterial streets and cul-de-sacs, substantial open space, equestrian trails, and ranch-style residential architecture, particularly those within the Horse Overlay Zone (primarily covering the northern half of the Planning Area and the central portion of the southwestern end of the Planning Area). Low-density single-family residential development occupies the majority of the Planning Area, and remains consistent with the City's goals on incorporation, preserving, and protecting its rural community atmosphere. Horse Overlay Zones either permit or require horse-related elements along arterial streets, including white rail fences bordering equestrian paths, stables, and equine-related street names. Distinctive signage identifies neighborhoods, which are arranged in cul-de-sacs accessed from arterial streets. Residential architectural themes range from mid-century ranch to contemporary Mediterranean, incorporating construction materials such as wood siding and trim, stucco, stone veneer, brick veneer, wood shake, concrete shake tile, Spanish tile and composition roofing. Residences are typically one or two stories in height, with maximum building heights generally less than 30 feet, and are set back an average of 25 feet from the street. Neighborhoods are landscaped throughout with manicured lawns, trees, shrubs and annual plantings, generally in good to excellent condition. Mature trees add visual texture and soften building edges, including eucalyptus, pine, jacaranda, Brazilian pepper, California pepper, and various species of palms.



View of the Stable Trail near Country Lane and Horseshoe Lane, looking southwest.



View of the Fern Creek Trail crossing over Masongate Drive, looking southwest.

FIGURE 4.1-3a
Views of Equestrian Trails in the Planning Area



View of the Palos Verdes Drive North Trail from the intersection of Palos Verdes Drive North and Strawberry Lane.



View of the equestrian trail and facilities at Dapplegray Park from Palos Verdes Drive North, looking northwest

FIGURE 4.1-3b
Views of Equestrian Trails in the Planning Area



View of residences on Dobbin Lane near the intersection with Palos Verdes Drive North, looking north.



View of residences on Ferncreek Drive near the intersection with Masongate Drive, looking west.

FIGURE 4.1-4a
Views of the Residential Areas within the Horse Overlay Zone in the Planning Area



View of residences and horse trail on Country Lane near the intersection with Horseshoe Lane, looking west.



View of residences on Country Lane and Quarterhorse Lane from Clear Vista Trail, looking north.

FIGURE 4.1-4b
Views of the Residential Areas within the Horse Overlay Zone in the Planning Area

Various elements of California Ranch and Mediterranean styles make up the architectural vernacular of the residential neighborhoods within the Horse Overlay Zone. The California Ranch style is characterized by one or two-story structures with rectangular or L-shaped footprints, attached garages, stucco or siding-finished surfaces, and hip or gable roofs. Residences constructed in Mediterranean style may be one or two stories in height, faced with light-colored stucco surfaces, typically incorporate arched windows and entries and gallerias (covered exterior walkways) and have clay (or synthetic) tile gable or mansard roofs. Many residences exhibit materials and decorative elements drawn from other architectural styles, adding variety to the residential aesthetic environment.

Residential structures outside the Horse Overlay Zone are characterized by a mix of architectural styles and are often developed on smaller lots, as shown in **Figures 4.1-5a and 4.1-5b**. In addition, new multi-family/mixed-use developments, particularly along Silver Spur Road and Deep Valley Drive, are characterized by multi-story buildings that are three to four stories in height providing upper-story setbacks to break up the massing of the structures, as also shown in **Figure 4.1-5a**.

Commercial Areas

Most commercial land uses in the Planning Area are located in the Peninsula Center Commercial District (Commercial District), generally bounded by Silver Spur Road on the north, Indian Peak Road on the south, Crenshaw Boulevard on the east, and Hawthorne Boulevard on the west; Deep Valley Drive bisects the eastern half of the Peninsula Center in an east-west direction. The Commercial District, as shown in **Figures 4.1-6 through 4.1-11**, includes the Peninsula Shopping Center on the western end near Hawthorne Boulevard (see **Figure 4.1-6**), the Promenade on the Peninsula primarily located between Norris Center Drive and Drybank Drive (see **Figure 4.1-7**), The Village Shopping Center between Drybank Drive and Roxcove Drive, and the Silver Spur Town & Country Center between Roxcove Drive and Deep Valley Drive (see **Figure 4.1-8**). Other commercial land uses located throughout the Planning Area, including small clusters at the intersections of Rolling Hills Road and Palos Verdes Drive North and Monticello Drive and Palos Verde Drive North. The Peter Weber Equestrian Center is the largest commercial parcel in the Planning Area, but buildings only comprise a small portion of the parcel, and the remainder is open space and trails on the former Palos Verdes Landfill.

Structures within the Commercial District generally range from one to four stories in height. These commercial structures do not convey consistent architectural style or theme and have varying setback distances from the surrounding streets, including Silver Spur Road and Deep Valley Drive. Commercial structures, particularly on the south side of Deep Valley Drive between Drybank Drive and just east of Roxcove Drive, have low-rise storefronts that offer a more-pedestrian feel. However, sidewalks along Deep Valley Drive are generally narrow (see **Figure 4.1-10**).



View of the Merrill Gardens Senior Housing complex on the southeast corner of Silver Spur Road and Drybank Drive, looking south.



View of multi-family townhouses on Via Granada in the Casas Verdes community, looking northeast.

FIGURE 4.1-5a
Views of Other Residential Areas in the Planning Area



View of multi-family townhouses on Sycamore Lane in the Terraces Community, looking north.



View of single-family homes on Willow Wood Road, looking northeast.

FIGURE 4.1-5b
Views of Other Residential Areas in the Planning Area



View of commercial uses on the southern portion of the Peninsula Center Shopping Center.



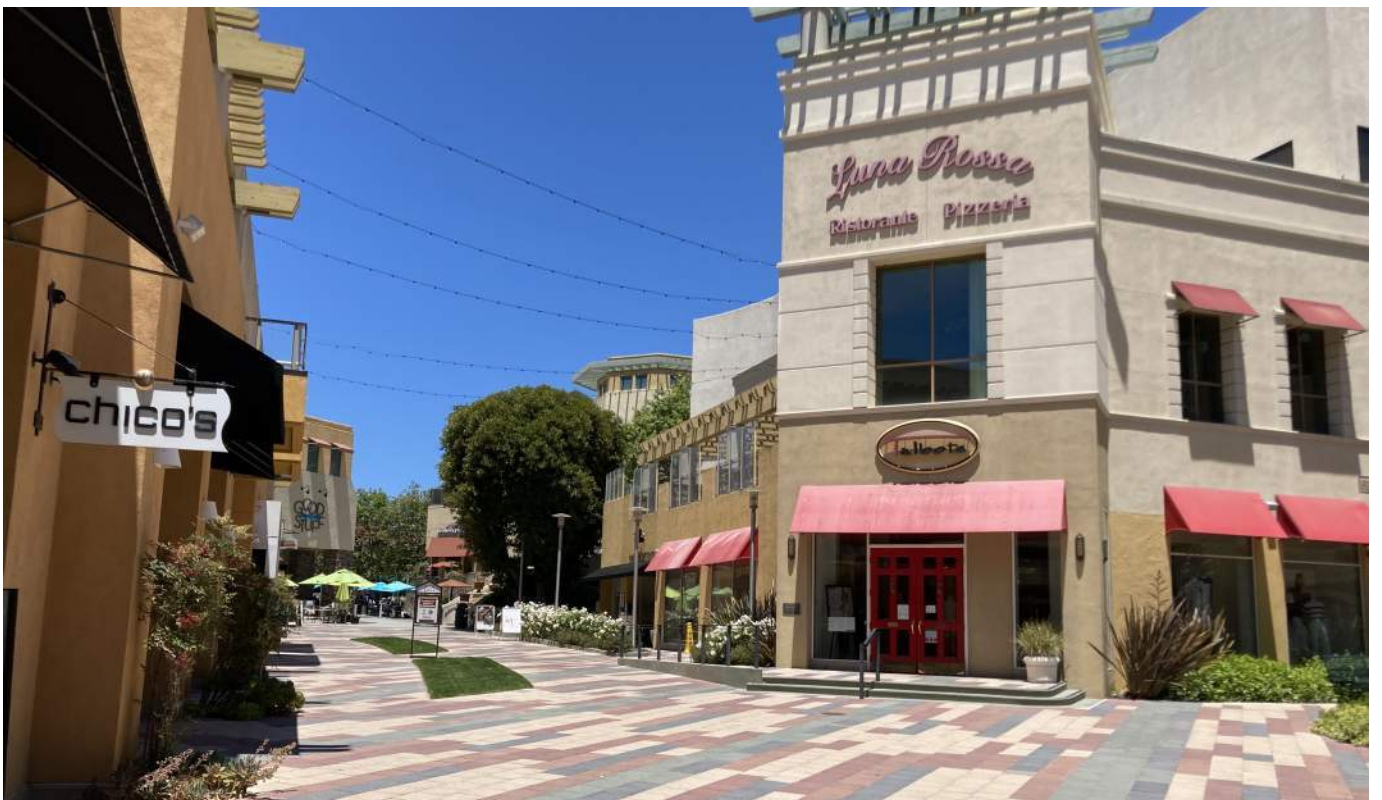
View of commercial uses in the center and northern portions of the Peninsula Center Shopping Center.

FIGURE 4.1-6

Views of the Commercial Uses within the Peninsula Shopping Center



View from Silver Spur Road, looking southwest.



View from within, looking northwest.

FIGURE 4.1-7
Views of the Promenade on the Peninsula



View looking southeast



View looking northeast

FIGURE 4.1-8
Views of the Silver Spur Town and Country Commercial Development



View of the commercial uses along Silver Spur Road from Norris Center Drive, looking north.



View of the commercial uses at the intersection of Silver Spur Road and Drybank Drive, looking east.

FIGURE 4.1-9a
Views of the Commercial Uses along Silver Spur Road



View of the commercial uses southwest of the intersection of Silver Spur Road and Roxcove Drive.



View of the commercial uses along the south side of Silver Spur Road between Roxcove Drive and Drybank Drive.



FIGURE 4.1-9b

Views of the Commercial Uses along Silver Spur Road



View between Roxcove Drive and the Peninsula Center Library (including the Brick Walk Development)

FIGURE 4.1-10
Views of the Commercial Uses along Deep Valley Drive



View of the commercial and mixed use structures along Deep Valley Drive across from the Peninsula Center Library.



View of the commercial uses along Deep Valley Drive east of Roxcove Drive.

FIGURE 4.1-11
Other Views along Deep Valley Drive

4.1.2 IMPACT ANALYSIS

4.1.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on aesthetics based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an aesthetics impact is considered significant if implementation of the proposed GPU would:

Threshold 4.1(a): Have a substantial adverse effect on a scenic vista.

Threshold 4.1(b): Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Threshold 4.1(c): In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

Threshold 4.1(d): Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in **Appendix A** of this Draft PEIR) determined that since there are no State scenic highways or any State-designated or eligible highways that are identified in the California Department of Transportation's State scenic highway program within or in the vicinity of the Planning area, the proposed GPU would have no impact related to Threshold (b), which involves scenic resources or State scenic highways. The Initial Study also determined that impacts related to Threshold (d), which involves light and glare, would be less than significant as any future development would be required to comply with the lighting requirements set forth in the RHEMC and utilize low-reflectivity glass windows and architectural materials. As such, no further analysis of these issues is necessary.

4.1.2.2 METHODOLOGY

The evaluation of aesthetics and aesthetic impacts requires the application of a process that objectively identifies the visual features of the environment and their importance. Aesthetic description involves identifying existing visual character, including visual resources and scenic vistas unique to the Planning Area. Visual resources are determined by identifying landforms (e.g., topography and graded areas), views (e.g., scenic resources, such as natural features or rural, suburban, and urban characteristics), and viewing points/locations. Changes to aesthetic resources due to implementation of the proposed GPU are identified and qualitatively evaluated based on the potential modifications to the existing setting and the viewer's sensitivity. The proposed GPU does not identify any specific development project. Accordingly, the aesthetics analysis below is based on the potential reasonable "worst case" (i.e., most intense) form and massing that would be allowed under the proposed GPU. The analysis below also identifies where the majority of development potential is allowed and where the greatest changes in visual appearance are expected at buildout of the proposed GPU (e.g., where commercial development could be replaced by mixed-use or residential uses).

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4.1.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.1(a): ***Would the Project have a substantial adverse effect on a scenic vista?***

Impact Analysis

Scenic vistas in the Planning Area consist of the scenic corridors and roadways with views of the Pacific Ocean and the Los Angeles Basin, open spaces and equestrian trails, and natural hillsides and canyons. The proposed GPU would continue to regulate development in the Planning Area and would contain updated policies related to the preservation and enhancement of scenic views.

While Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Peninsula Center Commercial District. This Commercial District is where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers and existing structures ranging from one to four stories in height. By focusing development in under-utilized areas of the Commercial District, the proposed GPU relieves pressure to develop in open space and lower density areas to avoid changing the semi-rural and suburban character of well-established neighborhoods in the Planning Area. This allows for the preservation of open space views and the enhancement of urban/suburban views.

Areas of land use intensification identified in the proposed GPU would occur along the City-designated scenic corridors but are primarily in areas where development has already taken place. Accordingly, implementation of the proposed GPU is not anticipated to result in a substantial change in views, including those related to the height, bulk, and mass of the existing development, from Silver Spur Road, Crenshaw Boulevard, and Hawthorne Boulevard. Any future development resulting from the proposed GPU would not substantially obstruct or impair any distant views from along these scenic corridors since any development would be limited four stories in height and would be required to comply with the required height and setbacks to ensure no significant changes in views from the City-designated scenic corridors.

In addition, the Commercial District is currently developed and devoid of any natural features and is in an urbanized area of the city. Any future development resulting from the proposed GPU would be consistent with the surrounding development and similar in terms of type, height, and mass to other existing, multi-story buildings (three to four stories) in the area. Intensification of uses in the Commercial District would not change the topography of the site to degrade the visual intactness and unity of the scenic corridors surrounding the Commercial District. Similarly, since the Commercial District is located in a canyon flanked by ridges on the north and south sides that have hillside residential development, the difference in elevation between the Commercial District and the residential neighborhoods provides sufficient vertical separation that no scenic views from the residential neighborhoods would be obstructed or impaired.

Proposed policies require that future developments, particularly those envisioned in the proposed GPU, conserve natural resources, including natural landforms, and viewsheds. More specifically, one of the goals of the update to the Conservation Element addresses the promotion and preservation of the aesthetic quality of the community and scenic roadway. The policy associated with this goal is to preserve the character and viewsheds of designated scenic corridors by prioritizing consideration of the visibility of scenery, major landform, vegetation, structures, and panoramas based on the framework established for the Scenic Overlay Zone. In addition, one of the goals of the update to the Land Use Element would prioritize compatibility between existing

and future development and between residential and commercial areas by continuing to implement the City's Neighborhood Compatibility Ordinance and View Protection Ordinance.

Finally, any future development under the proposed GPU would remain to be subject to development and planning review and must, therefore, conform to zoning and other ordinances regarding aesthetic qualities, such as landscaping, building setbacks, hillside protection, signage, and lighting. Due to the siting and nature of the proposed land use changes, and policies that guide new development to minimize impact on scenic corridors and other scenic resources, the proposed GPU would have a less-than-significant impact on the scenic vistas within the Planning Area.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on the scenic vistas within the Planning Area, future development activity, such as the representative projects, would not result in significant impacts on scenic vistas. In addition, as discussed above, individual development projects, such as the representative projects, would be subject to development and planning review and would be required to comply with the requirements of the zoning code and other ordinances regarding aesthetic qualities, such as landscaping, building setbacks, hillside protection, signage, and lighting. Compliance with all applicable regulations and requirements would ensure that development of representative projects would have a less-than-significant impact on the scenic vistas within the Planning Area. Accordingly, impacts related to scenic vistas resulting from development of representative projects would be less than significant.

Mitigation Measures

Impacts related to scenic vistas were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to scenic vistas were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.1(c): In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis

Implementation of the proposed GPU does not involve substantial changes to land use or building design for most neighborhoods within the Planning Area and includes provisions to preserve or improve the existing visual character of the Planning Area.

Proposed land use designations and policies would direct new development into under-utilized or previously developed areas, where any proposed changes in land use and physical design are intended to increase visual quality. The proposed policies also seek to ensure that any development or redevelopment observe design guidelines to ensure visual compatibility with the

4.1 AESTHETICS

surrounding environment. Additionally, by encouraging more diversified commercial and residential development particularly in the Peninsula Center Commercial District, the proposed GPU would also promote investment in the maintenance of existing structures and filling in vacant visual areas with attractive and economically vibrant new development.

The proposed GPU also promotes a more pedestrian-friendly environment, including streetscape improvements at the pedestrian scale, and ensures that residents have nearby access to shops and services, particularly in the Commercial District. The result would be a more aesthetically pleasing streetscape with an emphasis on well-designed sidewalks, landscaping, and facades.

Any future development under the proposed GPU, particularly within the Commercial District, would increase density from 30 dwelling units per acre to up to 68 dwelling units per acre when accounting for the City's density bonus program, which would allow a 50-percent density bonus in exchange for City-desired community benefits, as well as the 50-percent State density bonus for affordable housing.³ Even with increased density, any future development under the proposed GPU would be of a scale consistent with existing structures and surrounding properties (e.g., height of three to four stories and setback) and contain architectural elements that would blend with the existing buildings in the area, as shown in the preliminary urban design concepts illustrated in **Figures 4.1-12** through **4.1-16**. A central community gathering space is envisioned at the heart of the Commercial District with the reconfiguration or redevelopment of the Promenade on the Peninsula. Establishing a central plaza or park is one of the important elements that can transform the area from a "Commercial District" to a "Town Center." Building materials, such as terra cotta tile roofs, stucco walls, and stone, and architectural elements, such as awnings, overhangs, porches, and arcades, would continue to be used for future development. Particularly where the ground floor use is commercial, an arcade would provide more pedestrian space and shelter from the natural elements while keeping the building close to the street. Curved forms in arcades and arched windows soften the appearance of large massing and reflect Spanish and Mission architectural styles that also use these materials and colors. Both sloped tile roofs and flat roofs with parapets are used throughout the Commercial District and would be continued to provide variety in the roofline. Any future development under the proposed GPU would continue to be subject to the City's development standards, as well as the City's Neighborhood Compatibility Ordinance and View Protection Ordinance. Accordingly, aesthetic impacts of any future development under the proposed GPU, particularly in the Commercial District, related to consistency with development standards and other plans, policies, and regulations would be considered less than significant.

In other portions of the Planning Area, the open space components of the Planning Area's visual character would not be significantly altered by the proposed GPU. In contrast, designations for certain parcels that are currently used as open space or utilities, but not designated as such, would be changed to be consistent with their actual usage. Overall, no changes are anticipated to the existing open space, recreation, public facilities, and utilities with implementation of the proposed GPU, other than facility maintenance and improvement projects that could be undertaken to maintain the level of service to the community.

In addition, the proposed GPU also contains policies to maintain existing natural open spaces, parks, and recreational facilities, as well as conserve the natural environment and the rolling

³ Base density for the Commercial District Mixed-Use Overlay is 30 du/acre plus the City's density bonus of 50 percent (30 du + 15 du = 45 du) plus the State's density bonus of 50 percent for affordable housing (45 du + 22.5 du = 67.5 du ~ 68 du).



Source: Michael Baker International, 2021.

FIGURE 4.1-12

Conceptual Rendering of the Promenade on the Peninsula Redevelopment



Source: Michael Baker International, 2021.

FIGURE 4.1-13

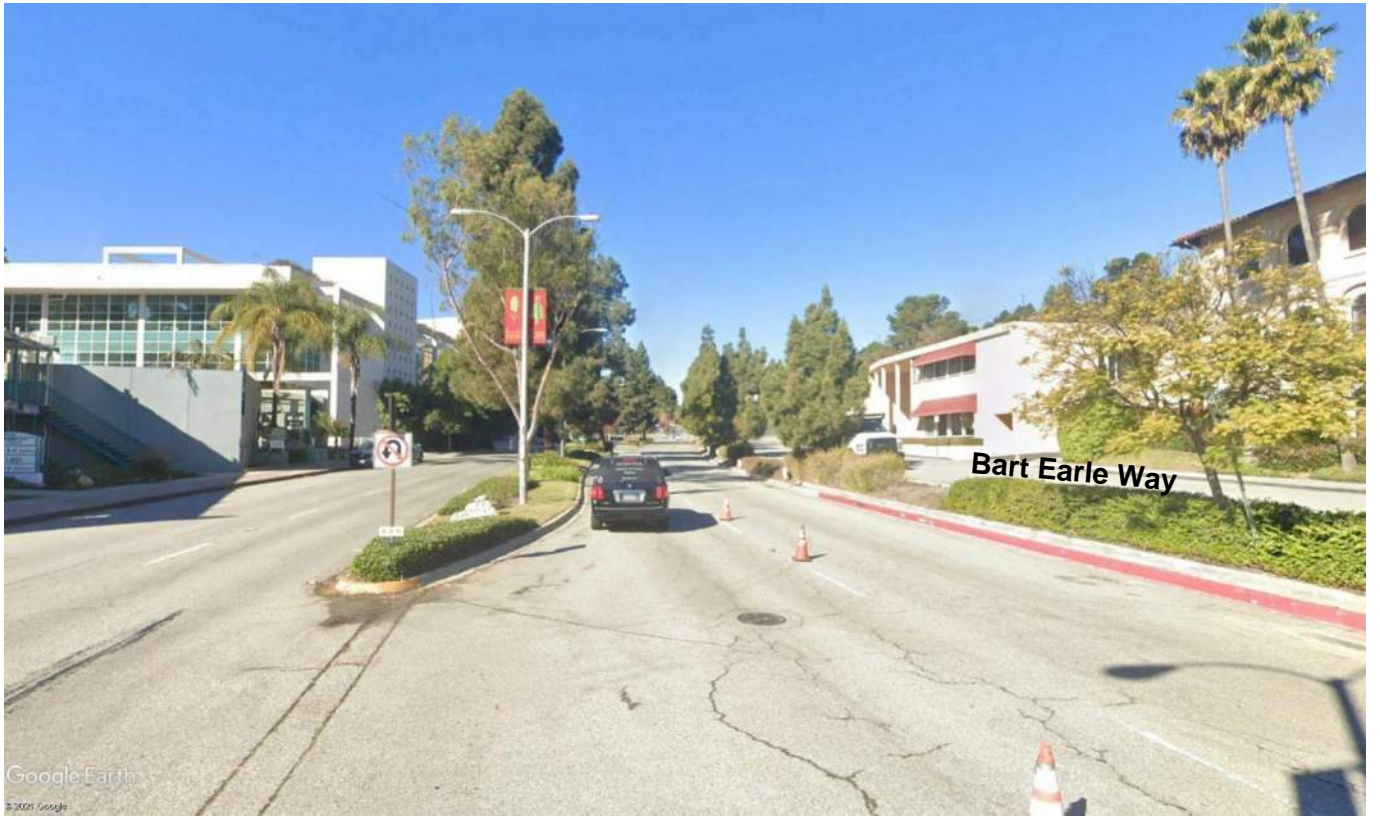
Conceptual Rendering of the Central Plaza from a Ground Floor Use



Source: Michael Baker International, 2021.

FIGURE 4.1-14

Conceptual Rendering of Pedestrian-Friendly Silver Spur Road Streetscape



Before



After

Source: Michael Baker International, 2021.

FIGURE 4.1-15
Conceptual Rendering of Silver Spur Road between Drybank Drive
and Deep Valley Road upon Vacation of Bart Earle Way



Source: Michael Baker International, 2021.

FIGURE 4.1-16
Conceptual Rendering of the Brick Walk Property

4.1 AESTHETICS

topography of the Planning Area. As the proposed GPU includes policies recognizing the sensitivity of preserving the visual character of existing neighborhoods and open spaces, implementation of the proposed GPU is unlikely to lead to visual degradation of the Planning Area.

The proposed GPU would also continue to be consistent with the City's existing Hillside Development Guidelines, Neighborhood Compatibility Ordinance, and View Protection Ordinance. Permitted development would be expected to preserve or enhance the visual quality of existing topography.

While the proposed GPU would have a beneficial impact in some areas with respect to aesthetics and visual quality, particularly in the Commercial District, it is expected that any adverse impacts on visual character or quality of public views in other areas of the Planning Area would be less than significant. Similarly, the proposed GPU would not conflict with applicable zoning or other goals and policies related to scenic quality, and, as such, impacts would also be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to not conflict with applicable zoning or other goals and policies related to scenic quality, future development activity, such as the representative projects, would not result in significant impacts related to aesthetics. In addition, as discussed above, individual development projects, such as the representative projects, would be subject to the City's development standards, as well as the City's Neighborhood Compatibility Ordinance and View Protection Ordinance. Compliance with all applicable regulations and requirements would ensure that the aesthetic impacts of representative projects related to consistency with development standards and other plans, policies, and regulations would be less than significant.

Mitigation Measures

Impacts related to visual quality and conflict with applicable zoning and other regulations governing scenic quality were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to visual quality and conflict with applicable zoning and other regulations governing scenic quality were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.1.2.4 CUMULATIVE IMPACTS

Impact Analysis

Land use changes that would alter the scale, density, and character of urban/suburban areas and neighborhoods could change the visual character of areas in the region. However, the proposed GPU seeks to ensure that the Planning Area's semi-rural and suburban character are maintained through the scale of development and promote planning practices that foster greater connections between existing neighborhoods and future developments. Appropriately scaled development would ensure that the Planning Area's rolling topography, equestrian character, and expansive open spaces dominate much of the Planning Area's landscape, with clustered opportunities for

urban-scaled development primarily in the Commercial District. Consistent with the goals and policies to protect open spaces, parks, and the semi-rural and suburban character of the Planning Area and the attention to preserving existing neighborhoods through policies and land use design, the proposed GPU's contribution to aesthetic impact would not cumulatively considerable, and, as such, cumulative aesthetic impacts would be less than significant.

Mitigation Measures

Cumulative impacts related to aesthetics were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related aesthetics were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.1 AESTHETICS

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4.2 AIR QUALITY

This section of the PEIR discusses the potential air quality impacts associated with the implementation of the proposed GPU. This section includes a discussion of the air quality characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates the potential Air Quality impacts that may result from the proposed GPU.

4.2.1 ENVIRONMENTAL SETTING

4.2.1.1 REGULATORY FRAMEWORK

FEDERAL

The U.S. Environmental Protection Agency (USEPA) is responsible for implementing the Federal Clean Air Act (FCAA), which was first enacted in 1955 and amended numerous times after. The FCAA established federal air quality standards known as the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for “criteria” pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants addressed under the FCAA are ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂), which is a form of nitrogen oxides (NO_x); sulfur dioxide (SO₂), which is a form of sulfur oxides (SO_x); particulate matter less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}, respectively); and lead (Pb); refer to **Table 4.2-1**.

STATE

The California Air Resources Board (CARB) administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 4.2-1**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS.

Similar to the USEPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. Similar to the FCAA, all areas designated as nonattainment under the CCAA are required to prepare plans showing how the area would meet the CAAQS by its attainment dates. **Table 4.2-1** also illustrates the FCAA and CCAA attainment status for the South Coast Air Basin (Basin), within which the City of Rolling Hills Estates is located.

4.2 AIR QUALITY

**Table 4.2-1
National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California ^a		Federal ^b	
		Standard ^c	Attainment Status	Standards ^{c,d}	Attainment Status
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment	N/A	N/A
	8 Hours	0.070 ppm (137 µg/m ³)	Unclassified	0.070 ppm (135 µg/m ³)	Extreme Nonattainment
Particulate Matter (PM ₁₀)	24 Hours	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	N/A	Attainment
Fine Particulate Matter (PM _{2.5})	24 Hours	No Separate State Standard		35 µg/m ³	Nonattainment
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	12.0 µg/m ³	Nonattainment
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Maintenance
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Maintenance
Nitrogen Dioxide (NO ₂) ^e	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	N/A	53 ppb (100 µg/m ³)	Maintenance
	1 Hour	0.18 ppm (339 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	N/A
Lead (Pb) ^{f,g}	30 days Average	1.5 µg/m ³	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 µg/m ³	Attainment
	Rolling 3-Month Average	N/A	N/A	0.15 µg/m ³	Attainment
Sulfur Dioxide (SO ₂) ^h	24 Hours	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (for certain areas)	Attainment
	3 Hours	N/A	N/A	N/A	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	N/A
	Annual Arithmetic Mean	N/A	N/A	0.030 ppm (for certain areas)	Attainment
Visibility-Reducing Particles ⁱ	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km @ <70% RH	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride ^f	24 Hour	0.01 ppm (26 µg/m ³)	N/A		

µg/m³ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable

Notes:

^a California standards for ozone, carbon monoxide (except eight-hour Lake Tahoe), sulfur dioxide (one- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

**Table 4.2-1
National and California Ambient Air Quality Standards**

<p>^b National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.</p> <p>^c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.</p> <p>^d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.</p> <p>^e To attain the one-hour national standard, the three-year average of the annual 98th percentile of the one-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.</p> <p>^f CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>^g The national standard for lead was revised on October 15, 2008 to a rolling three-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>^h On June 2, 2010, a new one-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the one-hour national standard, the three-year average of the annual 99th percentile of the one-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the one-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the one-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.</p> <p>ⁱ In 1989, CARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.</p> <p>Source: California Code of Regulation 70200 Table of Standards. https://ww3.arb.ca.gov/regs/title17/70200.pdf, accessed on July 27, 2021; U.S. Environmental Protection Agency, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table, accessed on July 27, 2021.</p>

REGIONAL

Air Quality Management Plan

The 2016 Air Quality Management Plan (2016 AQMP), which was adopted in March 2017, proposes policies and measures to achieve federal and State standards for improved air quality in the Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under the South Coast Air Quality Management District's (SCAQMD) jurisdiction. The 2016 AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, State, regional, and local level. These agencies (USEPA, CARB, local governments, Southern California Association of Governments (SCAG), and the SCAQMD) are the primary agencies that implement the 2016 AQMP programs.

4.2 AIR QUALITY

The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (2016–2040 RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG’s latest growth forecasts. While SCAG has adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS) in September 2019, the SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The SCAQMD is planning to release the updated AQMP in 2022.

The 2016 AQMP addresses several State and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2016 AQMP highlights the reductions and the interagency planning necessary to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under Federal Clean Air Act. The primary task of the 2016 AQMP is to bring the Basin into attainment with federal health-based standards.

SCAQMD Rules and Regulations

All projects located within the Basin are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules that may be applicable in the City include the following:

- **Rule 401 Visible Emissions.** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or of such opacity as to obscure an observer’s view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of this rule.
- **Rule 402 Nuisance.** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust.
- **Rule 445 Wood-Burning Devices.** This rule prohibits permanently installed wood-burning devices in any new development. A wood-burning device means any fireplace, wood-burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units (BTU) per hour.
- **Rule 1113 Architectural Coatings.** No person shall apply or solicit the application of any architectural coating within SCAQMD, with volatile organic compound (VOC) content in excess of the values specified in a table incorporated in this rule.

In addition to the rules listed above, SCAQMD has developed an air quality guidance document with suggested measures to reduce the amount of fugitive dust that is re-entrained into the atmosphere from unpaved areas, parking lots, and construction sites.

SCAQMD General Plan Guidance

The SCAQMD has prepared the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning (Guidance Document), dated May 6, 2005. The SCAQMD has made this document available to local governments as a tool to assist in the development of their General Plans and other planning decisions. Implementation of the suggested strategies throughout the region will strengthen the local government partnership with the SCAQMD to achieve attainment of the CAAQS and NAAQS and demonstrate efforts taken to provide environmental equity and protect public health.

The involvement of local governments to establish public policies that support SCAQMD strategies is essential for this region to meet State and federal air quality goals. Since the General Plan is the foundation for all local planning and development decisions, it is the most important tool in the implementation of local government policies and programs necessary to achieve clean air standards. Local governments work with their Council of Governments and the SCAQMD to improve air quality through a variety of programs, including regulatory actions, policy making, and education programs. The City can address air quality issues through ordinances, local circulation systems, transportation services, energy, and land use. Design standards, such as requirements for bicycle racks and bicycle paths, may result in reduced motor vehicle trips and decreased levels of air pollutants. The SCAQMD Guidance Document suggests policies and strategies that are intended to guide local governments in developing approaches to reduce exposure to source-specific air pollution and lower health risk associated with cumulative air pollution impacts.

Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally-designated metropolitan planning organization (MPO) for the Southern California region and is the largest MPO in the United States. Growth projections included in the AQMPs form the basis for the projections of air pollutant emissions and are based on general plan land use designations and the SCAG's 2016-2040 RTP/SCS demographics forecasts. While SCAG has recently adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS), the SCAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. The population, housing, and employment forecasts within the 2016-2040 RTP/SCS are based on local general plans, as well as input from local governments, such as the City. SCAG is responsible under the FCAA for determining conformity of projects, plans, and programs with the SCAQMD.

LOCAL

The topic of air quality is included in the current (1992) Rolling Hills Estates General Plan Conservation Element (Conservation Element) to address reducing pollutant levels through stationary source, mobile source, transportation, and land use controls and energy conservation measures. The Conservation Element identifies significant resources within the City and establishes a plan for their conservation, management, or preservation. The applicable goals and policies are included below.

4.2 AIR QUALITY

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

Policy 1.8: Inform residents of the environmental concerns regarding air quality, water resources, land and other ecological resources to solicit cooperation and support in the City's conservation plans.

Goal 4: Protect and maintain the air quality of the Peninsula.

Policy 4.1: Cooperate with the South Coast Air Quality Management District (SCAQMD) and surrounding cities to develop standards for the enforcement of regulations specific to Rolling Hills Estates.

Policy 4.2: The City will work with the other agencies in the region to ensure that motor vehicles comply with all standards for air pollution control.

Policy 4.3: Implement the clear air strategies outlined in the Conservation Element for the City to assist in the implementation of the Air Quality Management Plan.

4.2.1.2 EXISTING CONDITIONS

SOUTH COAST AIR BASIN

Geography

The Planning Area is located in the Basin, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and/or dispersion of pollutants throughout the Basin.

Climate

The climate in the Basin is characterized by moderate temperatures and comfortable humidity, with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. January is usually the coldest month at all locations, while July and August are usually the hottest months of the year. Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer, except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, as the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature.

Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

In the Planning Area, the climate is typically warm during summer when temperatures tend to be in the 70s°F and cool during winter when temperatures tend to be in the 40s°F. The warmest month of the year is August with an average maximum temperature of 78.6°F, while the coldest month of the year is December with an average minimum temperature of 44.3°F. Temperature variations between night and day tend to be moderate during summer and winter with a difference that can reach 32.3°F. The annual average precipitation in the Planning Area is 13.55 inches. The wettest month of the year is February with an average rainfall of 3.23 inches, and the driest month of the year is July with an average rainfall of 0.02 inches.¹

Photochemical Smog

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain original or “primary” pollutants (mainly reactive hydrocarbons and oxides of nitrogen) react to form “secondary” pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind from the emission sources. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air would be mixed and dispersed into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in the southland. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air that acts as a lid through which the marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours. Mixing heights for inversions are lower in the summer and more persistent and are partly responsible for the high levels of O₃ observed during summer months in the Basin. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

¹ Western Regional Climate Center, Period of Record Monthly Climate Summary at Torrance AP, California, <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8973>, accessed May 27, 2021.

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AMBIENT AIR QUALITY

The SCAQMD monitors air quality at 37 monitoring stations throughout the Basin. Each monitoring station is located within a Source Receptor Area (SRA). The communities within a SRA are expected to have similar climatology and ambient air pollutant concentrations. The Planning Area is located in SRA 3 (Southwest Coastal Los Angeles County). The monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

Pollutants Measured

The following air quality information briefly describes the various types of pollutants monitored at the Long Beach - 2425 Webster Street Monitoring Station, which is the nearest to the Planning Area; however, for pollutants not measured at Long Beach - 2425 Webster Street Monitoring Station, data from the next closest station, which is the South Long Beach located 1305 E. Pacific Coast Highway, were used. Air quality data from 2017 through 2019 are provided in **Table 4.2-2**.

**Table 4.2-2
Local Air Quality Levels**

Pollutant	Primary Standard		Year	Maximum Concentration ^a	Number of Days State/Federal Std. Exceeded
	California	Federal			
Carbon Monoxide (CO) ^b	20 ppm for 1 hours	35 ppm for 1 hours	2017 2018 2019	3.918 ppm 4.688 ppm 3.047 ppm	0/0 0/0 0/0
Ozone (O ₃) (1-Hour) ^b	0.09 ppm for 1 hour	NA ^c	2017 2018 2019	0.082 ppm 0.074 ppm 0.075 ppm	0/0 0/0 0/0
Ozone (O ₃) (8-Hour) ^b	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2017 2018 2019	0.069 ppm 0.064 ppm 0.065 ppm	0/0 0/0 0/0
Nitrogen Dioxide (NO ₂) ^b	0.180 ppm for 1 hour	0.100 ppm for 1 hour	2017 2018 2019	0.089 ppm 0.085 ppm 0.071 ppm	0/0 0/0 0/0
Particulate Matter (PM ₁₀) ^{b,d,e}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours	2017 2018 2019	79.0 µg/m ³ 83.0 µg/m ³ 155.4 µg/m ³	10/0 4/0 4/1
Fine Particulate Matter (PM _{2.5}) ^{e,f}	No Separate State Standard	35 µg/m ³ for 24 hours	2017 2018 2019	59.4 µg/m ³ 77.3 µg/m ³ 31.2 µg/m ³	0/14 0/12 0/11
ppm = parts per million PM ₁₀ = particulate matter 10 microns in diameter or less µg/m ³ = micrograms per cubic meter PM _{2.5} = particulate matter 2.5 microns in diameter or less NM = Not Measured NA = Not Applicable					
Notes: a Maximum concentration is measured over the same period as the California Standard. b Measurements taken at the Long Beach - 2425 Webster Street monitoring station located at 2425 Webster Ave, Long Beach CA 90810. c The U.S. Environmental Protection Agency revoked the Federal 1-hour Standard in June of 2005. d PM ₁₀ exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002. e PM ₁₀ and PM _{2.5} exceedances are derived from the number of samples exceeded, not days. f Measurements taken at the South Long Beach monitoring station located 1305 E. Pacific Coast Hwy, Long Beach CA 90806.					
Source: California Air Resources Board, ADAM Air Quality Data Statistics, http://www.arb.ca.gov/adam/welcome.html , accessed May 25, 2021.					

Carbon Monoxide. CO is a colorless and odorless gas. The automobile and other types of motor vehicles are the main source of this pollutant in the Basin. CO concentrations are generally higher along roadways, especially in the early mornings. The State and federal standard for CO is 9.0 parts per million (ppm), averaged over eight hours. The standards were not exceeded between 2017 and 2019 at the Long Beach-2425 Webster Street Monitoring Station. The Basin is designated as an attainment/maintenance area for federal and State CO standards.

CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency, as seen in high altitudes) are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of CO. Exposure to high levels of CO can slow reflexes and cause drowsiness, as well as result in death in confined spaces at very high concentrations.

Nitrogen Dioxide. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas with an odor similar to bleach and is the by-product of fuel combustion, which results from mobile and stationary sources. It has complex diurnal concentrations that are typically higher at night. The Basin has relatively low NO₂ concentrations, as very few monitoring stations have exceeded the State standard of 0.18 ppm (one hour) since 1988. NO₂ is itself a regulated pollutant, but it also reacts with hydrocarbons in the presence of sunlight to form O₃ and other compounds that make up photochemical smog. NO₂ levels have not exceeded the State standard at the Long Beach - 2425 Webster Street Monitoring Station between 2017 and 2019. The Basin is designated as an attainment/maintenance area for NO₂ for State and Federal standards.

NO₂ can irritate and damage the lungs and lower resistance to respiratory infections, such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes, as well as cause pulmonary dysfunction.

Ozone. O₃, a colorless gas with a sharp odor, is one of a number of substances called photochemical oxidants (highly reactive secondary pollutant). These oxidants are formed when hydrocarbons, nitrogen oxides, and related compounds interact in the presence of ultraviolet sunlight. The State standard for O₃ is 0.09 ppm, averaged over one hour, and 0.07 ppm, averaged over eight hours. Both federal and State standards designate the Basin as a nonattainment area. The federal one-hour standard for O₃ was revoked as of June 5, 2005, and, therefore, no longer applies.

The one-hour O₃ levels ranged from 0.075 ppm to 0.082 ppm from 2017 and 2019 at the Long Beach - 2425 Webster Street Monitoring Station. The eight-hour O₃ levels between 2017 and 2019 ranged from 0.064 ppm to 0.069 ppm. The State eight-hour standard for O₃ is 0.07 ppm and was approved by CARB on April 28, 2005. The State standard has not been exceeded between 2017 and 2019. The federal standard for O₃ has been revoked as of June 2005.

O₃ is a photochemical pollutant and is formed by reactive organic compounds (ROGs) and NO_x in the presence of sunlight; therefore, ROGs and NO_x are O₃ precursors. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O₃ concentrations can form

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over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O₃ in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ (in the troposphere) can adversely affect the human respiratory system and other tissues. O₃ is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible to the health effects of O₃. Short-term exposure (lasting for a few hours) to O₃ at levels typically observed in Southern California can result in aggravated respiratory diseases, such as emphysema, bronchitis, asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Coarse Particulate Matter (PM₁₀). PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns (or ten one-millionths of a meter). PM₁₀ arises from sources, such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate in the lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25). The federal 24-hour standard of 150 micrograms per cubic meter (µg/m³) was retained. The State standard for PM₁₀ is 50 µg/m³ averaged over 24 hours; this standard was exceeded 18 times in total at the Long Beach - 2425 Webster Street Monitoring Station between 2017 and 2019. The federal standard for PM₁₀ is 150 µg/m³ averaged over 24 hours; this standard was exceeded once between 2017 and 2019.

Fine Particulate Matter (PM_{2.5}). In 1997, the USEPA announced new PM_{2.5} standards. Industry groups challenged the new standard in court, and implementation of the standard was blocked. However, upon appeal by the USEPA, the U.S. Supreme Court reversed this decision and upheld the USEPA's new standards. On January 5, 2005, the USEPA published a Final Rule in the Federal Register that designates a portion of Los Angeles County of the Basin as a nonattainment area for Federal PM_{2.5} standards.² The Planning Area is within the nonattainment area portion. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. For PM_{2.5}, the federal standard is 35 µg/m³ over 24 hours. There is no separate State standard for PM_{2.5}. At the South Long Beach Monitoring Station, there were a total of 37 exceedances between 2017 and 2019 for PM_{2.5}.

Sulfur Dioxide. SO₂ is a colorless, irritating gas with a rotten egg smell that is formed primarily by the combustion of sulfur-containing fossil fuels. SO₂ is often used interchangeably with sulfur oxides (SO_x). SO₂ levels in all areas of the Basin do not exceed federal or State standards, and the Basin is designated as in attainment for both State and federal SO₂ standards. SO₂ was not monitored at the Long Beach - 2425 Webster Street or South Long Beach Monitoring Station.

² U.S. Environmental Protection Agency, Air Quality Designations and Classifications for the Fine Particles (PM_{2.5}) National Ambient Air Quality Standards, January 5, 2005.

Reactive Organic Gases and Volatile Organic Compounds. Hydrocarbon compounds are any compounds containing various combinations of hydrogen and carbon atoms that exist in the ambient air. VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor; some examples include gasoline, alcohol, and the solvents used in paints. There are no specific State or federal VOC thresholds as they are regulated by individual air districts as O₃ precursors.

Lead (Pb). In the Basin, atmospheric lead is generated almost entirely by the combustion of leaded gasoline and contributes less than one percent of the material collected as total suspended particulate. Atmospheric lead concentrations have been reduced substantially in recent years due to the lowering of average lead content in gasoline. Exceedances of the State air quality standard for lead (monthly average concentration of 1.50 grams per cubic meter [g/m³]) now are confined to densely populated areas, where vehicle traffic is greatest. The Basin has achieved attainment for lead under both State and federal standards. Lead was not monitored at the Long Beach - 2425 Webster Street or South Long Beach Monitoring Station.

PRIMARY SOURCES OF EMISSIONS

Air pollutants typically occur from stationary sources, point sources, and mobile sources. As the Planning Area primarily consists of residential and commercial uses, stationary and point sources are limited. Mobile sources are responsible for the majority of emissions in the Planning Area. These emission sources are described below.

Stationary and Point Sources

Stationary source emissions refer to those that originate from a single place or object that does not move around. Typical stationary sources include power plants, mines, smokestacks, vents, incinerators, buildings, and other facilities using industrial combustion processes. Stationary point sources have one or more emission sources at a facility with an identified location and are usually associated with manufacturing and industrial projects.

The Planning Area does not have any power plants or other facilities that represent a major stationary emissions source within its limits. However, the Planning Area contains several minor point sources of air pollutants. A variety of pollutants, including reactive hydrocarbons from activities, such as spray painting, are typically generated by smaller commercial and industrial uses. The City has no land devoted to industrial uses. Approximately 59.6 percent of the Planning Area is developed with residential land uses. Commercial uses cover approximately 6.9 percent.³ While each use might not represent a significant source of air pollution, the cumulative effects of development of the entire Planning Area could be significant. Although the number and nature of future additional air pollutant point sources is presently unknown, each individual source would be required to comply with rules and regulations as they are established by the SCAQMD. These regulations require that sources of hazardous materials or criteria pollutants above threshold levels obtain permits prior to operation of the facility.

Mobile Source

Mobile sources of emissions refer to those moving objects that release pollution and include cars, trucks, busses, planes, trains, motorcycles, and gasoline-powered lawn mowers. Mobile source emissions may be classified as on- or off-road sources. Increased traffic volumes within the

³ Dyett & Bhatia, *Rolling Hills Estates General Plan 2040 Existing Conditions Report*, January 2018.

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Planning Area could contribute to regional incremental emissions of NO_x, VOC, CO, SO_x, and PM₁₀. The following is a listing of emissions that typically emanate from vehicular sources:

- Vehicle running exhaust (VOC, CO, NO_x, SO_x, and PM₁₀);
- Vehicle tire wear particulates (PM₁₀);
- Vehicle brake wear particulates (PM₁₀);
- Vehicle variable starts⁴ (VOC, CO, NO_x);
- Vehicle hot soaks⁵ (VOC);
- Vehicle diurnal⁶ (VOC);
- Vehicle resting losses⁷ (VOC); and
- Vehicle evaporative running losses (VOC).

On-Road Sources

These sources are considered to be a combination of emissions from automobiles, trucks, and motorcycles, buses, and indirect sources. Major sources of mobile emissions in the Planning Area include the local and regional roadway network. There is no major freeway that passes through the Planning Area. However, other busy roadways within the Planning Area that contribute to localized air quality emissions are Crenshaw Boulevard, Hawthorne Boulevard, Palos Verdes Drive North, Silver Spur Road, Crest Road, and Highridge Road.

Indirect on-road sources of emissions are those that by themselves may not emit air contaminants; however, they indirectly cause the generation of air pollutants by attracting vehicle trips or by consuming energy. Examples of these indirect sources include an office complex or commercial center that generates trips and consumes energy resources.

Off-Road Sources

Off-road sources typically include aircraft, trains, construction equipment, and landscape equipment. The primary source of off-road emissions within the Planning Area would be generated by construction equipment and landscape equipment. Construction activities are typically temporary and intermittent and can be located at various locations within the Planning Area. Landscape equipment emissions would occur more regularly and would occur throughout the Planning Area, especially within residential areas. There is no aircraft traffic within the Planning Area as the closest airport, Torrance Municipal Airport, is located less than one mile north and outside of the Planning Area. Additionally, there are no railroad tracks located within the Planning Area.

Emissions from off-road sources include NO_x and diesel particulate matter (DPM), which contribute to serious public health problems. The USEPA has set emission standards for engines

⁴ Variable starts emissions are generated at the time and right after the vehicle engines are ignited.

⁵ Hot soaks are the evaporative hydrocarbon emissions which escape from a vehicle during the first hour after the engine stopped.

⁶ Diurnal emissions, one of the evaporative emissions, are functions of both fuel volatility and temperature which are themselves interdependent.

⁷ Vehicle resting loss is evaporative emissions during vehicle resting.

used in most construction, agricultural, and industrial equipment. The USEPA has adopted off-road diesel fuel requirements to decrease the allowable levels of sulfur, which can damage advanced emission control technologies.

EMISSIONS INVENTORY

Table 4.2-3 summarizes the emissions of criteria air pollutants within the Planning Area for area, mobile, and energy source categories. The emissions inventory is based on existing land use information, vehicle miles traveled (VMT), energy consumption data. According to the emissions inventory, area and mobile sources are the largest contributor to the estimated maximum daily air pollutant levels.

**Table 4.2-3
Summary of 2021 Estimated Existing Emissions Inventory
for the Planning Area**

Source Type/Category ^b	Estimated Winter Maximum Daily Emissions (Pounds/Day) ^a					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	1,306.89	86.58	2,320.42	5.23	308.53	308.53
Energy	4.28	37.72	24.17	0.23	2.95	2.95
Mobile	246.50	332.33	2,579.79	5.27	531.22	145.12
Total for the Planning Area^c	1,557.66	456.62	4,924.39	10.74	842.70	456.61

Notes:
^a Emissions estimates calculated using CalEEMod version 2020.4.0.
^b Emissions estimates calculated using the land use categories/intensities presented in Section 4.8, Land Use and Planning, of this PEIR.
^c The numbers may be slightly off due to rounding.
 Source: **Appendix C**, Air Quality/Greenhouse Gas Emissions/Energy Data, for assumptions used in this analysis.

SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Land uses generally considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, churches, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Where sensitive populations occupy such uses for short durations (e.g., churches), the receptors are less affected by the nearby sources of air pollution than at uses where sensitive populations reside (e.g., convalescent centers). The Planning Area currently has numerous sensitive land uses, including low-, medium-, and high-density residential communities, public and private schools, assisted living facilities, and active use parks. These sensitive land uses will continue to exist, and new sensitive land uses may occur with implementation of the proposed GPU.

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4.2.2 IMPACT ANALYSIS

4.2.2.1 THRESHOLDS OF SIGNIFICANCE

The SCAQMD's CEQA Air Quality Handbook provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries, as presented in **Table 4.2-4**. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately, the lead agency determines the thresholds of significance for impacts.

Table 4.2-4
South Coast Air Quality Management District Emission Thresholds

Phase	Pollutant (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993.

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions relating to air quality. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

Threshold 4.2(a): *Conflict with or obstruct implementation of the applicable air quality plan.*

Threshold 4.2(b): *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard.*

Threshold 4.2(c): *Expose sensitive receptors to substantial pollutant concentrations.*

Threshold 4.2(d): *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in Appendix A of this PEIR) determined that residential development and commercial uses do not typically generate objectionable odors that affect a substantial number of people. Although some industrial land uses, such as wastewater treatment plants, food processing, compost facilities, and other industrial processes, have the potential to generate other emissions, such as those leading to objectionable odors, implementation of the proposed GPU would not result in the development of these uses within the Planning Area. Therefore, the proposed GPU would have no impact related to Threshold 4.2(d), and, as such, no further analysis of this issue is necessary.

4.2.2.2 METHODOLOGY

In accordance with the SCAQMD's CEQA Air Quality Handbook, two criteria were used to evaluate the proposed GPU's consistency with the SCAQMD and SCAG regional plans and policies, including the AQMP. Regional area- and mobile-source emissions of criteria air pollutants and ozone precursors were modeled using the California Emissions Estimator Model (CalEEMod), which is designed to estimate emissions for land use development projects. CalEEMod allows land use data entries that include project location specifics and trip generation rates, and accounts for emissions from the use of electricity, natural gas, and water, as well as mobile-source emissions associated with vehicle trip generation and emissions from waste generation. Regional emissions were modeled based on proposed land use types, the increase in trip generation, and default settings and parameters attributable to the analysis period and project location. With the information of the existing condition and two buildout scenarios, the net change of the emissions under low-range and high-range build scenarios compared to the existing condition were presented. Localized air quality impacts were qualitatively discussed.

4.2.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.2(a): Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

A consistency determination with the AQMP plays an important role in linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decisionmakers of the environmental effects of a project under consideration early in the CEQA process to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP. Only new or updated general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the AQMP strategy is based on projections from local general plans. Projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. In accordance with the SCAQMD's CEQA Air Quality Handbook, the two following criteria were used to evaluate the proposed GPU's consistency with the SCAQMD and SCAG regional plans and policies, including the AQMP:

Criterion 1

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

- Would the project result in an increase in the frequency or severity of existing air quality violations?

The proposed GPU includes provisions for improved local and regional transit services, as well as a connected, balanced, and integrated transportation system of bicycle and pedestrian networks. However, the program-level emissions associated with future development in the Planning Area under the proposed GPU would cause potential significant and unavoidable air quality impacts, as detailed below under Threshold 4.2(b). It is noted that the SCAQMD thresholds are intended to evaluate the air quality impacts from individual development projects and do not apply to plan-level projects, such as the proposed GPU. Future development projects in the

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Planning Area would be required to comply with SCAQMD regulations and incorporate mitigation measures, as feasible, to reduce air quality impacts.

As discussed in Threshold 4.2(b), emissions of ROG, CO, SO₂, PM₁₀, and PM_{2.5} of the proposed GPU would be higher than the existing setting. Given the volume of air pollutants attributable to buildout of the Planning Area, the proposed GPU could potentially cause an increase in the frequency or severity of existing air quality violations.

- Would the project cause or contribute to new air quality violations?

As discussed under Threshold 4.2(b), future development anticipated under the proposed GPU would cause potential significant and unavoidable air quality impacts. Therefore, the proposed GPU would have the potential to contribute to a violation of the ambient air quality standards.

- Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The 2016 AQMP utilizes growth projections from the existing 1992 General Plan. Compared to 1992 General Plan, the proposed GPU anticipates an additional 878 units of residential land use development under the low-range buildout scenario and an additional 2,158 residential units under high-range buildout scenario. As a GPU, the Project would not include any direct demolition or development. Future individual development projects within the Planning Area would be required to undergo environmental review pursuant to CEQA, as well as comply with **Mitigation Measures MM-AQ-1** and **MM-AQ-2** and all applicable SCAQMD rules and regulations. As discussed above, the proposed GPU has a potential to contribute to a violation of the ambient air quality standards. Thus, impacts associated with compliance with the 2016 AQMP would be significant and unavoidable.

Criterion 2

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the project exceeds the assumptions utilized in preparing the forecasts presented in the 2016 AQMP, which involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria:

- Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

A goal of the proposed GPU is promoting the concept of Commercial District with development of commercial and residential mix-uses in the Planning Area. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the Planning Area, which are used by SCAG in all phases of implementation and review. As discussed above, the proposed GPU would accommodate more residential units than the existing 1992 General Plan, and the SCAQMD has not incorporated these projections into the 2016 AQMP. With the approval of the proposed GPU, the SCAG would include the growth projections associated with the proposed GPU in the regional planning projections, and SCAQMD would incorporate the same projections in the next update of the

AQMP. However, since projections associated with the proposed GPU are not currently included in the 2016 AQMP, the proposed GPU would not meet this criterion, and the impact would be potentially significant.

- Would the project implement all feasible air quality mitigation measures?

The proposed GPU would be required to comply with applicable emission reduction measures identified by the SCAQMD. Additionally, the goals and policies of the proposed GPU Sustainability Element would prepare the City for long-term adaptability. Thus, the proposed GPU meets this 2016 AQMP consistency criterion.

- Would the project be consistent with the land use planning strategies set forth in the AQMP?

The AQMP relied upon SCAG's RTP/SCS for land use planning strategies. As discussed in **Table 4.7-5** in Section 4.7, Greenhouse Gas Emissions, of this PEIR, the proposed GPU would be consistent with SCAG's 2020-2045 RTP/SCS. In summary, the proposed GPU would encourage compact mixed-use development within the Peninsula Center Commercial District, thereby locating residents in proximity to retail, services, entertainment, and employment. Therefore, although the proposed GPU would accommodate an increase in residential units within the Planning Area, the developments would be consistent with the land use planning strategies. The proposed GPU would be consistent with this criterion.

As discussed above, the proposed GPU would not be consistent with the 2016 AQMP. Therefore, implementation of the proposed GPU would have the potential to contribute to a violation of the ambient air quality standards. Thus, impacts associated with compliance with the 2016 AQMP would be significant and unavoidable.

Representative Projects

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, their cumulative development would result in greater emissions than the existing setting, which could potentially contribute to an increase in the frequency or severity of existing air quality violations. However, when considered individually, development of each of the representative projects would not result in any exceedance of the SCAQMD thresholds that are applied to individual development projects for determining whether a project would result in a significant air quality impact; see **Tables 4.2-5** through **4.2-7** and **Tables 4.2-11** through **4.2-13** under Threshold 4.2(b), below, for regional emissions during construction and operation, respectively, of each representative project and **Tables 4.2-14** through **4.2-16** under Threshold 4.2(c), below, for localized emissions during construction of each representative project. Accordingly, each of the representative projects would not contribute to any increase in the frequency or severity of existing air quality violations, and, on an individual basis, impacts related to consistency with the 2016 AQMP or with land use planning strategies would be less than significant.

Mitigation Measures

Refer to **Mitigation Measures MM-AQ-1** and **MM-AQ-2** under Threshold 4.2(b) below.

4.2 AIR QUALITY

Level of Significance After Mitigation

The proposed GPU would be inconsistent with the SCAQMD AQMP as buildout of the proposed GPU could exceed current SCAG population and employment estimates and would cumulatively contribute to the nonattainment designations of the Basin. Incorporation of **Mitigation Measures MM-AQ-1** and **MM-AQ-2** into future development projects during construction and operation described under Threshold 4.2(b), below, would contribute to reduced criteria air pollutant emissions associated with buildout of the proposed GPU. In addition, goals and policies included in the proposed GPU would promote increased capacity for alternative transportation modes and implementation of transportation demand management strategies. However, since implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, no mitigation measures are available that would reduce total air quality emissions from buildout of the proposed GPU to a less-than-significant level. In addition, the population and employment assumptions of the AQMP would still be exceeded until such time the AQMP is revised and incorporates updated projections that consider the proposed GPU. Therefore, air quality impacts related to the implementation of the AQMP would remain significant and unavoidable.

Threshold 4.2(b): ***Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?***

Impact Analysis

SHORT-TERM CONSTRUCTION EMISSIONS

Implementation of the proposed GPU would not directly result in new development within the Planning Area; however, it would allow for land use intensification in certain portions of the Planning Area to provide additional residential uses, which could result in new construction-related emissions associated with future development. The thresholds of significance recommended by the SCAQMD for construction emissions were developed for individual development projects. Construction-related emissions are described as short-term or temporary in duration and have the potential to represent a significant impact with respect to air quality. Implementation of the proposed GPU is dependent on individual housing decisions, employment opportunities, provision of services for housing and supporting commercial uses, land use decisions by the City and other public agencies, regional transportation planning decisions, the decisions of financial institutions related to development projects, and other similar factors. Future development projects and plans would continue to define specific phasing at a detailed level and be reviewed by the City to ensure that development occurs in a logical manner consistent with policies in the proposed GPU and that additional environmental review is conducted under CEQA, as needed.

Construction-related activities associated with implementation of the proposed GPU would result in emissions of criteria air pollutants and precursors from site preparation (e.g., demolition, excavation, grading, and clearing); exhaust from off-road equipment, material delivery trucks, and worker commute vehicles; vehicles travel on roads; and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings, and trenching for utility installation).

The proposed GPU allows for land use intensification in certain portions of the Planning Area. Assuming relatively robust economic conditions over the next 20 years, construction activities would occur in certain portions of the Planning Area, but the rate of development cannot be predicted. Future construction-related emissions could lead to the violation of an applicable air quality standard or contribute substantially to an existing or projected air quality violation.

Proposed policies in the proposed GPU's Sustainability Element address potential air quality impacts by continuing to participate in regional efforts, reducing local contributions of airborne pollutants to the air basin, limiting locating sensitive receptors near pollutant emitting sources when feasible, expanding dust mitigation programs, and creating an air quality monitoring system. In addition, one of the policies of the update to the Land Use Element addresses air quality through maintenance and enhancement of the Planning Area's open space by preserving and siting appropriate densities to maximize conservation and air quality benefits. Furthermore, the Rolling Hills Estates Municipal Code (RHEMC) Section 17.72.080 requires all land use and development review applications referenced in Chapter 17.72 (such as zone changes, conditional use permits, subdivisions, etc.) and all public works and other public projects to undergo environmental review as an integral part of the process for such applications prior to consideration by the decision-making authority. Additionally, future development projects that include employers with 670 employees or more are required to comply with SCAQMD Rule 2202, which requires the implementation of employee commute reduction programs. Environmental review must also be carried out in accordance with CEQA, the CEQA Guidelines, and other applicable regulations.

In summary, future development projects would be required to comply with RHEMC Section 17.72.080 and all applicable SCAQMD rules and regulations, as well as other control measures to reduce construction emissions. However, because the proposed GPU would facilitate future development and generate construction emissions that could potentially exceed SCAQMD thresholds, impacts would be considered significant and unavoidable.

When considering the representative projects, construction emissions are presented in **Tables 4.2-5** through **4.2-7**. As shown therein, construction-related daily maximum regional emissions would not exceed the SCAQMD daily significance thresholds. Therefore, regional construction emissions resulting from each of the representative projects would be considered less than significant. However, future development projects that are larger than any of the representative projects could generate construction-related daily maximum regional emissions exceeding the SCAQMD thresholds that would result in a cumulatively considerable net increase of criteria pollutant for which the Basin is non-attainment under the federal or State ambient air quality standard. As such, impacts from larger future development projects may result in significant air quality impacts.

4.2 AIR QUALITY

**Table 4.2-5
Small Scale Representative Project Maximum Daily Construction Emissions**

Emissions Source	Emissions (Pounds/Day) ^{a,b}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Year 1	51.21	82.53	22.30	0.27	10.28	3.89
Maximum Daily Emissions^c	51.21	82.53	22.30	0.27	10.28	3.89
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<p>^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case scenario and is, therefore, presented as a conservative analysis.</p> <p>^b The reduction/credits for construction emissions are based on “mitigation” included in CalEEMod and are required by the SCAQMD Rules. The “mitigation” applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.</p> <p>^c A small scale project modified the grading duration from default (two days) to five days.</p>						
Refer to Appendix C of this PEIR for assumptions used in this analysis.						
Source: Michael Baker International, 2021.						

**Table 4.2-6
Medium Scale Representative Project Maximum Daily Construction Emissions**

Emissions Source	Emissions (Pounds/Day) ^{a,b}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Year 1	3.69	98.34	28.13	0.31	12.36	4.80
Year 2	73.87	16.18	21.31	0.05	3.08	1.27
Maximum Daily Emissions^c	73.87	98.34	28.13	0.31	12.36	4.80
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<p>^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case scenario and is, therefore, presented as a conservative analysis.</p> <p>^b The reduction/credits for construction emissions are based on “mitigation” included in CalEEMod and are required by the SCAQMD Rules. The “mitigation” applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.</p> <p>^c A medium scale representative project modified demolition phase duration from default (20 days) to 29 days, grading phase duration from default (6 days) to 26 days, and architectural coating phase duration from default (10 days) to 12 days.</p>						
Refer to Appendix C of this PEIR for assumptions used in this analysis.						
Source: Michael Baker International, 2021.						

**Table 4.2-7
Hotel Representative Project Maximum Daily Construction Emissions**

Emissions Source	Emissions (Pounds/Day) ^{a,b}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Year 1	3.69	98.34	28.13	0.31	12.36	4.80
Year 2	73.67	15.95	19.21	0.05	2.37	1.07
Maximum Daily Emissions	73.87	98.34	28.13	0.31	12.36	4.80
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Notes:

^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. Winter emissions represent worst-case scenario and is, therefore, presented as a conservative analysis.

^b The reduction/credits for construction emissions are based on "mitigation" included in CalEEMod and are required by the SCAQMD Rules. The "mitigation" applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.

^c A hotel representative project modified demolition phase duration from default (20 days) to 29 days, grading phase duration from default (6 days) to 26 days, and architectural coating phase duration from default (10 days) to 12 days.

Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

LONG-TERM MOBILE AND STATIONARY SOURCE EMISSIONS

Table 4.2-8 and **Table 4.2-9** present the criteria air pollutant emissions within the Planning Area for area, energy, mobile source categories based on the proposed GPU growth assumptions under low-range and high-range buildout scenarios. According to the emissions inventory, area sources are the largest contributor to the estimated maximum daily air pollutant levels. In addition, **Table 4.2-10** presents the net change in emissions compared to existing conditions for both buildout scenarios.

**Table 4.2-8
Summary of 2040 Estimated Emissions Inventory
under the Low-Range Buildout Scenario**

Source Type/ Category ^b	Estimated Winter Maximum Daily Emissions (Pounds/Day) ^a					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	2,344.22	167.48	4,353.80	10.24	603.79	603.79
Energy	4.40	38.82	25.12	0.24	3.04	3.04
Mobile	182.24	171.59	1,813.39	3.88	554.68	149.15
Total for the Planning Area^c	2,530.85	377.89	6,192.30	14.36	1,161.52	755.98

Notes:

^a Emissions estimates calculated using CalEEMod version 2020.4.0.

^b Emissions estimates calculated using the land use categories/intensities depicted in Section 4.8, Land Use and Planning, of this PEIR.

^c The numbers may be slightly off due to rounding.

Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

4.2 AIR QUALITY

**Table 4.2-9
Summary of 2040 Estimated Emissions Inventory
under the High-Range Buildout Scenario**

Source Type/Category ^b	Estimated Winter Maximum Daily Emissions (Pounds/Day) ^a					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	3,052.74	221.81	5,760.84	13.57	799.93	799.93
Energy	5.00	43.60	27.24	0.27	3.42	3.42
Mobile	197.39	185.86	1,964.12	4.20	600.78	161.55
Total for the Planning Area^c	3,255.09	451.27	7,752.20	18.04	1,404.13	964.90

Notes:
^a Emissions estimates calculated using CalEEMod version 2020.4.0.
^b Emissions estimates calculated using the land use categories/intensities depicted in Section 4.8, Land Use and Planning, of this PEIR.
^c The numbers may be slightly off due to rounding.
Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

Table 4.2-10

**Net Change in Estimated Operational Emissions under Low-Range and High-Range
Buildout Scenarios**

Source Type/Category ^b	Estimated Winter Maximum Daily Emissions (Pounds/Day) ^a					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Net Change in Winter Emissions for Low-range Buildout Scenario						
Area	1,037.33	80.90	2,033.38	5.01	295.27	295.27
Energy	0.12	1.10	0.94	0.01	0.08	0.08
Mobile	-64.26	-160.74	-766.41	-1.40	23.47	4.03
Total for the Planning Area^c	973.19	-78.73	1,267.91	3.62	318.82	299.38
Net Change in Winter Emissions for High-range Buildout Scenario						
Area	1,745.85	135.23	3,440.42	8.34	491.41	491.41
Energy	0.72	5.89	3.07	0.04	0.47	0.47
Mobile	-49.11	-146.47	-615.68	-1.08	69.56	16.42
Total for the Planning Area^c	1,697.43	-5.36	2,827.81	7.30	561.43	508.30

Notes:
^a Emissions estimates calculated using CalEEMod version 2020.4.0.
^b The net winter emissions represent the net increase or decrease in operational air emissions from the existing conditions within the Planning Area.
^c The numbers may be slightly off due to rounding.
Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

The Planning Area's stationary source emissions primarily consist of residential and commercial uses. Indirect sources consist of electricity usage. Mobile source emissions are produced by each trip generating land use within the City (e.g., residential, schools, retail, office, etc.). The proposed GPU would allow for additional residential and non-residential development over existing conditions. Because the City anticipates future growth, overall emissions are anticipated to be higher than existing conditions under both conditions except for NO_x (refer to **Table 4.2-10**). Area

source emissions are expected to increase from existing conditions. However, mobile source ROG, NO_x, CO, and SO_x emissions would decrease despite a projected increase in vehicle trips. This can be attributed to improved vehicle emissions standards, improved fuel efficiency, and a newer model year vehicle fleet during the planning period.

Criteria pollutant emissions health effects are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). Ozone precursors, VOCs and NO_x, affect air quality on a regional scale. Health effects related to ozone are, therefore, the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. For example, based on SCAQMD's modeling in the 2012 Air Quality Management Plan (2012 AQMP), a reduction of 432 tons per day of NO_x and a reduction of 187 tons per day of VOCs would reduce ozone levels at the highest monitored site by only nine parts per billion. As shown in **Table 4.2-10**, NO_x and ROG (i.e., VOC) estimated maximum daily emissions would be negligible compared to SCAQMD's modeling in the 2012 AQMP. As such, increases in regional air pollution from criteria air pollutants that would be generated by the buildout of the proposed GPU would have nominal or negligible impacts on human health.

One of the policies in the proposed GPU's Sustainability Element aims to improve air quality within the Planning Area through educating City staff, contractors, residents, and visitors about sustainable driving practices, such as reducing excessive speeding, preventing car idling, regular car maintenance for maximizing fuel efficiency, and carpooling. Other policies in the proposed GPU's Sustainability Element aim to reduce air pollutants with long-term adaptability by participating in regional strategies, pursuing lobbying strategies to encourage high-quality transit opportunities, and seeking funding opportunities that support climate and long-term adaptability.

The thresholds of significance that have been recommended by the SCAQMD were established for individual development projects and are based on the SCAQMD's General Plan guidance and New Source Review emissions standards for individual sources of new emissions, such as boilers and generators. They do not apply to cumulative development or multiple projects. Air quality impacts would be regional and not confined to the limits of the Planning Area. The destinations of motor vehicles, which are the primary contributors to air pollution, vary widely and cross many jurisdictional boundaries. As stated above, the proposed GPU establishes the Planning Area's mobility goals by providing improved local and regional transit services, as well as a connected, balanced, and integrated transportation system of bicycle and pedestrian networks. Such alternatives to automotive transportation can be greatly utilized to reduce mobile source emissions. Future site-specific development proposals would be evaluated for potential air emissions once development details have been determined and are available. Individual projects may or may not result in significant operational air quality emissions. Although individual development projects have the potential to exceed SCAQMD thresholds, the proposed GPU goals and policies themselves would not result in potentially significant impacts.

In summary, development projects allowed under the proposed GPU would increase regional pollutants over current conditions, although ozone precursor pollutant (i.e., NO_x) would decrease due to improvements in vehicular technology for mobile source emissions. However, given the volume of air pollutants attributable to buildout of the proposed GPU, impacts would be conservatively considered significant and unavoidable in this regard.

4.2 AIR QUALITY

When considering the representative projects, operational emissions are presented in **Tables 4.2-11** through **4.2-13**. As shown therein, regional emissions resulting from operation of each of the representative projects would not exceed the SCAQMD daily significance thresholds. Therefore, regional operational emissions resulting from each of the representative projects would be considered less than significant. However, future development projects that are larger than any of the representative projects could generate regional operational emissions exceeding the SCAQMD thresholds that would result in a cumulatively considerable net increase of criteria pollutants for which the Basin is non-attainment under the federal or State ambient air quality standard. As such, impacts from larger future development projects may result in significant air quality impacts.

**Table 4.2-11
Small Scale Representative Project Long-Term Operational Emissions**

Scenario	Emissions (Pounds/Day) ^{a,c,d}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Representative Project Summer Emissions						
Area Source	1.04	0.56	3.13	<0.01	0.06	0.06
Energy Source	0.05	0.45	0.33	<0.01	0.03	0.03
Mobile Source	2.11	1.80	17.31	0.03	3.44	0.93
Total Summer Emissions^b	3.20	2.81	20.78	0.04	3.53	1.03
<i>SCAQMD Thresholds</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No
Representative Project Winter Emissions						
Area Source	1.04	0.56	3.13	<0.01	0.06	0.06
Energy Source	0.05	0.45	0.33	<0.01	0.03	0.03
Mobile Source	2.06	1.95	17.32	0.03	3.44	0.93
Total Summer Emissions^b	3.15	1.95	17.32	0.03	3.44	0.93
<i>SCAQMD Thresholds</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No
Notes: ^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD. ^b Numbers may be slightly off due to rounding. ^c Project operational emissions were modeled with the operational year of 2023. ^d The emissions data modeled in CalEEMod is with the implementation of the SCAQMD Rule 403, AB 341 and Rule 445. The mitigation includes the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads three times daily; and limit speeds on unpaved roads to 15 miles per hour; only natural gas hearth per SCAQMD Rule 445; 50 percent solid waste recycled per AB 341. Refer to Appendix C of this PEIR for assumptions used in this analysis. Source: Michael Baker International, 2021.						

**Table 4.2-12
Medium Scale Representative Project Long-Term Operational Emissions**

Scenario	Emissions (Pounds/Day) ^{a,c,d}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
SCAQMD Thresholds	55	55	550	150	150	55
Representative Project Summer Emissions						
Area Source	3.63	1.99	11.17	0.01	0.21	0.21
Energy Source	0.10	0.91	0.62	<0.01	0.07	0.07
Mobile Source	4.74	4.33	42.14	0.09	8.78	2.38
Total Summer Emissions^b	8.47	7.23	53.93	0.10	9.05	2.66
Threshold Exceeded?	No	No	No	No	No	No
Representative Project Winter Emissions						
Area Source	3.63	1.99	11.17	0.01	0.21	0.21
Energy Source	0.10	0.91	0.62	<0.01	0.07	0.07
Mobile Source	4.63	4.68	41.76	0.08	8.78	2.38
Total Summer Emissions^b	8.36	7.58	53.55	0.10	9.05	2.66
Threshold Exceeded?	No	No	No	No	No	No
Notes:						
^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.						
^b Numbers may be slightly off due to rounding.						
^c Project operational emissions were modeled with the operational year of 2023.						
^d The emissions data modeled in CalEEMod is with the implementation of the SCAQMD Rule 403, AB 341 and Rule 445. The mitigation includes the proper maintenance of mobile and other construction equipment; replacement of ground cover in disturbed areas quickly; watering of exposed surfaces three times daily; covering of stockpiles with tarps; watering all haul roads three times daily; and limiting speeds on unpaved roads to 15 miles per hour; use of only natural gas hearth per SCAQMD Rule 445; 50-percent solid waste recycled per AB 341.						
Refer to Appendix C of this PEIR for assumptions used in this analysis.						
Source: Michael Baker International, 2021.						

**Table 4.2-13
Hotel Representative Project Long-Term Operational Emissions**

Scenario	Emissions (Pounds/Day) ^{a,c,d}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
SCAQMD Thresholds	55	55	550	150	150	55
Representative Project Summer Emissions						
Area Source	3.98	<0.01	0.04	0.00	<0.01	<0.01
Energy Source	0.22	2.00	1.68	0.01	0.15	0.15
Mobile Source	3.71	3.33	32.29	0.07	6.65	1.80
Total Summer Emissions^b	7.91	5.33	34.01	0.08	6.80	1.96
Threshold Exceeded?	No	No	No	No	No	No
Representative Project Winter Emissions						
Area Source	3.98	<0.01	0.04	0.00	<0.01	<0.01
Energy Source	0.22	2.00	1.68	0.01	0.15	0.15
Mobile Source	3.62	3.60	32.08	0.06	6.65	1.08
Total Summer Emissions^b	7.82	5.60	33.80	0.07	6.80	1.96
Threshold Exceeded?	No	No	No	No	No	No
Notes:						
^a Emissions were calculated using CalEEMod version 2020.4.0, as recommended by the SCAQMD.						
^b Numbers may be slightly off due to rounding.						
^c Project operational emissions were modeled with the operational year of 2023.						
^d The emissions data modeled in CalEEMod is with the implementation of the SCAQMD Rule 403, AB 341 and Rule 445. The mitigation includes the proper maintenance of mobile and other construction equipment; replacement of ground cover in disturbed areas quickly; watering of exposed surfaces three times daily; covering of stockpiles with tarps; watering all haul roads three times daily; and limiting speeds on unpaved roads to 15 miles per hour; use of only natural gas hearth per SCAQMD Rule 445; 50-percent solid waste recycled per AB 341.						
Refer to Appendix C of this PEIR for assumptions used in this analysis.						
Source: Michael Baker International, 2021.						

4.2 AIR QUALITY

Mitigation Measures

MM-AQ-1: The City of Rolling Hills Estates shall require applicants of future development projects that require discretionary grading approval by the Planning Commission to control ozone precursor emissions from construction equipment vehicles by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications. The equipment maintenance records and equipment design specifications data sheets shall be kept on site by the project contractor during construction activities.

MM-AQ-2: To identify potential long-term operational-related air quality impacts from future development projects that are larger than the representative projects considered in this analysis, project-specific air emissions impacts shall be determined in compliance with the latest version of the SCAQMD CEQA Guidelines. To address potential localized impacts, the air quality analysis shall be completed pursuant to the latest version of SCAQMD's *Final Localized Significance Threshold Methodology* document or other appropriate methodology as determined in conjunction with SCAQMD. The results of the operational-related and localized air quality impacts analyses shall be included in the future development project's CEQA documentation. If such analyses identify potentially significant regional or localized air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts as required by CEQA. In such cases, appropriate mitigation could include, but would not be limited to:

- Use of Tier 4 equipment during project construction;
- Incorporation of energy-efficient design features beyond those required by Title 24 and the CALGreen Code; and
- Application of transportation demand measures (TDM) beyond those required by code.

Level of Significance After Mitigation

Construction activities associated with future development under the proposed GPU could generate short-term emissions that exceed the SCAQMD's significance thresholds and would cumulatively contribute to the nonattainment designations of the Basin. Implementation of **Mitigation Measures MM-AQ-1** and **MM-AQ-2** would reduce criteria air pollutant emissions from construction-related activities. However, since implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area and possibly future development projects that are larger than the representative projects considered in this analysis, it cannot be determined with certainty that **Mitigation Measures MM-AQ-1** and **MM-AQ-2** would reduce impacts below SCAQMD's thresholds in all cases. Therefore, construction impacts related to the increase of criteria pollutants for which the Basin is non-attainment are conservatively considered significant and unavoidable.

Similarly buildout of the proposed GPU would generate long-term emissions that may exceed SCAQMD's regional significance thresholds and cumulatively contribute to the non-attainment

designations of the Basin. **Mitigation Measure MM-AQ-2**, in addition to the consistency with the goals and policies of the proposed GPU, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks, installation of electric vehicle charging stations, and development and implementation of land use policies that promote public and active transit, would also reduce criteria air pollutants within the Planning Area. However, since implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area and possibly future development projects that are larger than the representative projects considered in this analysis, it cannot be determined with certainty that **Mitigation Measure MM-AQ-2** would reduce impacts below SCAQMD's thresholds in all cases. As a result, and given the total volume of air pollutants attributable to buildout of the proposed GPU, operational impacts related to the increase of criteria pollutants for which the Basin is non-attainment are conservatively considered significant and unavoidable.

Threshold 4.2(c): Would the Project expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised October 2009]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with development projects. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_x, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD monitors air quality at 37 monitoring stations throughout the Basin. Each monitoring station is located within a Source Receptor Area (SRA). The communities within an SRA are expected to have similar climatology and ambient air pollutant concentrations. The Planning Area is located within SRA 3 (Southwest Los Angeles County Coastal).

Construction

As described above, the proposed GPU does not include any planned demolition or development. Individual development projects within the Planning Area would occur in incremental phases over time. The phasing and exact details of each project would be evaluated on a case-by-case basis, and these individual projects would be required to analyze LSTs. Additionally, future development projects would be required to comply with all applicable SCAQMD rules and regulations, as well as other control measures to reduce construction emissions; refer to **Mitigation Measure MM-AQ-2**. However, since individual development projects could occur close to existing sensitive receptors, construction activities associated with proposed GPU would potentially expose sensitive receptors to substantial pollutant concentrations. Therefore, impacts would be potentially significant.

When considering the representative projects, localized construction emissions are presented in **Tables 4.2-14** through **4.2-16**. As shown therein, localized emissions resulting from the construction of each of the representative projects would not exceed the SCAQMD LST screening thresholds. Therefore, localized construction emissions resulting from each of the representative projects would be considered less than significant. However, future development projects that are larger than any of the representative projects could generate localized construction emissions exceeding the SCAQMD

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thresholds that may potentially expose sensitive receptors to substantial pollutant concentrations. As such, construction impacts from larger future development projects may result in significant air quality impacts.

Table 4.2-14
Small Scale Representative Project Localized Construction Emissions

Phase	Emissions (Pounds/Day) ^{a,c,d}			
	NO _x	CO	PM ₁₀	PM _{2.5}
LST Screening Threshold^a	91	664	5	3
CalEEMod Defaults Maximum Daily Emissions (on-site) ^{b,c}	12.00	7.47	4.31	1.48
Threshold Exceeded?	No	No	No	No
Representative Project Maximum Daily Emissions (on-site) ^{b,c,d}	12.00	7.47	4.31	1.45
Threshold Exceeded?	No	No	No	No

Notes:

^a The LST Screening Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO_x, CO, PM₁₀, and PM_{2.5}. The LST Screening Threshold was based on the anticipated daily acreage disturbance for construction (approximately one acre per day; therefore, the threshold for one acre was used), distance to the nearest sensitive receptor (as a conservative analysis, 25-meter is used), and Source Receptor Area 3 (Southwest Coastal LA County).

^b The Grading phase emissions during Year 1 present the worst-case scenario for NO_x and PM_{2.5}, the demolition phase emissions during Year 1 present the worst-case scenario for CO and PM₁₀.

^c Modeling assumptions include compliance with SCAQMD Rule 403 which requires properly maintaining mobile and other construction equipment; replacing ground cover in disturbed areas quickly; watering exposed surfaces three times daily; covering stock piles with tarps; watering all haul roads twice daily; and limiting speeds on unpaved roads to 15 miles per hour.

^d A small scale representative project modified the grading duration from default (two days) to five days.

Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

Table 4.2-15
Medium Scale Representative Project Localized Construction Emissions

Phase	Emissions (Pounds/Day) ^{a,c,d}			
	NO _x	CO	PM ₁₀	PM _{2.5}
LST Screening Threshold^a	91	664	5	3
CalEEMod Defaults Maximum Daily Emissions (on-site) ^{b,c}	16.98	14.35	6.8	2.05
Threshold Exceeded?	No	No	No	No
Representative Project Maximum Daily Emissions (on-site) ^{b,c,d}	16.98	14.35	4.97	1.98
Threshold Exceeded?	No	No	No	No

Notes:

^a The LST Screening Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO_x, CO, PM₁₀, and PM_{2.5}. The LST Screening Threshold was based on the anticipated daily acreage disturbance for construction (approximately one acre per day; therefore, the threshold for one acre was used), distance to the nearest sensitive receptor (as a conservative analysis, 25-meter is used), and Source Receptor Area 3 (Southwest Coastal LA County).

^b The Grading phase emissions during Year 1 present the worst-case scenario for NO_x and PM_{2.5}, the demolition phase emissions during Year 1 present the worst-case scenario for PM₁₀, and the Building Construction emissions during Year 1 present the worst-case scenario for CO.

^c Modeling assumptions include compliance with SCAQMD Rule 403 which requires properly maintaining mobile and other construction equipment; replacing ground cover in disturbed areas quickly; watering exposed surfaces three times daily; covering stock piles with tarps; watering all haul roads twice daily; and limiting speeds on unpaved roads to 15 miles per hour.

^d A medium scale representative project modified the demolition phase duration from default (20 days) to 29 days, grading phase duration from default (6 days) to 26 days, and architectural coating phase duration from default (10 days) to 12 days.

Refer to **Appendix C** of this PEIR for assumptions used in this analysis.
Source: Michael Baker International, 2021.

**Table 4.2-16
Hotel Representative Project Localized Construction Emissions**

Phase	Emissions (Pounds/Day) ^{a,c,d}			
	NO _x	CO	PM ₁₀	PM _{2.5}
LST Screening Threshold^a	91	664	5	3
CalEEMod Defaults Maximum Daily Emissions (on-site) ^{b,c}	16.98	14.35	6.80	1.95
Threshold Exceeded?	No	No	No	No
Representative Project Maximum Daily Emissions (on-site) ^{b,c,d}	16.98	14.35	4.95	1.98
Threshold Exceeded?	No	No	No	No
Notes:				
^a The LST Screening Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO _x , CO, PM ₁₀ , and PM _{2.5} . The LST Screening Threshold was based on the anticipated daily acreage disturbance for construction (approximately one acre per day; therefore, the threshold for one acre was used), distance to the nearest sensitive receptor (as a conservative analysis, 25-meter is used), and Source Receptor Area 3 (Southwest Coastal LA County).				
^b The Grading phase emissions during Year 1 present the worst-case scenario for NO _x and PM _{2.5} , the demolition phase emissions during Year 1 present the worst-case scenario for PM ₁₀ , and the Building Construction emissions during Year 1 present the worst-case scenario for CO.				
^c Modeling assumptions include compliance with SCAQMD Rule 403 which requires properly maintaining mobile and other construction equipment; replacing ground cover in disturbed areas quickly; watering exposed surfaces three times daily; covering stock piles with tarps; watering all haul roads twice daily; and limiting speeds on unpaved roads to 15 miles per hour.				
^d A hotel representative project modified the demolition phase duration from default (20 days) to 29 days, grading phase duration from default (6 days) to 26 days, and architectural coating phase duration from default (10 days) to 12 days.				
Refer to Appendix C of this PEIR for assumptions used in this analysis.				
Source: Michael Baker International, 2021.				

Operational

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). No industrial uses currently exist or are planned in the Planning Area. Therefore, operational LSTs would not apply to the developments associated with the proposed GPU. As such, the impacts would be less than significant.

Localized Air Quality Health Impacts

Construction

The construction activities induced by the proposed GPU are anticipated to involve the operation of diesel-powered equipment, which would emit Diesel Particulate Matter (DPM). In 1998, the CARB identified diesel exhaust as a Toxic Air Contaminant (TAC). Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. Construction of the individual development projects within the Planning Area would be required to comply with the California Code Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from the construction of the development projects under the proposed GPU.

There are sensitive receptors located in the Planning Area. However, health impacts on sensitive receptors associated with exposure to DPM from construction of developments projects associated with the proposed GPU are anticipated to be less than significant because construction activities of

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individual development projects are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction activities associated with the proposed GPU are not anticipated to result in an elevated cancer or other health risk to nearby sensitive receptors and the impact would be less than significant.

Operations

The proposed GPU would involve new developments including residential uses, offices, retail, and restaurants that would result in very limited operational activities with potential health risks, including landscaping maintenance operations and boilers for restaurants. None of these activities would result in the generation of excessive TAC emissions, or associated health risks from the individual development projects' operation. Therefore, operation associated with the proposed GPU is not anticipated to result in an elevated cancer or other health risk to nearby sensitive receptors and the impact would be less than significant.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels (i.e., adversely affect residents, school children, hospital patients, the elderly, etc.). To identify CO hotspots, the SCAQMD requires a CO microscale hotspot analysis when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization) by 0.02 (two percent) for any intersection with an existing level of service (LOS) D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersection locations. However, projected intersection capacity/queuing analyses are unknown, as no specific development proposals have been identified.

The Basin is designated as an attainment area for State and federal CO standards. There has been a decline in CO emissions even though VMT on U.S. urban and rural roads have increased. On-road mobile source CO emissions have declined 24 percent between 1989 and 1998, despite a 23 percent rise in motor VMT over the same 10 years. California trends have been consistent with national trends; CO emissions declined 20 percent in California from 1985 through 1997, while VMT increased 18 percent in the 1990s. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A detailed CO analysis was conducted in the Federal Attainment Plan for Carbon Monoxide (CO Plan) for the SCAQMD's 2003 Air Quality Management Plan. The locations selected for microscale modeling in the CO Plan are worst-case intersections in the Basin and would likely experience the highest CO concentrations. Of these locations, the Wilshire Boulevard/Veteran Avenue intersection experienced the highest CO concentration (4.6 ppm), which is well below the 35-ppm 1-hr CO Federal standard. The Wilshire Boulevard/Veteran Avenue intersection is one of the most congested intersections in southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection (100,000 ADT), it can be reasonably inferred that CO hotspots would not be experienced at any locations within the City as the highest anticipated volume of traffic in the City during the planning period would be 33,727 ADT on Palos Verdes

Drive North west of Strawberry Lane; refer to Section 4.15, Transportation, of this PEIR. Therefore, impacts would be less than significant in this regard.

Mitigation Measures

Please refer to **Mitigation Measures MM-AQ-1 and MM-AQ-2** above.

Level of Significance After Mitigation

Construction activities associated with future development under the proposed GPU could generate short-term emissions that may cause localized air quality impacts. Implementation of **Mitigation Measures MM-AQ-1** through **MM-AQ-3** would reduce criteria air pollutant emissions from construction-related activities and the associated localized impacts. However, since construction activities could occur close to existing sensitive receptors, construction emissions generated by future development projects that are larger than the representative projects considered in this analysis have the potential to exceed SCAQMD LSTs and it cannot be determined with certainty that **Mitigation Measures MM-AQ-1 and MM-AQ-2** would reduce impacts below SCAQMD's thresholds in all cases. Therefore, the impacts are conservatively considered significant and unavoidable.

4.2.2.4 CUMULATIVE IMPACTS

Impact Analysis

Cumulative Consistency with Applicable Air Quality Plan

The proposed GPU would be consistent with the SCAQMD and SCAG's goals and policies (refer to **Tables 4.8-1** and **4.8-2** in Section 4.8, Land Use and Planning, of this PEIR). The proposed GPU would include growth projections that are not currently included in the 2016 AQMP and therefore is inconsistent with the 2016 AQMP. As such, impacts associated with the proposed GPU in this regard would be cumulatively considerable. Cumulative impacts would be significant and unavoidable.

Cumulative Short-term Construction Emissions

The geographic context for air quality impacts for the Planning Area is SRA 3 (Southwest Coastal Los Angeles County) of the Basin. The analysis accounts for all anticipated cumulative growth within this geographic area. However, the significance of cumulative air quality impacts is typically determined according to the project methodology employed by the SCAQMD, as the regional body with authority in this area, which has taken regional growth projections into consideration.

SCAQMD thresholds for criteria pollutants are established for individual development projects, and it is assumed that some of the projects that would be implemented under the proposed GPU could individually exceed the SCAQMD thresholds. Based on the programmatic-level construction analysis above, construction-related emissions associated with future development projects in the Planning Area and surrounding cities may be "cumulatively considerable." Construction of future development projects under the proposed GPU would be required to comply with the applicable SCAQMD rules and regulations. However, due to the unknown nature of project-specific development under the proposed GPU at this time, construction emissions associated with future development projects that are larger than the representative projects considered in this analysis could potentially exceed SCAQMD thresholds. Therefore, this cumulative impact is considered to be significant and unavoidable.

4.2 AIR QUALITY

Cumulative Long-term Mobile and Stationary Source Emissions

With regard to daily operational emissions and the cumulative net increase of any criteria pollutant for which the region is nonattainment, this is considered to be a potentially significant cumulative impact, due to nonattainment of O₃ and PM₁₀, and PM_{2.5} standards in the Basin. Emissions inventories for the Planning Area in 2040 are presented in **Table 4.2-8** and **Table 4.2-9**. The inventories include the existing emissions within the Planning Area, as well as emissions associated with the anticipated future development. As a result, **Table 4.2-8** and **Table 4.2-9** represent the cumulative conditions within the Planning Area for 2040. Regarding the contribution of future development under the proposed GPU, the SCAQMD has recommended methods to determine the cumulative significance of new land use projects. The SCAQMD's methods are based on performance standards and emission reduction targets necessary to attain Federal and State air quality standards as predicted in the 2016 AQMP. As previously discussed, the contribution of daily operational emissions from future development projects that are larger than the representative projects considered in this analysis could be cumulatively considerable and, thus, are considered to be significant and unavoidable.

Cumulative Carbon Monoxide Hotspots

Cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations, such as CO hotspots. Thus, this is considered to be a less-than-significant cumulative impact. Future ambient CO concentrations resulting from the proposed GPU would be substantially below federal and State standards. These future concentrations consider cumulative development that would occur in SRA 3 (Southwest Coastal Los Angeles County). Therefore, the contribution of future development under the proposed GPU would not be cumulatively considerable, and the cumulative impact would be less than significant.

Cumulative Localized Air Quality Impacts

Cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations, such as TACs. Thus, this is considered to be a less than significant cumulative impact. In addition, no industrial uses that would potentially generate substantial pollutant concentrations currently exist or are planned in the Planning Area. Therefore, the contribution of future development under the proposed GPU would not be cumulatively considerable, and the cumulative impact would be less than significant.

Mitigation Measures

Please refer to **Mitigation Measures MM-AQ-1 and MM-AQ-2** above.

Level of Significance After Mitigation

Air emissions generated during construction of future potential development projects in the Planning Area and surrounding cities may be cumulatively considerable. Emissions from operations of future development associated with implementation of the proposed GPU would potentially exceed the SCAQMD thresholds for criteria pollutants, resulting in a significant impact. In accordance with SCAQMD methodology, any project emissions that cannot be mitigated to less-than-significant levels are also significant on a cumulative basis. Therefore, air quality impacts associated with the buildout of the proposed GPU could be cumulatively considerable, and, thus, are considered to be significant and unavoidable.

4.3 BIOLOGICAL RESOURCES

This section of the PEIR discusses the potential biological resource impacts associated with the implementation of the proposed GPU. This section includes a discussion of the biological characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation, such as major plant communities, wildlife occurrence, and wildlife movement.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A**), this section of the Draft EIR evaluates the potential for implementation of the proposed GPU to have a substantial adverse effect, either directly or indirectly, on special-status species, riparian habitats, federally protected wetlands, and the movement of native resident or migratory fish or wildlife. This section also discusses whether implementation of the proposed GPU would conflict with any local policies or ordinances protecting biological resources or conflict with provisions of an adopted habitat conservation plan or other approved local, regional, or state habitat conservation plan.

4.3.1 ENVIRONMENTAL SETTING

4.3.1.1 REGULATORY FRAMEWORK

FEDERAL

Endangered Species Act and Critical Habitat

Administered by the United States Fish and Wildlife Service (USFWS), the Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Sections 4(d), 7, and 10(a) of the ESA regulate actions that could jeopardize endangered or threatened species. Section 4(d) rules are applied by the USFWS to incentivize proactive conservation efforts with long-term benefits through streamlining ESA compliance efforts, and to target the "take" prohibitions for actions that result in low levels of take but do not contribute to the threats facing a species' continued existence. A Section 7 consultation is required when there is a nexus between federally listed species' use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for "incidental" take of endangered or threatened species. The term "incidental" applies if the taking of a listed species is incidental to and not the purpose of an otherwise lawful activity.

Critical habitat is the geographic area occupied by a threatened or endangered species essential to species conservation that may require special management considerations or protection. Critical habitat also may include specific areas not occupied by the species but that have been determined to be essential for species conservation. According to the Federal Registry for Critical Habitat, as of December 2007, the coastal California gnatcatcher critical habitat is generally located throughout the western portion of the Planning Area and in portions of surrounding communities to the west and south. A small section of coastal California gnatcatcher critical habitat is identified north of Chaparral Lane in the southeast corner of the Planning Area. Approximately 0.1 mile west of the City's boundary is the Palos Verdes blue butterfly critical habitat, located west of Hawthorne Boulevard in the Hesse Community Park in the City of Rancho Palos Verdes.

4.3 BIOLOGICAL RESOURCES

Clean Water Act

Permitting for projects filling waters of the U.S., including wetlands and vernal pools, is overseen by U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. Projects may be permitted on an individual basis or may be covered under one of several approved Nationwide Permits. Individual Permits are assessed based on the type of action, amount of fill, etc. and typically require substantial time to review and approve by the USACE.

Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act, as amended under the Migratory Bird Treaty Reform Act of 2004. In common practice, the Migratory Bird Treaty Act is used to place restrictions on disturbance of active bird nests during the nesting season, which is generally defined as February 15 to August 31 for songbirds. Further, the USFWS commonly places restrictions on disturbances allowed near active raptor nests during the nesting season, which is generally defined as January 15 to August 31.

STATE

California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the CESA authorizes the California Department of Fish and Wildlife (CDFW) to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes. The golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*) are considered State Fully Protected (SFP) species and may not be taken or possessed at any time. The Native Plant Protection Act enacted a process by which plants are listed as rare or endangered and regulates the collection, transport, and commerce of such plants. Plants listed as rare under this act are designated threatened under the CESA.

California Fish and Game Code

Section 3503.5 of the California Fish and Game Code protects raptors and owls and their active nests, stating that it is unlawful to take, possess, or destroy any birds of prey or to take or destroy the nest or eggs of any such bird without authorization by the CDFW. Section 1600 of the Fish and Game Code states that projects affecting riparian and/or wetland habitats must enter into a Streambed Alteration Agreement with the CDFW.

State Water Resources Control Board

There are three agencies that regulate activities within streams, wetlands, and riparian areas in California. Regulations enforced by the USACE and the CDFW related to activities in riparian habitat and streams are described above. The third agency that regulates activities within streams and wetlands in California is the State Water Resources Control Board. Specifically, the Planning Area is within the jurisdiction of the Los Angeles Regional Water Quality Control Board, which regulates discharges to surface waters pursuant to Section 401 of the Clean Water Act and Section 13263 of the California Porter-Cologne Water Quality Control Act. A Clean Water Act Section 401 Water Quality Certification must be issued prior to issuance of any Section 404 permit by the USACE.

LOCAL

The current (1992) Rolling Hills Estates General Plan Conservation Element (Conservation Element) has several goals and policies that directly address protection of native plant and animal life. These applicable goals and policies are included below.

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

Policy 1.1: Maintain the natural canyons and hillside areas for passive open space and/or for incorporation into the Citywide trails system.

Policy 1.2: Encourage planting of native drought tolerant plant species to minimize erosion and to provide habitats for wildlife while being sensitive to the wildfire hazard.

Policy 1.9: Ensure that the long-term protection of the environment shall be a primary consideration in approving development projects. Require all future construction projects, both public and private, to mitigate their potential environmental impacts through the environmental review process.

Goal 2: Preserve local plant and animal life and their habitats in the Peninsula.

Policy 2.1: Strive to protect the remaining wildlife population of the area and prevent the destruction of the remaining natural habitats.

Policy 2.2: Preserve the existing vegetation in the open space corridors in its natural state while being sensitive to fire protection policies.

Policy 2.3: Encourage the re-establishment of appropriate native plants by requiring developments to prepare landscape plans that promote the preservation, protection, and enhancement of vegetation, wildlife and natural habitats.

Policy 2.4: Implement the General Plan guidelines for the restoration of habitats for sensitive and/or endangered species.

Goal 6: Minimize grading and significant changes in the natural topography and grading activities should be designed to preserve the unique and significant cultural and biologic features to maintain the identity, image and environmental qualities of the City.

Policy 6.3: Preserve natural land forms, vegetation, and wildlife by requiring more stringent regulations for the development and alteration of slopes greater than 2 to 1.

The Conservation Element includes an Ecological Resource Overlay Zone, which applies to portions of the City where highly sensitive ecological habitats are located. The identified Ecological Resource Areas include open space areas, such as Highridge Park, Ernie Howlett Park, and the George F. Canyon Preserve, as well as sloped areas that would not support development, such as the hillside on the south side of Indian Peak Road between Hawthorne Boulevard and Norris Center Drive.

4.3 BIOLOGICAL RESOURCES

4.3.1.2 EXISTING CONDITIONS

The Planning Area is primarily developed with suburban development arranged within and atop natural hills and interlaced with canyon and other open space areas. The most common wildlife species that occur within the Planning Area include mourning dove, spotted dove, house finch or linnnet, hummingbirds, striped skunk, cottontail rabbit, jack rabbit, opossum, pocket gopher, grey fox, red fox, coyote, frog, California king snake, foothill alligator lizard, California slender salamander, and western fence lizard.¹ Other species, such as the cactus wren, may occur within the Planning Area; however, these species require specialized habitats that are not naturally occurring within the Planning Area and may only be found in landscaped gardens. As such, species like the cactus wren are unlikely to be found in the Planning Area. Additionally, several bat species may occur within the Planning Area, roosting in mature trees, buildings, and cliffs within the Planning Area. While most bat species that can occur within Los Angeles County are common, such as the Mexican free-tailed bat, big brown bat, and California myotis, the pocketed free-tailed bat may also be present within the Planning Area.² None of these bats are considered endangered or threatened by the CDFW or USFWS; however, the pocketed free-tailed bat is considered a species of special concern by CDFW. The Planning Area is also home to special status species, USFWS-identified critical habitat, various vegetation communities, and wetland habitats. The following paragraphs provide details regarding these resources within the Planning Area, including the quality and the general locations of these resources:

SPECIAL STATUS SPECIES

Special-status species include plants and animals that, because of their acknowledged rarity or vulnerability to various causes of habitat loss or population decline, are recognized in some fashion by federal, State, or other agencies as deserving special consideration. The Habitat Conservation Division (HCD) of the CDFW maintains the California Natural Diversity Database (CNDDDB). The CNDDDB is used to gather and disseminate data on the status and locations of rare and endangered plants, animals, and vegetation types. In addition to the CNDDDB, the USFWS maintains their own dataset for species occurrence. According to the CDFW and the USFWS, special-status species that have occurred in the Planning Area include the Palos Verdes blue butterfly, two avian species (coastal California gnatcatcher and least Bell's vireo), as well as two plant species (aphanisma and mesa horkelia). The federal- and State-designated conservation status of these species, and their general location, are shown in **Table 4.3-1** and **Figure 4.3-1**.

In general, the two special-status plant species have occurred in the southwestern portion of the Planning Area, along with the coastal California gnatcatcher occurrence areas, as shown in **Figure 4.3-1**. According to these federal and State databases, least Bell's vireo has occurred in an area between Crenshaw Boulevard and Rolling Hills Road north of Palos Verdes Drive North in the South Coast Botanical Garden. Finally, the Palos Verdes blue butterfly has been observed north of Palos Verdes Drive North and east of Rolling Hills Road near the Linden H. Chandler Preserve.

¹ Dyett and Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

² Natural History Museum of Los Angeles County, Backyard Bats, website, <https://nhm.org/community-science-nhm/backyard-bats>, accessed September 21, 2021.

**Table 4.3-1
Special-Status Species in the Planning Area**

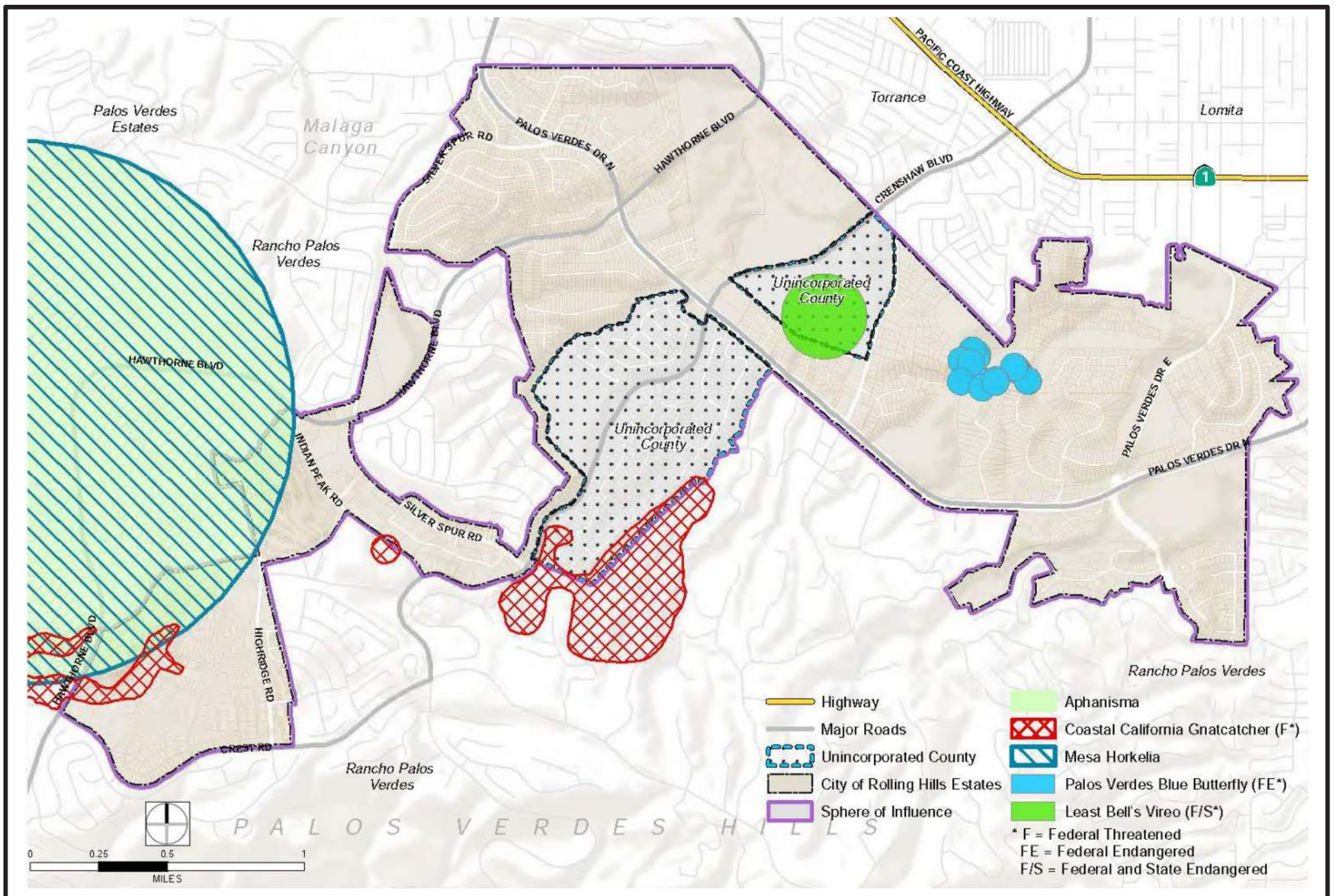
Common Name	Scientific Name	Federal Listing	State Listing
U. S. Fish and Wildlife Service			
<i>Animal Species</i>			
Palos Verdes blue butterfly	<i>Glaucopsyche lygdamus palosverdesensis</i>	Endangered	None
Coastal California gnatcatcher	<i>Polioptila californica</i>	Threatened	None
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Endangered	Endangered
California Department of Fish and Wildlife			
<i>Animal Species</i>			
Coastal California gnatcatcher	<i>Polioptila californica</i>	Threatened	None
<i>Plant Species</i>			
Mesa horkelia	<i>Horkelia ceneata ssp. puberula</i>	None	None
Aphanisma	<i>Aphanisma blitoides</i>	None	None
<i>Note: This does not represent an exhaustive list of special-status species that may occur in the Planning Area. Rather, this table represents a list of species that have occurred in the Planning Area, as identified by the USFWS and the CDFW in the CNDDB.</i>			
Source: USFWS, Environmental Conservation Online System, 2018.			

CRITICAL HABITAT

Critical habitat is the specific area within the geographic area that contains the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. The Planning Area includes critical habitat for coastal California gnatcatcher, which was designated by the USFWS in December 2007 and is generally located in the western portion of the Planning Area, as well as small sections of the area north of Chaparral Lane in the southeastern corner of the Planning Area and west of Ernie Howlett Park on the north side of the Planning Area. Additionally, the cities surrounding the Planning Area include coastal California gnatcatcher critical habitat, such as Rolling Hills, Palos Verdes Estates, and Rancho Palos Verdes. Critical habitat is shown in **Figure 4.3-2**. Critical habitat for the Palos Verdes blue butterfly, designated by the USFWS in 1980, is located west of the Planning Area in Hesse Community Park (City of Rancho Palos Verdes) and in a portion of the Agua Amarga Reserve (City of Palos Verdes Estates).

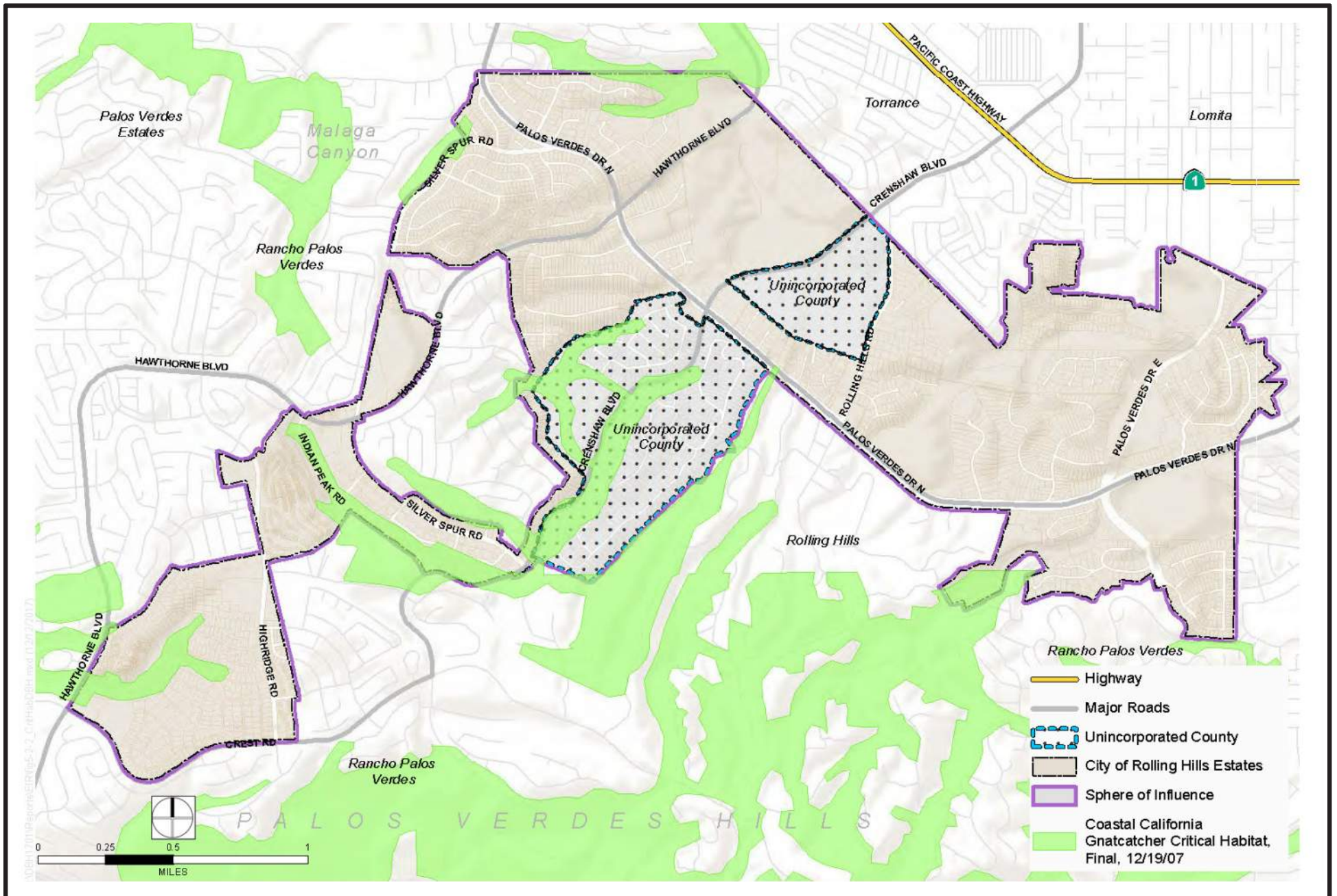
VEGETATION COMMUNITIES

While the majority of the Planning Area is urbanized, there are a number of vegetation communities that exist within the Planning Area. According to the U.S. Department of Agriculture, the Planning Area includes annual grassland, barren, coastal oak woodland, coastal scrub, and mixed chaparral vegetation habitats. **Table 4.3-2** includes a list of vegetation communities, as well as their approximate area. As shown in table, the vast majority of the Planning Area (approximately 82 percent) is characterized by urban land cover, with annual grassland (approximately 7.7 percent) and mixed chaparral (approximately 3.3 percent) representing the next two most common land vegetation community types.



Source: Dyett and Bhatia, 2018

FIGURE 4.3-1
Species Occurrences



Source: Dyett and Bhatia, 2018

FIGURE 4.3-2
Critical Habitat

4.3 BIOLOGICAL RESOURCES

**Table 4.3-2
Vegetation Communities**

Vegetation Type	Acres	Percent of City
Annual Grassland	212.3	7.7%
Barren	68.2	2.5%
Coastal Oak Woodland	38.6	1.4%
Coastal Scrub	88.5	3.2%
Mixed Chaparral	89.9	3.3%
Urban	2,245.5	81.9%
Total	2,742.9	100%

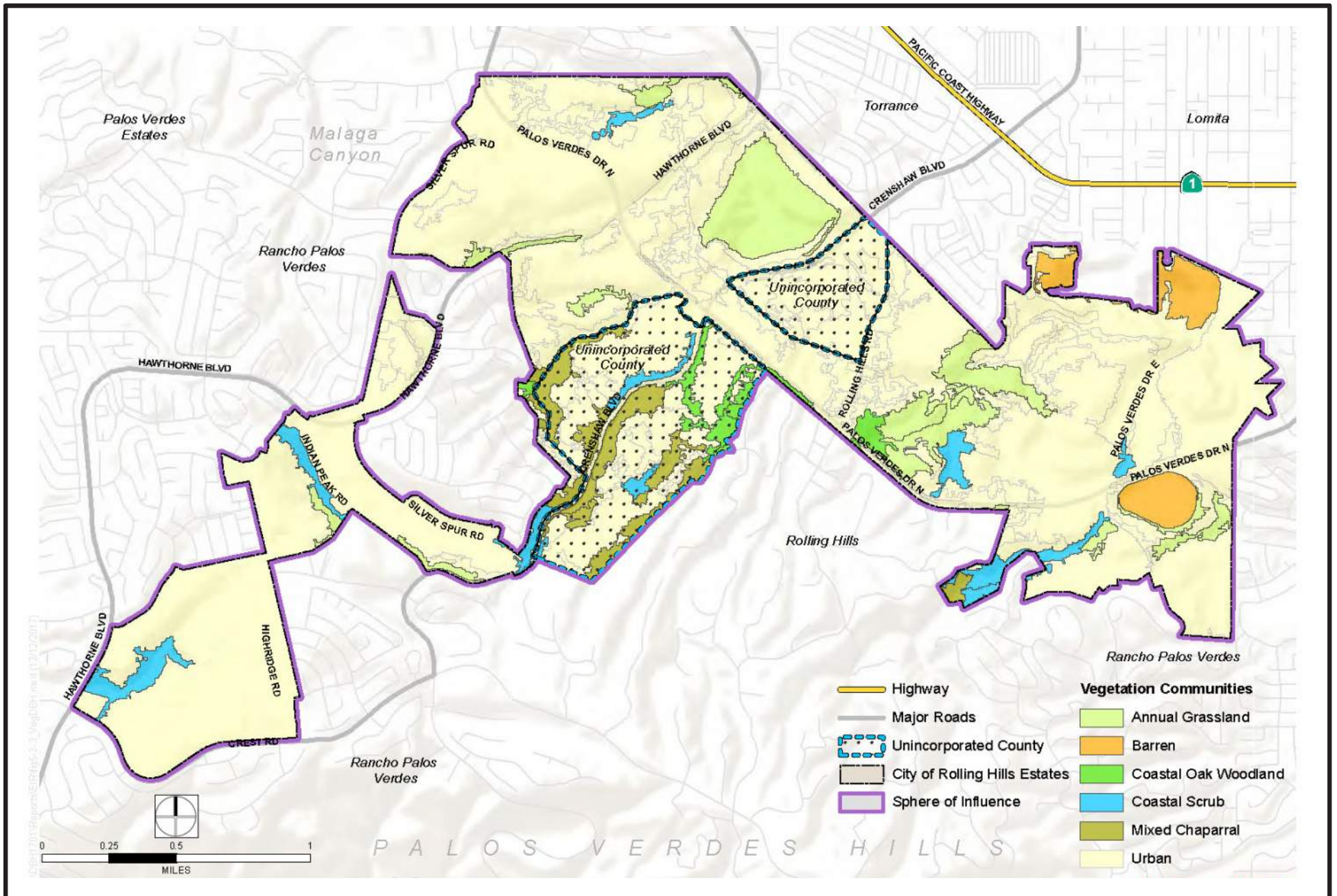
Source: LSA Associates, GIS Data, September 2017.

Annual Grasslands

Annual grassland habitats are open grasslands, comprising of primarily annual plant species. Annual grassland habitat has been described as Valley Grassland, Valley and Foothill Grassland, California Prairie, Annual Grassland Series, and Annual Grass-Forb series. Species composition is greatly influenced by seasonal and annual fluctuations in weather patterns. Annual plants grow slowly during winter months and more rapidly during spring season. Annual grassland habitat is found just above or surrounding Valley Riparian (VRI), Alkali Desert Scrub (ASC), Fresh Emergent Wetland (FEW), Pasture (PAS) and all agricultural habitat types, and below Valley Oak Woodland (VOW), Blue Oak Woodland (BOW), Blue Oak-Foothill Pine (BOP), Chamise-Redshank (CRC), and Mixed Chaparral (MCH) habitats. Annual grasslands also borders Coast Oak Woodland (COW), and Coastal Scrub (CSC). Many species of wildlife use annual grasslands for foraging, but some species require special habitat features, such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Animals found in this habitat include common garter snake, western fence lizard, western rattlesnake, California ground squirrel, and coyote. As shown in **Figure 4.3-3**, annual grassland habitats are mostly found in the northern and eastern portions of the Planning Area, with large concentrations of this vegetative community on the former Palos Verdes Landfill site between Crenshaw Boulevard and Hawthorne Boulevard and near Dapplegray Elementary School.

Barren Land

Barren land is defined by the absence of vegetation with less than 2 percent total vegetation cover by herbaceous, desert, or non-wildland species and less than 10 percent cover by tree or shrub. Barren lands include rocky outcroppings, open sandy beaches, vertical river banks and canyon walls. Urban settings covered in pavement and buildings may be classified as barren land as long as vegetation does not reach the percentage cover threshold. As shown in **Figure 4.3-3**, barren land is concentrated in the eastern portion of the Planning Area, mostly consisting of the reservoir located on the southeastern corner of the Palos Verdes Drive East and Palos Verdes Drive North intersection, as well as barren land located near the Planning Area's northeastern boundary with the City of Lomita (the Rolling Hills Country Club area).



Source: Dyett and Bhatia, 2018

FIGURE 4.3-3
Vegetation Communities

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Coastal Oak Woodland

Coastal oak woodland consists of deciduous and evergreen hardwoods, with a height of 15 to 70 feet. In areas with wet soils, the trees are dense and form a closed canopy while in dryer areas, the trees are widely spaced. These trees are used by many species of mammals and birds. As shown in **Figure 4.3-3**, a very small portion of the Planning Area is characterized as coastal oak woodland. This vegetation community is located north of Palos Verdes Drive North to the east of Rolling Hills Road and south of Palos Verdes Drive North between Crenshaw Boulevard and the eastern boundary of the Planning Area adjacent to the City of Rolling Hills.

Coastal Scrub

Coastal scrub is characterized by low to moderate-sized shrubs with flexible branches, semi-woody stems, and a shallow root system. These plants can range up to 7 feet tall with canopy cover usually around 100 percent. As shown in **Figure 4.3-3**, small communities of coastal scrub habitat are sporadically located throughout the Planning Area. Coastal scrub habitat is located on the steep hillsides and canyons on the west side of the Planning Area (along Indian Peak Road and in the canyon to the northeast of the intersection of Hawthorne Boulevard and Crest Road), in the center of the Planning Area along Crenshaw Boulevard, on the north side of the Planning Area (west of Ernie Howlett Park), and on the eastern portion of the Planning Area (the George F. Canyon Nature Preserve).

Mixed Chaparral

Mixed chaparral is a structurally homogeneous brushland type dominated by shrubs with thick, stiff, heavily cutinized evergreen leaves. Shrub height and crown cover vary considerably based on the type of soil, precipitation patterns, and the date of the last wildfire. Canopy height ranges from 3 to 13 feet and occasionally 19 feet. Mixed chaparral is a floristically rich type of habitat that supports approximately 240 different species of woody plants. As shown in **Figure 4.3-3**, the mixed chaparral vegetation community is limited to a small portion of the George F. Canyon Nature Preserve on the east side of the Planning Area, as well as areas along Crenshaw Boulevard in the center of the Planning Area.

Urban

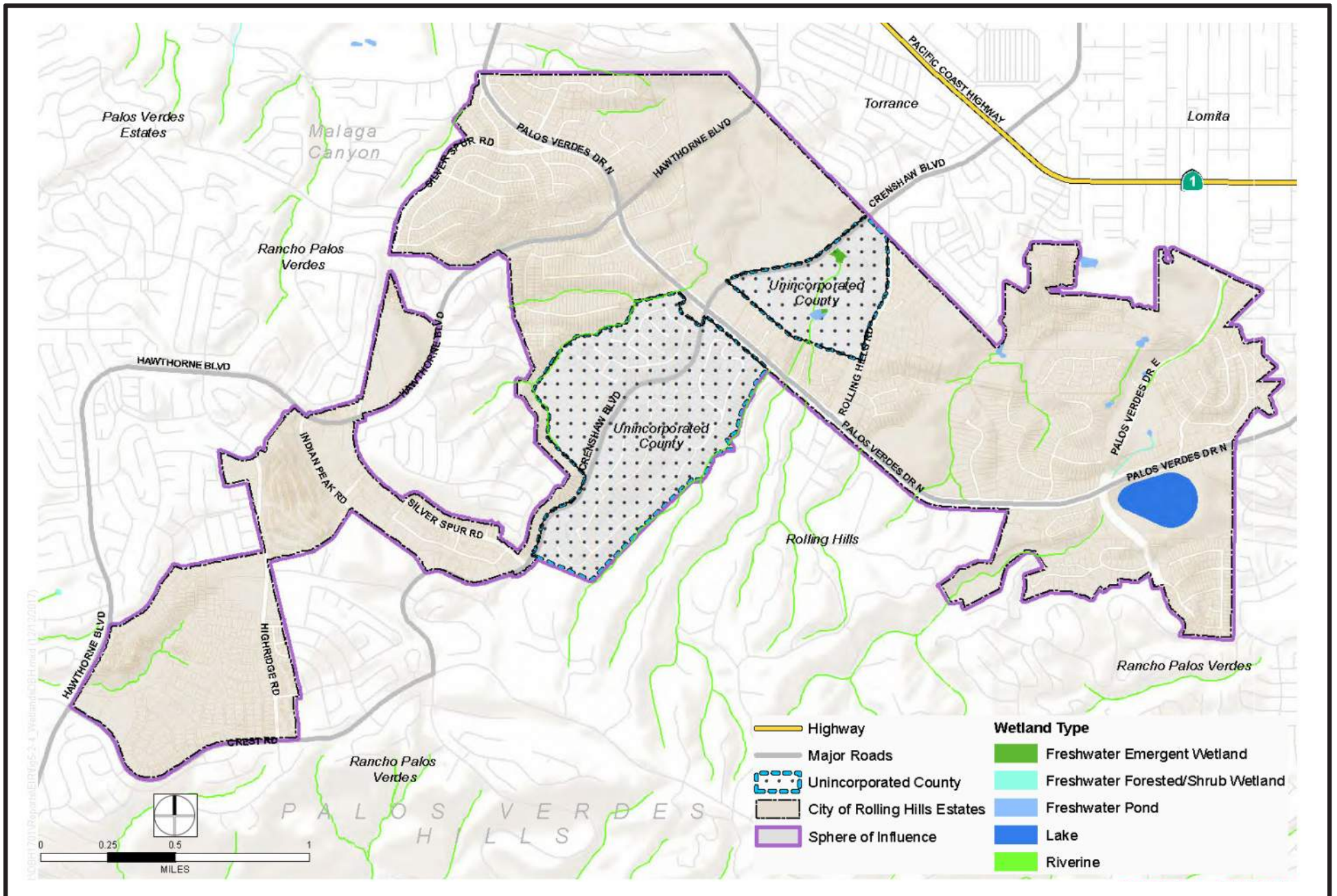
The urban vegetation community includes impervious surfaces and development, as well as managed landscaping, such as tree groves, lawns, gardens, and shrub cover. As shown in **Figure 4.3-3**, this vegetation community makes up the majority of the Planning Area.

WETLANDS

According to the USFWS National Wetlands Inventory, there are five different types of wetlands located throughout the Planning Area, including freshwater emergent wetland, freshwater forested/shrub wetland, freshwater pond, lake, and riverine. These wetland types, as well as their location within the Planning Area, are discussed below and displayed in **Figure 4.3-4**.

Freshwater Emergent Wetland

The freshwater emergent wetland is characterized by erect, rooted herbaceous hydrophytes and are frequently flooded to the point that the roots of the vegetation prosper in an anaerobic



Source: Dyett and Bhatia, 2018

FIGURE 4.3-4
Wetlands

4.3 BIOLOGICAL RESOURCES

environment (i.e., an environment lacking in oxygen).³ Freshwater emergent wetland habitats occur on virtually all exposures of slopes, provided that a basin or depression is saturated or at least periodically flooded. However, they are most common on level to gently rolling topography. As shown in **Figure 4.3-4**, freshwater emergent wetland is limited to a small portion of the South Coast Botanic Garden.

Freshwater Forest/Shrub Wetland

Freshwater forest/shrub wetlands are generally located in the central and eastern portions of the Planning Area, between canyons. As shown in **Figure 4.3-4**, a freshwater forest/shrub wetland is located north and west of the Palos Verdes Reservoir, traveling under the intersection of Palos Verdes Drive North and Palos Verdes Drive East toward the George F. Canyon Nature Reserve. Once in this reserve, this freshwater forest/shrub wetland turns into a riverine feature, which follows the canyon to the southwest into the Cities of Rancho Palos Verdes and Rolling Hills.

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Freshwater Pond

A freshwater pond is a body of standing water, either natural or artificial and is usually smaller than a lake. During extended periods of dry conditions, these ponds may temporarily dry up. As shown in **Figure 4.3-4**, freshwater ponds that vary in size are located north of the Palos Verdes Reservoir on the east side of the Planning Area. Additionally, the National Wetlands Inventory shows that a small pond is located in the South Coast Botanic Garden; however, this pond is man-made and is currently dry.

Lake

A lake is an area of variable size that is filled with water, localized in a basin that is surrounded by land and apart from any river or other outlet that serves to feed or drain the lake. As shown in **Figure 4.3-4**, there is only one lake located within the Planning Area, the Palos Verdes Reservoir, which is located at the southeastern corner of the intersection of Palos Verdes Drive North and Palos Verdes Drive East on the east side of the Planning Area.

Riverine

A riverine wetland feature is a large natural stream of water flowing in a channel to the sea, a lake, or another such stream. Within the Planning Area, riverine features are located at the bottom of canyons formed by the Planning Area's many ridgelines. As shown in **Figure 4.3-4**, riverine wetland features are located in the southwestern portion of the Planning Area, east of Hawthorne Boulevard and north of Crest Road; in the center of the Planning Area, south of Hawthorne Boulevard and west of Palos Verdes Drive North; in the northern portion of the Planning Area

³ City of Rolling Hills Estates, General Plan Background Report, 1992.

west of Hawthorne Boulevard and east of Palos Verdes Drive North; and in the eastern portion of the Planning Area, north of Palos Verdes Drive North and east of Rolling Hills Road. Additionally, riverine wetland features are located within the George F. Canyon reserve, within the South Coast Botanical Garden, as well as along the Planning Area's southern boundary with the City of Rolling Hills, south of the intersection of Palos Verdes Drive North and Crenshaw Boulevard. These riverine wetland areas comprise the only riparian habitat in the Planning Area.

SIGNIFICANT ECOLOGICAL AREAS

Significant Ecological Areas (SEAs) are officially designated areas within Los Angeles County identified as having irreplaceable biological resources. These areas represent the wide-ranging biodiversity of the County and contain some of the County's most important biological resources. Each individual SEA was configured to support sustainable populations of its component species, and includes undisturbed to lightly disturbed habitat along with linkages and corridors that promote species movement. The County-designated Palos Verdes Peninsula and Coastline SEA covers a portion of the Planning Area, including the canyon in the western portion of the Planning Area, east of Hawthorne Boulevard and north of Crest Road, as well as the George F. Canyon Preserve in the eastern portion of the Planning Area. Development within SEAs is subject to permitting requirements and development standards, such as stormwater standards requiring development in or directly adjacent to SEAs to comply with the municipal National Pollution Discharge Elimination System (NPDES) permit, as required by Section 8.38.070 of the City's Code of Ordinances.

LAND CONSERVATION WITHIN THE PLANNING AREA

The Planning Area includes open space areas that are preserved and managed by the Palos Verdes Land Conservancy (Conservancy). Founded in 1988, the Conservancy has preserved 1,600 acres of open space on the Palos Verdes Peninsula, within the Cities of Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and Los Angeles (the San Pedro community). The mission of the Conservancy is to preserve land and restore habitat for the education and enjoyment of all. Several of these open space areas managed by the Conservancy are located within and adjacent to the Planning Area, including the Linden H. Chandler Preserve, which the Conservancy has managed since 1994, and the George F. Canyon Nature Preserve, which the Conservancy provided naturalist services to beginning in 1995⁴. Currently, the Conservancy and the City of Rolling Hills Estates jointly operate the George F. Canyon Nature Center.⁵ Conservancy-managed lands that are located immediately adjacent to the Planning Area include the Vista del Norte Reserve in Rancho Palos Verdes, located south of Indian Peak Road on the south side of the Planning Area's Commercial District, as well as the Agua Amarga Reserve, which is located west of Hawthorne Boulevard and north of Crest Road across Hawthorne Boulevard from the canyon/open space area within the Planning Area that is identified as an SEA by the County of Los Angeles.

⁴ Palos Verdes Peninsula Land Conservancy, Timeline, February 2021.

⁵ City of Rolling Hills Estates, George F. Canyon Nature Center and Stein/Hale Nature Trail, <https://www.ci.rolling-hills-estates.ca.us/government/community-services/city-parks-facilities-trails/george-f-canyon-nature-center-stein-hale-nature-trail>, accessed June 3, 2021.

4.3 BIOLOGICAL RESOURCES

4.3.2 IMPACT ANALYSIS

4.3.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on biological resources based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact to biological resources is considered significant if implementation of the proposed GPU would:

Threshold 4.3(a): ***Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.***

Threshold 4.3(b): ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.***

Threshold 4.3(c): ***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.***

Threshold 4.3(d): ***Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.***

Threshold 4.3(e): ***Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.***

Threshold 4.3(f): ***Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.***

4.3.2.2 METHODOLOGY

Changes to biological resources due to implementation of the proposed GPU are identified and evaluated based on the potential modifications to the existing setting and the sensitivity of biological resources found in the Planning Area. The proposed GPU does not identify any specific development project. Accordingly, the following analysis is based on the potential reasonable "worst case" (i.e., most intense) development that would be allowed under the proposed GPU. The analysis below also identifies where the majority of development potential would exist and where there could be a related impact to biological resources as a result of the GPU.

4.3.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.3(a): ***Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

Impact Analysis

As shown in **Figure 2.5-2**, the majority of sites envisioned for potential intensification through buildout of the proposed GPU are located on underutilized parcels that are characterized with urban/suburban development, such as institutional uses (e.g., Palos Verdes Peninsula High School, Dapplegray Elementary School, and existing municipal and church properties) and commercial development (such as development within the City's Commercial District, and commercial office properties). By focusing development on institutional and commercial land uses and in the Commercial District, which includes the City's most intense land uses with subregional-serving commercial centers, office buildings, and residential buildings ranging in height from two to four stories, the proposed GPU would relieve development pressure on open space and low density areas where biological resources are more likely to occur. Further, the proposed GPU would not result in land use changes that convert open space to other development uses, as shown in **Figure 2.5-2**. There is one vacant residential lot located in the western portion of the Planning Area; however, the land use designation in the existing General Plan (Low Density Residential) would remain unchanged in the proposed GPU. The land use designation of the parcel located on the corner of Hawthorne Boulevard and Crest Road would change from Neighborhood Commercial to High Density Residential; however, as this parcel is currently characterized by high density residential development, this land use designation change would not represent a change in development patterns within the Planning Area.

As stated above, candidate, sensitive, or special status species that have occurred within the City of Rolling Hills Estates are limited to the Palos Verdes blue butterfly, two avian species (coastal California gnatcatcher and least Bell's vireo), and two plant species (aphanisma and mesa horkelia). As shown in **Figure 4.3-1**, these species occur on parcels located throughout the Planning Area. Mesa horkelia and aphanisma have been known to occur in the western portion of the Planning Area; coastal California gnatcatcher have been known to occur in open space areas in the western portion of the Planning Area, as well as outside the Planning Area in the Vista Del Norte Reserve south of Indian Peak Road and west of Crenshaw Boulevard and in the south-central portion of the Planning Area; least Bell's vireo have occurred in the vicinity of the South Coast Botanic Garden in the center of the Planning Area; and Palos Verdes Blue Butterfly have occurred in the area near the Linden H. Chandler Preserve in the eastern portion of the Planning Area.

In the western portion of the Planning Area, the proposed GPU would result in intensification of the parcel located on the south side of the intersection of Highridge Road and Via Granada. As shown in **Figure 4.3-1**, above, mesa horkelia and aphanisma have been known to occur in the vicinity of this parcel. While this parcel is currently fully developed with a series of low-rise office buildings, a surface parking lot, and managed landscaping, protected species, such as mesa horkelia and aphanisma, could be impacted directly or indirectly by buildout of the proposed GPU and intensification of the existing development on this parcel; however, presence of these species on this parcel is unlikely given the developed nature of the parcel. Similarly, encouraging growth in underutilized portions of the Commercial District may also have direct or indirect impacts on protected species, such as coastal California gnatcatcher, which have been known to occur on the south side of the Commercial District (see **Figure 4.3-1**), as well as on protected habitats, such as coastal California gnatcatcher critical habitat located on the steep slopes on the south side of the Commercial District (see **Figure 4.3-2**). Other locations where buildout of the proposed GPU could take place in areas with known biological resources include the parcel located on the northeast side of the intersection of Hawthorne Boulevard and Crest Road, portion of which includes coastal California gnatcatcher critical habitat, as well as

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land associated with Dapplegray Elementary School, which is immediately south of the Linden H. Chandler Preserve, which includes the only known occurrences of the endangered Palos Verdes Blue Butterfly in the Planning Area (see **Figure 4.3-1**).

In each of the above locations where buildout of the GPU would result in land use intensification, the parcels are already partially or fully developed with urban/suburban land uses. For example, the coastal California gnatcatcher critical habitat located in the southwest portion of the Planning Area, as well as on the south side of the Commercial District, predominantly includes steep hillsides and canyons that would not support development. Direct impacts of intensification of land uses within the Commercial District could result from loss of habitat temporarily, through grading or construction activities, or permanently through ongoing operation or maintenance of future development. Indirect impacts to coastal California gnatcatcher individuals or critical habitat could result from elevated dust or noise levels during construction, increased runoff or sedimentation during operation of future development, or from additional light pollution created by new development. Further, the proposed GPU includes additional open space in the southwest portion of the Planning Area, which includes existing open space that partially overlaps with USFWS-designated coastal California gnatcatcher critical habitat and the coastal scrub habitat identified in **Figure 4.3-3**. By removing development pressures from this open space area, the GPU would have a beneficial impact on biological resources. In short, buildout of the proposed GPU would be concentrated in previously developed areas, with no development expected in areas currently designated as open space by the City.

While buildout of the proposed GPU would be concentrated in previously developed areas, no specific development projects are proposed as part of the GPU. While the change in vegetative land cover and habitats supporting protected species would likely be extremely minimal, there may be isolated habitat disturbance associated with future buildout of the proposed GPU that could impact protected species or their habitat, such as the coastal California gnatcatcher in the western portion of the Planning Area or the Palos Verdes blue butterfly in the northern portion of the Planning Area. Such impacts to protected species and habitats would be reduced through implementation of goals and policies included within the proposed GPU. Such goals and policies, as included in the proposed General Plan Conservation Element, include those related to conserving the Planning Area's natural environment and open space areas and limiting grading and development in areas containing canyons and native vegetation. As stated above, the proposed GPU Conservation Element also includes a goal encouraging preservation of local plant and animal life and their habitats, with accompanying policies to preserve open space corridors in their natural state, encourage re-establishment of native plants, encourage development to prepare landscape plans promoting preservation of native plants, and prioritize restoration of habitats for protected species.

While the above-mentioned goals and policies in the proposed GPU would reduce impacts to biological resources associated with buildout of the GPU, future development may result in impacts to special status species and habitats, thus requiring detailed review on a project-by-project basis. This includes the representative projects, which would result in no additional or different environmental impacts beyond those describe above resulting from the overall buildout of the proposed GPU. Therefore, impacts to special status species and habitats resulting from buildout of the proposed GPU would be potentially significant.

Mitigation Measures

MM-BIO-1: The City of Rolling Hills Estates shall require applicants of future development projects that require discretionary grading approval by the Planning Commission within

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portions of the City that are included within USFWS-designated critical habitat for coastal California Gnatcatcher, or are within close proximity to known occurrences of protected species, such as those identified on **Figure 4.3-1**, above, to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall minimally include a reconnaissance level field survey of the project site for the presence and quality of biological resources potentially affected by project development. These resources include, but are not limited to, protected/special-status species or their habitat, sensitive habitats such as wetlands or riparian areas, and jurisdictional waters. If sensitive or protected biological resources are absent from the project site and adjacent lands potentially affected by the project, the biologist shall submit a written report substantiating such to the City of Rolling Hills Estates before issuance of a grading permit by the City, and the project may proceed without any further biological investigation.

If sensitive or protected biological resources are present on the project site or may be potentially affected by the project, then a qualified biologist shall evaluate impacts to sensitive or protected biological resources from development and produce a biological resources impact assessment. The impact assessment may include focused plant and animal surveys or jurisdictional delineations to determine a future development project's impact to biological resources, along with corresponding project-specific mitigation measures, as necessary. To minimize impacts, the City of Rolling Hills Estates will require applicants to design projects to avoid impacts to sensitive or protected biological resources to the greatest extent feasible. Further, if sensitive or protected species are present on the project site, then the applicant shall consult with the appropriate oversight agency, such as CDFW or USFWS, as necessary.

- MM-BIO-2:** If future development projects that involve vegetation removal, and are not otherwise categorically exempt from CEQA or subject to the emergency project statutory exemption from CEQA, are unable to avoid construction activities within nesting bird season (January 1st through July 31st for raptors and February 1st through August 31st for other avian species), a qualified biologist shall conduct a pre-construction nesting bird survey for avian species to determine the presence/absence, location, and status of any active nests on or adjacent to the area proposed development area. The survey shall be conducted for active nests, eggs, and young of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act (MBTA), and/or the California Fish and Game Code (CFGF) Sections 3503, 3503.5, or 3511, within 200 feet of the disturbance zone for songbirds, or within 500 feet of the disturbance zone for raptors and special-status bird species. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and the CFGF, a nesting bird survey should be conducted no more than three (3) days prior to the commencement of project construction if construction occurs between January 1st and August 31st. In the event that active nests are discovered, a suitable buffer (distance to be determined by the biologist) shall be established around such active nests, and no construction activities within the buffer will be allowed, until the biologist has determined that the nest(s) is no longer active (i.e., the nestlings have fledged and are no longer dependent on the nest).

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MM-BIO-3: The City of Rolling Hills Estates shall require applicants of future development projects that require discretionary grading approval by the Planning Commission and are not categorically exempt from CEQA or subject to the emergency project statutory exemption from CEQA to retain a qualified bat biologist to conduct a clearance survey for bats within suitable structures and trees within a project's impact area within 30 days of construction. If bats roosts are found within the project impact area, the qualified bat biologist shall identify the bats to the species level and evaluate the colony to determine its size and significance. If any structures house an active maternity colony of bats, construction activities shall not occur during the recognized bat breeding season (March 1 to October 1). Any proposed work in areas with no suitable roosting or foraging habitat shall not require a bat survey. If a bat roost is present within the vicinity of a proposed project impact area that does not need to be removed, a qualified bat biologist shall establish a species-specific no-disturbance buffer that must be maintained throughout the duration of the project's construction. If a maternity roost is identified, a no disturbance buffer shall be established and maintained until a qualified bat biologist determines that the roost is no longer active.

If project activities must occur during non-daylight hours or during the bat breeding season (March 1 to October 1), a qualified bat biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. Night lighting shall be used only within the portion of the project actively being worked on and focused directly on the work area. This measure would minimize visual disturbance and allow bats to continue to utilize the remainder of the area for foraging and night roosting. If bats are showing signs of distress, work activities shall be modified to prevent bats from abandoning their roost or altering their feeding behavior. At any time, the qualified biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to roost abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect roost success. Any roosting habitat loss shall be sequenced, and roosting habitat shall be restored or replaced in-kind and on-site to prevent temporal or permanent loss based on the bat species roosting requirements.

Level of Significance After Mitigation

With implementation of **Mitigation Measures MM-BIO-1** through **MM-BIO-3** (i.e., preparation of a biological resources assessment and nesting bird and bat surveys conducted on a project-by-project basis), buildout of the proposed GPU would not result in a significant impact to special status species or habitats, as designated by the CDFW or USFWS. As such, impacts would be less than significant after mitigation.

Threshold 4.3(b): *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Threshold 4.3(c): *Would the Project 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?*

Impact Analysis

As stated above in response to Threshold Questions 4.3(a), the proposed GPU would concentrate future development on under-utilized parcels primarily located in the Planning Area's Commercial District, as well as on parcels characterized by institutional and commercial land uses and other previously developed parcels. Apart from one, small residential lot with low-density residential land use designations, the parcels identified for intensification are developed with urban/suburban land uses. Riparian habitat and wetlands are located in certain canyons and open spaces areas throughout the Planning Area (see **Figure 4.3-4**), which are not expected to experience development as a result of buildout of the proposed GPU. In many cases the canyons containing riparian habitat and wetlands are protected as open space or are not suitable for development due to slope constraints, thus protecting riparian habitat at the base of the canyons from development-related impacts, such as sedimentation and polluted runoff. Further, the proposed GPU Conservation Element includes a goal of conserving the natural environment and the rolling topography of the City and includes a policy which discourages excessive grading of slopes that could impact natural habitats within the Planning Area's canyons. Additionally, any future development that would directly or indirectly impact riparian or wetland habitats, which is unlikely given the location of riparian and wetland habitats away from areas that would see an intensification of land uses through buildout of the proposed GPU, as described above, would be required to comply with existing local, State, and federal regulations related to encroachment and/or disturbance of riparian and wetland habitats, such as requirements under the Clean Water Act (e.g., permits required by the USACE), as well as streambed alteration agreements from the CDFW and permits required by the RWQCB. Because the proposed GPU would not concentrate development in close proximity to existing wetland or riparian habitats, as shown on **Figure 4.3-4**, and because any direct or indirect impacts to riparian and wetland habitat would be evaluated on a project-by-project basis and would be required to comply with existing local, State, and federal regulations, the proposed GPU would not likely have a substantial effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, riparian habitat, or other sensitive natural community.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. In fact, there are no riparian or wetland habitats identified within the Commercial District, where these representative projects would be located, as shown in **Figure 4.3-4**. As such, while the exact location of the representative projects is unknown, it is unlikely that these projects would significantly impact riparian or wetland habitats. Regardless, buildout of the proposed GPU could include sites beyond the Commercial District and, therefore, may result in significant impacts to riparian areas if such development would be located in close proximity to these resources, as identified in **Figure 4.3-4**. As such, impacts would be potentially significant before mitigation.

Mitigation Measures

MM-BIO-4: The City of Rolling Hills Estates shall require applicants of future development projects that that require discretionary grading approval by the Planning Commission within portions of the Planning Area that are located within 100-feet of a riverine or wetland feature, as identified in **Figure 4.3-4**, to prepare a biological resources survey. The survey shall be conducted by a qualified biologist and shall minimally include a site survey for the presence and quality of riverine or wetland features potentially affected by project development, as well as a stream delineation of the potentially impacted riparian or wetland feature. If such features

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are present and may be impacted by the future development, then the City shall require appropriate vegetative buffers and/or setbacks adjoining the stream or wetland feature to reduce impacts of future development on these riparian or wetland features. If avoidance of riparian habitat, wetlands, or other drainage features within the jurisdiction of the CDFW or Army Corps is not possible, permits/approvals from the jurisdictional agency/agencies will be necessary and impacted acreage shall be replaced at a ratio acceptable to the jurisdictional agency/agencies. In no case shall the replacement ratio be less than 1:1.

Level of Significance After Mitigation

With implementation of **Mitigation Measure MM-BIO-4**, impacts on riparian habitat, sensitive natural communities, and federally protected wetlands as defined by Section 404 of the Clean Water Act would be less than significant. As such, impacts would be less than significant after mitigation.

Threshold 4.3(d): Would the Project 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?

Impact Analysis

Large blocks of open space or undeveloped areas within the Planning Area, located in canyons, nature preserves, the Palos Verdes Landfill, and the South Coast Botanical Garden, may serve as wildlife corridors for common and protected wildlife species. As stated above in response to Threshold Question 4.3(a), the proposed GPU would concentrate future development on under-utilized parcels primarily located in the Planning Area's Commercial District, as well as on parcels characterized by institutional and commercial land uses and previously developed parcels. The proposed GPU would not change land use designations of parcels located in open space areas; rather, the proposed GPU would increase land designated as open space in the canyons in the southwestern portion of the Planning Area. As stated above, while development would be concentrated in portions of the Planning Area that are characterized by existing urban/suburban development, development associated with the buildout of the proposed GPU could result in limited vegetation removal, intrusion by humans and pets, or increases in nuisance noise, affecting wildlife movement and nesting sites in areas with known occurrences of wildlife species and habitats. As such, impacts related to interference with the movement of native resident migratory wildlife species would be potentially significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a potentially significant impact on the movement of native resident migratory wildlife species prior to mitigation, the representative projects themselves may result in potentially significant impacts regarding the movement of native resident migratory wildlife species, prior to mitigation.

Mitigation Measures

Implementation of **Mitigation Measure MM-BIO-1** requires preparation of biological resources surveys on a project-by-project basis and, if necessary, biological resources impact assessments to determine potential project-level impacts of future development projects on sensitive biological

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resources along with corresponding project-specific mitigation measures, as necessary, to reduce impacts to sensitive biological resources, such as open space areas potentially serving as wildlife corridors. Further, **Mitigation Measures MM-BIO-2 and MM-BIO-3** would require completion of a nesting bird survey and bat roost survey prior to ground-disturbing activities by future projects that require discretionary grading approval by the Planning Commission, thus protecting migratory bird nests, eggs, and young pursuant to the state or federal Endangered Species Acts, MBTA, and/or the CFGC Sections 3503, 3503.5, or 3511 and protecting bat individuals and roosts.

Level of Significance After Mitigation

With the incorporation of **Mitigation Measures MM-BIO-1 through MM-BIO-3**, impacts on the movement of any native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, and native wildlife nursery sites from adoption of the proposed GPU, which includes the representative projects, would be less than significant. As such, impacts to sensitive biological resources are less than significant after mitigation.

Threshold 4.3(e): ***Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Impact Analysis

As stated above, the existing City General Plan Conservation Element has a number of goals and policies that directly address protection of native plant and animal life. Additionally, the City's existing General Plan Conservation Element includes an Ecological Resource Overlay Zone, which applies to portions of the City where highly sensitive ecological habitats are located. These sensitive areas include open space, such as Highridge Park, Ernie Howlett Park, and the George F. Canyon Preserve, as well as sloped areas that would not support development, such as the hillsides on the south side of the Commercial District and on the south side of Indian Peak Road between Hawthorne Boulevard and Norris Center Drive. These areas are identified in the proposed GPU Conservation Element as Ecological Resource Areas. Further, while the City has an ordinance regulating placement and maintenance of street trees (Rolling Hills Estates Municipal Code [RHEMC] Chapter 12.20), the purpose of this ordinance is not directly related to protecting biological resources and is, therefore, not relevant to this discussion. The City of Rolling Hills Estates does not have a tree protection ordinance. Finally, RHEMC Section 8.38.070(A)(10) includes stormwater management requirements for certain new development and redevelopment projects that are located in or adjacent to, or would directly discharge to an SEA. Buildout of the proposed GPU would predominantly occur in previously developed areas, which are characterized by existing development and located away from the SEA in the western portion of the Planning Area. If development were to occur that would directly impact an SEA, then the project would be required to comply with the municipal National Pollution Discharge Elimination System (NPDES) permit, as directed by RHEMC Section 8.38.070(A)(10). Each project would be approved on a project-by-project basis by the City, at which time the City would ensure that any future development under the proposed GPU meets local ordinances and policies related to protection of biological resources. Therefore, the proposed GPU would not conflict with any local policies or ordinances protecting biological resources, and impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU would not conflict with any local policies or ordinances protecting biological resources,

4.3 BIOLOGICAL RESOURCES

the representative projects themselves would not conflict with any local policies or ordinances protecting biological resources. Accordingly, the representative projects would result in a less-than-significant impact and would not conflict with any local policies or ordinances protecting biological resources.

Mitigation Measures

Impacts related to compliance with local policies and ordinances protecting biological resources were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to compliance with local policies and ordinances protecting biological resources were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.3(f): ***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

Impact Analysis

The Planning Area is not located within a Natural Community Conservation Plan (NCCP) or a Habitat Conservation Plan (HCP) area.⁶ The nearest areas covered by a NCCP and HCP are located in the City of Rancho Palos Verdes north, west, and south of the Planning Area. The largest continuous portion of the NCCP/HCP area is the Fillorum and Three Sister's reserves, as well as Portuguese Canyon, which include natural habitat and known occurrences Palos Verdes blue butterfly and aphanisma. The Vista Del Norte Reserve, located on the southeast side of the Planning Area's Commercial District, is the nearest component of the NCCP/HCP area to the intensification areas under the proposed GPU. All currently designated NCCP/HCP areas would remain protected by the NCCP/HCP, as these areas are located outside of the Planning Area and would not be directly impacted by buildout of the proposed GPU. Buildout of the proposed GPU within the Commercial District may result in indirect impacts on the Vista Del Norte reserve, such as elevated dust or noise levels during construction or from increased runoff or sedimentation during a project's operation. However, future projects would be reviewed by the City on a project-by-project basis and would be subject to **Mitigation Measure MM-BIO-1**, described above, thus reducing potential impacts to off-site biological resources.

Additionally, as stated above, the Palos Verdes Peninsula and Coastline Significant Ecological Area (SEA), as delineated by Los Angeles County, covers a portion of the Planning Area, including the canyons in the western portion of the Planning Area east of Hawthorne Boulevard and north of Crest Road, the George F. Canyon Preserve in the eastern portion of the Planning Area, and a steep hillside along Crenshaw Boulevard in the center of the Planning Area. Development within SEAs is subject to permitting requirements and development standards including the stormwater regulation identified above that is located within the RHEMC. Regardless, buildout of the proposed GPU would not involve development within the County-designated SEAs located within the City, as the areas proposed for intensification in the proposed GPU are predominantly located in previously developed areas. Further,

⁶ California Department of Fish and Wildlife, Natural Community Conservation Planning (NCCP) December 2019, <https://wildlife.ca.gov/Conservation/Planning/NCCP>, accessed May 24, 2021; U.S. Fish and Wildlife Service, Environmental Conservation Online System, Habitat Conservation Plans, Region 8, <https://ecos.fws.gov/ecp0/conservationPlan/region/summary?region=8&type=HCP>, accessed May 24, 2021.

4.3 BIOLOGICAL RESOURCES

the SEAs within the Planning Area are located within canyons and open space areas protected from development by land use designation, as well as by the physical constraints of the parcels themselves.

Therefore, buildout of the proposed GPU would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. As such, impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan, the representative projects themselves would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Accordingly, the representative projects would result in a less-than-significant impact and would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.

Mitigation Measures

Impacts related to conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.3.2.4 CUMULATIVE IMPACTS

Impact Analysis

As stated above, biologically sensitive areas are located within the Planning Area, as well as within adjacent cities on the Palos Verdes peninsula. For example, the cities surrounding the Planning Area (i.e., Rolling Hills, Palos Verdes Estates, Rancho Palos Verdes, and Los Angeles [San Pedro community]) include coastal California gnatcatcher critical habitat, as identified in **Figure 4.3-2**. Additionally, critical habitat for the Palos Verdes blue butterfly is located west of the Planning Area in Hesse Community Park (City of Rancho Palos Verdes) and in a portion of the Agua Amarga Reserve (City of Palos Verdes Estates). Further, the Los Angeles County-designated Palos Verdes Peninsula and Coastline SEA extends into the surrounding Cities of Rolling Hills, Palos Verdes Estates, and Rancho Palos Verdes. Therefore, the cumulative impact scenario analyzed in this section includes impacts on biological resources as a result of buildout of the proposed General Plan, as well as buildout of the General Plans for the Cities of Rolling Hills, Palos Verdes Estates, Rancho Palos Verdes and Los Angeles (the San Pedro community).

In general, impacts on biological resources are typically limited to an individual future development site and possibly the immediate surroundings and would not be substantially compounded by the construction or operation impacts of other, more distant projects. An important exception to this is when a future development project eliminates a significant portion of a regional wildlife corridor or eliminates one of the few remaining pockets of habitat supporting a sensitive species in the same

4.3 BIOLOGICAL RESOURCES

region. As identified above, designated areas of sensitive or protected habitat on the Palos Verdes peninsula include areas such as the USFWS-designated critical habitats for coastal California gnatcatcher and Palos Verdes blue butterfly, as well as the SEAs discussed above.

The biologically sensitive and protected habitats located on the Palos Verdes peninsula are collectively protected by the goals and policies of the General Plans of the five cities on the peninsula, as well as by the land conservation measures undertaken by the Palos Verdes Land Conservancy, which has preserved over 1,600 acres of open space on the peninsula. The areas managed by the Conservancy primarily include open space areas and canyons that often overlap with designated critical habitat and the Palos Verdes Peninsula and Coastline SEA.

Regarding the proposed GPU, the buildout scenario would concentrate development in areas that are already characterized by existing development, thus reducing development pressures on open space areas that have a greater likelihood of supporting sensitive or protected species of wildlife and plants. While adoption of the proposed GPU would not cause a substantial change in vegetation cover in the Planning Area, limited, isolated habitat disturbance could occur through development of under-utilized parcels within the Planning Area. Such development would be reviewed by the City on a project-by-project basis and would be subject to **Mitigation Measures MM-BIO-1** through **MM-BIO-4**, described above. Further the proposed GPU would include goals and policies conserving the Planning Area's natural environment and open space areas and limiting grading and development in areas containing canyons and native vegetation. Additional goals included within the proposed GPU Conservation Element include preservation of local plant and animal life and their habitats, which includes policies preserving open space corridors in their natural state, encouraging re-establishment of native plants, encouraging development to prepare landscape plans promoting preservation of native plants, and prioritizing restoration of habitats for protected species. Therefore, the proposed GPU seeks to ensure that the Planning Area's biological resources are maintained through the planning practices that encourage preservation of existing sensitive habitats and open space areas. Through consistency with the goals and policies to protect open spaces and the existing biological resources within Planning Area, implementation of **Mitigation Measures MM-BIO-1** through **MM-BIO-4**, as well as ongoing enforcement of existing General Plan goals and policies protecting sensitive biological resources by the other jurisdictions on the peninsula (Cities of Rolling Hills, Palos Verdes Estates, Rancho Palos Verdes and Los Angeles [the San Pedro community]) and preservation activities conducted by the Conservancy described above, the proposed GPU's contribution to impacts on biological resources within the Planning Area would not cumulatively considerable, and, as such, cumulative impacts would be less than significant.

Mitigation Measures

Cumulative impacts related to biological resources were determined to be less than significant. Therefore, no additional mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to biological resources were determined to be less than significant. Therefore, no additional mitigation measures are required or included and the level of impact remains less than significant.

4.4 CULTURAL RESOURCES

This section of this PEIR addresses the potential impacts to cultural resources that could result from the land alterations associated with the implementation of the proposed GPU. The following discussion addresses the existing cultural resources conditions in the Planning Area, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the proposed GPU.

The analysis in this section is based, in part, on the Rolling Hills Estates General Plan 2040 Existing Conditions Report.¹

4.4.1 ENVIRONMENTAL SETTING

4.4.1.1 CONCEPTS AND TERMINOLOGY

The following definitions are common terms used to discuss the regulatory requirements and treatment of cultural resources:

Archaeological resources are subsurface human cultural materials that are over 50 years old. Archaeological resources in the region are generally divided into two temporal categories: prehistoric (12,000+ years ago–1541) and historic-period (1542–50 years ago).

Building describes a structure created principally to shelter any form of human activity (e.g., house, barn, church, hotel, or similar construction). The term may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

Built environment is defined as buildings, structures, objects, and districts.

Cultural resources include archaeological and built environment resources. Related definitions in the National Register of Historic Places (National Register) and adopted by the California Office of Historic Preservation (OHP) are listed below.

Districts possess a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Historical resources as described in CEQA Guidelines Section 15064.5(a) include buildings, sites, structures, objects, or districts, each of which may have historical, prehistoric, architectural, archaeological, cultural, or scientific importance and is eligible for listing or is listed in the California Register of Historical Resources (California Register) or a local register of historical resources, or has been identified as significant in a historical resource survey meeting the requirements of California Public Resources Code (PRC) Section 5024.1(g), or has been determined by a lead agency to be historically significant based on substantial evidence. The California Register includes resources listed in, or formally determined eligible for listing in, the National Register, as well as some California State Landmarks and Points of Historical Interest.

Historic property is defined by the National Historic Preservation Act (NHPA) as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register, including artifacts, records, and material remains related to such a property.

¹ Dyett and Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

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Object is a term used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

Site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historical, cultural, or archaeological value regardless of the value of any existing structure.

Structure is a term used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter such as bridges, roads, and water conveyance features.

4.4.1.2 REGULATORY FRAMEWORK

FEDERAL

The Secretary of the Interior's Standards for Rehabilitation (Secretary's Standards), codified in 36 Code of Federal Regulations (CFR) Section 67.7, provide general guidance for the treatment of a historic property to ensure its significance is not materially impaired by a project. The Standards are used by lead agencies to evaluate proposed rehabilitation work on historic properties and potential impacts. Projects that comply with the Secretary's Standards benefit from a regulatory presumption that they would not result in a significant impact to a historical resource (CEQA Guidelines Section 15064.5(b)(3)). Projects that do not comply with the Secretary's Standards may or may not cause a substantial adverse change in the significance of a historic property.

STATE

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on historical resources (which includes archaeological sites), and unique archaeological resources. Pursuant to PRC Section 21084.1, a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

The term historical resource is defined in PRC Section 21084.1 and State CEQA Guidelines Section 15064.5(a), which define historical resources to include the following:

- 1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register (PRC Section 5024.1).
- 2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be "historically significant" if the

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resource meets the criteria for listing in the California Register (PRC Section 5024.1), including the following:

- a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Section 5020.1(j) or 5024.1.

Historical resources are usually 50 years old or older and must meet at least one of the above criteria for listing in the California Register (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity. Resources less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand their historical importance.

CEQA Guidelines Section 15064.5(b) describes how significant impacts on historical and archaeological resources are determined, stating the following: "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

- 1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- 2) The significance of an historical resource is materially impaired when a project:
 - A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
 - B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in an historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility

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for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

For historic buildings, CEQA Guidelines Section 15064.5(b)(3) states that the impacts of a project that follows *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*, or *The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings*,² shall be considered to have been mitigated to a level of less than significant.

CEQA Guidelines Section 15064.5(c) states: "CEQA applies to effects on archaeological sites."

- 1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
- 2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of PRC Section 21084.1, and this section, Section 15126.4 of the Guidelines, and the limits contained in PRC Section 21083.2 do not apply.
- 3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archeological resource in PRC Section 21083.2, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Sections 21083.2(c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- 4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. PRC Section 21083.2(g) states:

"Unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

² Grimmer, Anne E., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*, 2017; Morton III, W.B., G.L. Hume, K.D. Weeks, and H.W. Jandl, *The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings*, 1997.

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Treatment options under PRC Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under PRC Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 specifies protocol when human remains are discovered, as follows:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains (Section 7050.5(b)).

California Health and Safety Code Section 7050.5(c) also specifies that the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours if he or she recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American.

CEQA Guidelines Section 15064.5(e) requires that excavation activities stop whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. CEQA Guidelines Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

In addition to the provisions pertaining to accidental discovery of human remains, the CEQA Guidelines also require that a lead agency make provisions for the accidental discovery of historical or archaeological resources, generally. Pursuant to CEQA Guidelines Section 15064.5(f), these provisions should include “an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.”

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California Historical Building Code

The California Historical Building Code or CHBC (defined in California Health and Safety Code Division 13, Part 2.7, Sections 18950 to 18961) is intended to preserve California's architectural heritage by recognizing unique construction issues inherent in maintaining and rehabilitating historical resources. The CHBC provides alternative building regulations for permitting repairs, alterations, and additions necessary for preservation, rehabilitation, relocation, related construction, change of use, or continued use of a "qualified historical building or structure", defined in Section 18955 of the CHBC.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

RHEMC Chapter 17.38, Landmark Overlay Zones, describes the purpose of Landmark Overlay Zones, the process by which they are designated, the criteria which must be met for designation, and the process by which new construction and alterations to structures, sites or areas within Landmark Overlay Zones are reviewed. RHEMC Section 17.38.010 promotes the health, safety and general welfare of the public through:

- A. The protection, enhancement, perpetuation and use of structures, sites and areas that are reminders of past eras, events and persons important in local, state or national history, or which provide significant examples of architectural styles of the past or are landmarks in history or architecture, or which are unique and irreplaceable assets to the city and its neighborhoods, or which provide for this and future generations examples of the physical surroundings in which past generations lived;
- B. The development and maintenance of appropriate settings and environment for such structures;
- C. The enhancement of property values and the stabilization of neighborhoods and areas of the city;
- D. The enrichment of human life in its educational and cultural dimensions by serving aesthetic needs and fostering knowledge of the living heritage of the past.

RHEMC Section 17.38.040 specifies that one or more of the following criteria must be met in order to establish a landmark overlay designation to one or more individual structures or areas in one or more lots or sites:

- A. Structures, sites or areas particularly representative of a distinct style, region or way of life;
- B. Structures, sites or areas connected with a business or use which was once common but now rare;
- C. Buildings and/or associated structures of greater age than surrounding structures;
- D. Buildings and/or associated structures containing original materials or workmanship which are valued in themselves;

One or more of the following criteria may be considered in measuring the appropriateness of a potential landmark overlay designation:

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- E. Buildings and/or associated structures which are preserved or capable of being restored to their former condition;
- F. Buildings and/or associated structures particularly well related to their site or area;
- G. Buildings and/or associated structures expressing their function well;
- H. Structures, sites or areas visible or accessible to the public;
- I. Buildings and/or associated structures existing in appropriate settings (trees, walls, yard, etc.);
- J. Structures, sites or areas surrounded by land use significant for preservation of the structure, site or area.

RHEMC Section 17.38.090 describes regulations relating to alterations of designated landmark overlay properties: No person shall do any work listed below without first obtaining a permit from the planning commission:

- A. Exterior alteration to a structure, site or area designated landmark overlay;
- B. Interior alterations that would affect the exterior of a structure designated landmark overlay;
- C. Construction of any type on a landmark overlay structure, site or area unless excepted by the designation ordinance, or of a type which does not affect the exterior appearance of the structure, site or area.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law. The elements, along with their goals and policies, that are related to cultural resources are presented below.

Land Use Element

The Rolling Hills Estates General Plan Land Use Element (Land Use Element) is a State-mandated element and fulfills the requirements of Section 65302(a) of the California Government Code. The Land Use Element contains the goals and policies regulating future development and a land use plan to implement these goals.

Land use policies included in the 1992 General Plan Land Use Element included a number of land use overlay zone designations used to preserve environmentally significant areas or substantially reduce potential impacts from development through more stringent development standards. The overlay zones included a Cultural Resource Overlay Zone, defined as a designation applying “to those areas that have been designated as having a high sensitivity for cultural resources and where future development may affect these resources.”

Conservation Element

The Rolling Hills Estates General Plan Conservation Element (Conservation Element) is a State-mandated element and fulfills the requirements of Section 65302(d) of the California Government

4.4 CULTURAL RESOURCES

Code. The Conservation Element, in part, contains goals and policies that address the preservation of cultural resources, including the following:

Goal 3: Promote the preservation of cultural, historical and natural resources within the City.

Policy 3.1: Implement General Plan guidelines for the protection of sites of paleontological, archaeological, historical or culturally valuable significance.

4.4.1.3 EXISTING CONDITIONS

Information presented in this section is derived, in part, from the Rolling Hills Estates General Plan 2040 Existing Conditions Report,³ as well as background research conducted for the preparation of this section.

CULTURAL SETTING

Prehistoric Period

The division of prehistory into temporal periods provides a framework for understanding culture change in years before present (BP). The earliest inhabitants to the Los Angeles Basin occurred in the Paleocoastal or Paleoindian Period terms, indicating proximity to the coast⁴, and generally dated between about 13,000 and 8,500 BP. These earliest inhabitants were highly mobile hunter-gatherers. The Millingstone Horizon was redefined as the Encinitas Tradition, which dates to between about 8,500 BP and 3,500 BP⁵. Encinitas is a widespread cultural phenomenon distinguished by an abundance of manos and metates and a dearth of vertebrate faunal remains, projectile points, and mortar and pestle groundstone tools. Definitions of the Intermediate Period and Late Prehistoric Period continue to be employed as temporal periods, though understanding of cultural practices, technology, and migrations, among other aspects, has been thoroughly deepened.⁶

At the beginning of the historic period, the Planning Area is understood to be within the ancestral territory of the Gabrieliños although no Gabrieliño villages are known to be within the Planning Area. The place name *Haraasnga* is located approximately 2.5 miles south of the Planning Area.⁷ The Gabrieliño Indians are thus named because of their association with the Mission San Gabriel Arcángel, located approximately 28 miles northeast of the Planning Area. Generally, their territory included all of the Los Angeles Basin; parts of the Santa Ana and Santa Monica Mountains; along the coast from Aliso Creek in the south to Topanga Canyon in the north; and San Clemente, San Nicolas, and Santa Catalina Islands.

³ Dyett and Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

⁴ Moratto, M.J., *California Archaeology*, 1984; Erlandson, J.M., R.C. Torben, T.L. Jones and J.F. Porcasi, One if by Land, Two if by Sea: Who Were the First Californians? in *California Prehistory: Colonization, Culture, and Complexity*, 2007.

⁵ Warren, C.N., Cultural Tradition and Ecological Adaptation on the Southern California Coast in *Archaic Prehistory in the Western United States*, 1968; Sutton, M.Q. and J.K. Gardner, Reconceptualizing the Encinitas Tradition of Southern California, *Pacific Coast Archaeological Society Quarterly*, 42(4): 1-64, 2010.

⁶ Wallace, W.J., A Suggested Chronology for Southern California Coastal Archaeology, *Southwestern Journal of Anthropology* 11(3), 1955, pages 214-230; Sutton, M.Q. and J.K. Gardner, Reconceptualizing the Encinitas Tradition of Southern California, *Pacific Coast Archaeological Society Quarterly*, 42(4): 1-64, 2010.

⁷ McCawley, W., *The First Angelinos: The Gabrielino Indians of Los Angeles*, 1996.

Ethnography

The Gabrieliño spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrieliño shared this language with their neighboring groups to the south and east.⁸ Groups of Gabrieliño lived in villages that were autonomous from other villages. Each village had access to hunting, collecting, and fishing areas.⁹ Villages were typically located in protected coves or canyons near water. Acorns were the most important food for the Gabrielino although the types and quantity of different foods varied by season and locale. Other important sources of food were grass and many other seed types, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals.

Typically, Gabrieliño women gathered and men hunted, although work tasks often overlapped. Each village had a chief who controlled religious, economic, and warfare authorities. The chief had an assistant and an advisory council who assisted in important decisions and rituals. Each of these positions was hereditary being passed down from generation to generation.¹⁰ According to mapping of Gabrieliño villages undertaken by McCawley, no known villages were located within the Planning Area.¹¹ The two nearest Gabrieliño villages, which may be composed of large areas rather than just a single location, are *Haraasnga* and *Toveemonga*, approximately 2.5 miles and 3 miles, respectively, to the south of the Planning Area. In addition, the Kirkman-Harriman Pictorial and Historical Map of Los Angeles does not identify any Gabrielino villages within the Planning Area.¹²

Historic Period

Post-contact history for the State of California is generally divided into three periods: the Spanish Period (1769-1822), the Mexican Period (1822-1848), and the American Period (1848-present).

Spanish Period (1769-1822)

Between the mid-1500s and mid-1700s, Spanish explorers conducted sailing expeditions, which traveled Alta (upper) California's coast and made limited inland expeditions. Among these explorers were Juan Rodriguez Cabrillo and Sebastian Vizcaino, who explored the present-day San Diego and San Pedro bays in 1542 and 1602, respectively. By the mid-1700s, partly in response to the threat of British and Russian interests, Spain developed a three-pronged approach to colonize and secure Alta California. This included the establishment of presidios (military forts), missions, and pueblos (towns). Through the missions, Spanish Franciscan missionaries intended to convert the Native Americans into Christians and acculturate them to

⁸ Bean, L.J. and C.R. Smith. Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549; Shipley, W.F., Native Languages of California, In *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 80-90.

⁹ Bean, L.J. and C.R. Smith. Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549.

¹⁰ Bean, L.J. and C.R. Smith. Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549.

¹¹ McCawley, W., *The First Angelinos: The Gabrielino Indians of Los Angeles*, 1996.

¹² Kirkman, G.W., Kirkman-Harriman Pictorial and Historical Map of Los Angeles County, 1938.

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Spanish norms. Mission lands were supposed to later be returned to the Native American people.¹³

The first Spanish settlement in Alta California was established in 1769 by Gaspar de Portola and the Franciscan Father Junipero Serra at Mission San Diego de Alcalá, the first of 21 missions built by the Spanish between 1769 and 1823. Mission San Gabriel Arcángel, the fourth mission, was founded in 1771 near what would become the city of Los Angeles, approximately 28 miles northeast of the Planning Area.¹⁴ Native American labor was exploited at the missions and presidios. In combination with diseases to which Native Americans had no immunity, the mission system had a devastating impact on the Native American way of life and population.

Mexican Period (1822-1848)

The Mexican Period commenced in 1822 when news reached Alta California of the success of the Mexican Revolution against Spain. During the Mexican Period, the missions were secularized through a law passed by the Mexican Congress in 1833. Although the law and implementing regulations intended for farming and grazing land to be distributed to the emancipated Native Americans, in actuality, Mexican governors distributed large land grants to individuals who were typically former soldiers or from a well-connected family. Much of the State's land was put into private ownership and the rancho system spread and prospered with cattle hides and tallow as key products. The rancho system was unique to California during the 1830s and 1840s. Native Americans became a major source of labor often in a peonage system; a new hierarchy replaced the missionaries with the head of a Californio family (native-born Californians of Spanish-speaking parents).¹⁵

American Period (1848-Present)

The American Period began with the signing of the Treaty of Guadalupe Hidalgo in 1848, which ended the Mexican-American War and by which the United States agreed to pay Mexico \$15 million for the conquered territory, including present-day California, Texas, Nevada, and Utah, most of New Mexico and Arizona, and parts of Colorado and Wyoming.¹⁶ Settlement in California increased during the early American Period. Ranchos suffered from flooding in 1861-1862 and from severe drought in 1863-1864, which resulted in the death of thousands of cattle. Rancho owners suffered with the loss of income-producing livestock, debt, disputes over squatters and property boundaries, and legal challenges to their property rights. As a result, many ranchos or parts of them were sold, or otherwise acquired by Americans. Land was subdivided into smaller parcels and towns were laid out. Following the discovery of gold in California in 1848, the State's population grew exponentially with immigrants coming from countries all over the world. Development of railroad lines and the Port of Los Angeles in the mid-1800s to early 1900s furthered settlement and development.¹⁷

¹³ Sanchez, J.P., *The Significance of Spanish Colonial Missions in our National Story and our Common Heritage with Spain, Mexico and Latin America*, 2016; Milliken, R., L.H. Shoup and B.R. Ortiz, *Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today*, 2009.

¹⁴ California Missions Foundation, San Gabriel Arcángel, <https://californiamissionsfoundation.org/mission-san-gabriel/>, accessed June 26, 2021.

¹⁵ Milliken, Shoup and Ortiz, 2009; Pitt, L., *The Decline of the Californios: A Social History of the Spanish-Speaking Californians, 1846-1890*, 1966.

¹⁶ The Library of Congress, Treaty of Guadalupe Hidalgo, <https://www.loc.gov/rr/program/bib/ourdocs/guadalupe.html>, accessed July 27, 2021.

¹⁷ Port of Los Angeles, History, <https://www.portoflosangeles.org/about/history>, accessed July 26, 2021.

Rolling Hills Estates

The Planning Area was once part of the Spanish-era, 75,000-acre Rancho San Pedro, which Governor Pedro Fages granted provisionally to retired soldier Juan Jose Dominguez in approximately 1784.¹⁸ Juan Jose Dominguez died in 1809, leaving half the rancho to his nephew Cristobal Dominguez and half to Manuel Gutierrez and Mateo Rubio, who were in charge of ranch management and operations. Gutierrez allowed a friend, Jose Dolores Sepulveda, to graze cattle in the southwest portion of the property known as Canada de Los Palos Verdes. This later resulted in a lengthy battle between the Dominguez and Sepulveda families over claims to portions of the rancho. Ultimately, Rancho de los Palos Verdes was carved out of Rancho San Pedro and awarded to the Sepulvedas. However, the Sepulveda family incurred significant financial debt due to disputes with squatters, various lawsuits, and loss of income-producing cattle due to severe drought conditions.¹⁹ By 1882, as part of a legal settlement, Rancho de los Palos Verdes was partitioned into 17 parcels, and the Sepulveda family retained only a small amount of the rancho.²⁰

The largest parcel comprising 16,000 acres and the majority of the Palos Verdes Peninsula went to Jotham Bixby, who established a cattle ranch. Following Jotham's death, the ranch passed to his son George Bixby, who hired Henry Phillips, Sr. to serve as the ranch foreman. The ranch flourished under his management, and Phillips also encouraged Bixby to lease portions of the ranch to Japanese farmers.²¹

Kumekichi Ishibashi was the first Japanese farmer to work land on the Palos Verdes Peninsula (Peninsula). Born in 1874, he emigrated from Japan to San Francisco in 1895, and started farming in the Portuguese Bend area of the Peninsula in 1906. He leased a 50-acre parcel from George Bixby in 1910. Eventually, 40 families established a community of Japanese farmers who worked approximately 2,000 acres of coastal land from Malaga Cove to San Pedro. They grew a variety of vegetables, including tomatoes and peas. People of Japanese descent were forced from coastal areas after the bombing of Pearl Harbor, including the Ishibashis, and many were held at internment camps. The Ishibashis were one of only six families who returned to the Peninsula after World War II.²²

In 1913, the Bixby Ranch was sold to Frank A. Vanderlip, Sr. and other investors who envisioned a planned residential community on the Peninsula. In 1922, a portion of the large ranch was sold to create Palos Verdes Estates, and Vanderlip retained approximately 13,000 acres on which Rolling Hills Estates was later developed. The first shopping market in Rolling Hills Estates was established at the corner of Rolling Hills Road and Palos Verdes Drive North when the Rolling Hills Market was opened in 1938.²³ It then became known as The General Store, and later as Kelly's Korner.

Rolling Hills Estates incorporated in 1957 with a population of 3,500 people. Its citizens shared concerns about maintaining the community's rural character, open space, and equestrian lifestyle.

¹⁸ Janin, H. and U. Carlson, *The Californios, A History, 1769-1890*, 2017, pp. 25-26; Bancroft, H.H., *The Works of Hubert Howe Bancroft, Vol. XVIII, History of California, Vol. I, 1542-1800*, 1884, p. 662.

¹⁹ Dominguez Rancho Adobe Museum, History of Dominguez Rancho Adobe Museum, <https://dominguezrancho.org/domingo-rancho-history/>, accessed June 18, 2021; Online Archive of California, Inventory of the Rancho San Pedro Collection, 1769-1972, bulk 1900-1960, https://oac.cdlib.org/findaid/ark:/13030/kt109nc51t/entire_text/, accessed June 17, 2021; Megowan, Maureen, Family Feud: The Sepulvedas vs. the Dominguez's, <https://maureenmegowan.com/family-feud-the-sepulvedas-vs-the-dominquezs/>, accessed June 17, 2021.

²⁰ Gnerre, Sam, Bixby Ranch, *Daily Breeze*, March 2, 2010.

²¹ Gnerre, Sam, Bixby Ranch, *Daily Breeze*, March 2, 2010.

²² Gnerre, Sam, Bixby Ranch, *Daily Breeze*, March 2, 2010; Gnerre, Sam, Kumekichi Ishibashi launches an agricultural industry in the South Bay, *Daily Breeze*, February 3, 2021.

²³ Gnerre, Sam, The Rolling Hills General Store, *Daily Breeze*, July 12, 2014.

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Within two years of its incorporation, the City expanded to the east and west through annexations, including the Montecillo, Chandler Quarry, Country Club Estates, and northern Masongate areas. Between 1960 and 1966, the City annexed research and development land behind the Northrop Corporation, as well as the Peninsula Center, Harbor Sight, the Ranch, Rolling Hills Park Estates, Highridge, Hillcrest Manor, Hillcrest Meadows, Terraces, and Cresta Verdes areas. In 1982, the City also annexed the former Palos Verdes Landfill property.²⁴

Initially developed in the early 1960s, the Peninsula Center at the intersection of Hawthorne Boulevard and Silver Spur Road established a prominent commercial center along a major boulevard. Development along Silver Spur Road continued at a relatively slow pace with additional properties constructed to the southeast of the Peninsula Center between the mid-1960s and early 1970s. The area presently contains commercial, office, public, and institutional properties, among other uses.²⁵

Today, the City is comprised of 30 neighborhood areas, each with its own architectural style and homeowners' association. The City continues to place an emphasis on preserving its rural residential character.²⁶

CULTURAL RESOURCES IDENTIFICATION EFFORTS

South Central Coastal Information Records Search

A cultural resources records search was conducted on June 22, 2021 at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The records search identified cultural resources studies and resources within the Planning Area. As part of the records search and background research, the following federal and California inventories were reviewed:

- National Register of Historic Places²⁷
- California Points of Historical Interest²⁸
- California Historical Landmarks²⁹
- Archaeological Determinations of Eligibility³⁰
- Built Environment Resources Directory for Los Angeles County.³¹ The directory includes resources reviewed for eligibility for the National Register and the California Historical Landmarks programs through federal and State environmental compliance laws, and resources nominated under federal and State registration programs, including the National

²⁴ City of Rolling Hills Estates, History, <https://www.ci.rolling-hills-estates.ca.us/community/history-of-rolling-hills-estates>, accessed June 17, 2021.

²⁵ U.C. Santa Barbara Map and Imagery Lab, Aerial Photo, Flight C-23870, Frame 201, 1960; U.C. Santa Barbara Map and Imagery Lab, Aerial Photo, Flight C-25019, Frame 425, 1965; U.C. Santa Barbara Map and Imagery Lab, Aerial Photo, Flight AMI-LA-70B, Frame 5129, 1970; U.C. Santa Barbara Map and Imagery Lab, Aerial Photo, Flight AMI-LA-75, Frame 7403, 1975.

²⁶ Rolling Hills Estates, History, <https://www.ci.rolling-hills-estates.ca.us/community/history-of-rolling-hills-estates>, accessed June 17, 2021.

²⁷ National Park Service, National Register Database and Research, <https://www.nps.gov/subjects/nationalregister/database-research.htm>, accessed June 17, 2021.

²⁸ California Office of Historic Preservation, California Historical Resources, <https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19>, accessed June 16, 2021.

²⁹ California Office of Historic Preservation, California Historical Resources, <https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19>, accessed June 16, 2021.

³⁰ California Office of Historic Preservation, Archaeological Determinations of Eligibility, Los Angeles County, 2012.

³¹ California Office of Historic Preservation, Built Environment Resources Directory, Los Angeles County, 2021.

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Register, California Register, California Historical Landmarks, and California Points of Historical Interest.

- City of Rolling Hills Estates Landmark Overlay Zone properties

Results of the cultural resources identification efforts indicate 36 previous cultural resources studies have been conducted within the Planning Area. **Table 4.4-1** below includes 16 previously recorded cultural resources identified in the SCCIC records search and three City-designated Landmark Overlay Zone properties within the Planning Area.

**Table 4.4-1
Previously Recorded Cultural Resources**

Resource Name/Primary Number/Trinomial Number	Description	OHP Status Code	Eligibility Status
Cypress Street Water Reservoir, Lomita Reservoir/P-19-000191/CA-LAN-000191H	Water reservoir and Prehistoric site	NA	Cypress Street Water Reservoir - ineligible for the California Register and local designation. Not evaluated for the National Register. Prehistoric site was not evaluated.
P-19-000276/CA-LAN-000276	Prehistoric site	N/A	Not evaluated
P-19-000277/CA-LAN-000277	Prehistoric site	N/A	Not evaluated
P-19-000278/CA-LAN-000278	Prehistoric site	N/A	Not evaluated
P-19-000279/CA-LAN-000279	Prehistoric site	N/A	Not evaluated
P-19-000280/CA-LAN-000280	Prehistoric site	N/A	Not evaluated
P-19-000281/CA-LAN-000281	Prehistoric site	N/A	Not evaluated
P-19-000709/CA-LAN-000709	Prehistoric site	N/A	Not evaluated
P-19-000844/CA-LAN-000844	Prehistoric site	N/A	Not evaluated
P-19-000845/CA-LAN-000845	Prehistoric site	N/A	Not evaluated
P-19-003583/CA-LAN-003583	Prehistoric site	N/A	Not evaluated
P-19-003863/CA-LAN-003863	Prehistoric site	N/A	Not Evaluated
P-19-189747	Utility pole	6Y	Ineligible for the National Register. Not evaluated for the California Register or local designation
P-19-189961	Utility/telephone pole	6Z	Ineligible for the National Register; not evaluated for the California Register or local designation
Palos Verdes Reservoir/P-19-192333	Water reservoir	6Z	Ineligible for the National Register and California Register. Not evaluated for local designation.

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**Table 4.4-1
Previously Recorded Cultural Resources**

Resource Name/Primary Number/Trinomial Number	Description	OHP Status Code	Eligibility Status
608 Silver Spur Road	Commercial building	6Y – ineligible for NRHP	Determined ineligible for the National Register by SHPO. Not evaluated for the California Register or local designation.
The General Store (Kelly’s Korner)	Commercial building	N/A	City-designated Landmark Overlay Zone property
Empty Saddle Club	Recreational/ equestrian facility	N/A	City-designated Landmark Overlay Zone property
Peninsula Heritage School	Elementary school	N/A	City-designated Landmark Overlay Zone property
Source: SCCIC, Records Search Results for the Rolling Hills Estates GPU Project, June 22,2021.			

No known historical resources listed in the National Register, California Register, designated State Historical Landmarks, or State Points of Historical Interest are located within the Planning Area. Locations of known, recorded archaeological resources are restricted by the federal Archaeological Resources Protection Act in order to prevent looting, vandalism, and destruction. Their specific locations are not included in this section, but Cultural Resources Overlay Zones established by the City portray general cultural sensitivity within the Planning Area.

Literature Review

Available literature, including local histories and newspapers, as well as historic topographic maps and aerial photographs, were reviewed. The Planning Area has a long development history dating back to the Spanish period with the establishment of Rancho San Pedro in the 1780s. The area remained largely rural in character, and supported agricultural activities through the mid-twentieth century. Rolling Hills Estates incorporated in 1957, and residential and commercial construction increased thereafter.³²

4.4.2 IMPACT ANALYSIS

4.4.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the GPU’s impacts on cultural resources based on the thresholds of significance identified in California Environmental Quality Act (CEQA) Guidelines Appendix G. Based on these criteria, an impact on cultural resources is considered significant if implementation of the GPU would:

³² Dyett and Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

Threshold 4.4(a): *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.*

Threshold 4.4(b): *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.*

Threshold 4.4(c): *Disturb any human remains, including those interred outside of dedicated cemeteries.*

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in **Appendix A** of this PEIR) determined that although any future development within the Planning Area that requires excavation to depths greater than existing foundations may have the potential to disturb existing but undiscovered human remains, compliance with California Health and Safety Code Sections 7050.5, 7051, and 7052 and PRC Sections 5097 and 5097.98 would be required. These existing regulations address human burial remains and protects them from disturbance, vandalism, and destruction and establish procedures to be implemented if Native American remains are discovered. Therefore, the proposed GPU would have a less-than-significant impact related to Threshold (c). As such, no further analysis of this issue is necessary.

4.4.2.2 METHODOLOGY

Evaluation of the proposed GPU's potential to result in a significant impact on cultural resources is based on the resource identification and evaluation efforts presented in Subsection 4.4.1.3 above and in the Rolling Hills Estates General Plan 2040 Existing Conditions Report.

This analysis evaluates anticipated changes in the physical environment resulting from the GPU against the thresholds of significance identified above to determine if direct and indirect changes from existing conditions would constitute potentially significant effects to known or potential cultural resources. Project changes are described and potential impacts, if any, are identified under each impact discussion. Where impacts would be considered potentially significant, mitigation measures are identified to reduce impacts to a less-than-significant level.

A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

4.4.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.4(a): *Would the Project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.?*

Impact Analysis

The City's Landmark Overlay Zone includes three properties in the Planning Area: these include The General Store (Kelly's Korner), the Empty Saddle Club, and the Peninsula Heritage School. In addition to these sites, other buildings and properties have the potential to meet National Register, California Register, or local criteria for significance. A resource may be considered a historical resource under CEQA even if it is not listed in the National Register, California Register, or local historic landmarks list.

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Implementation of the proposed GPU would not directly impact any historical resources because it does not propose the demolition or alteration of any known or potential historical resource. Proposed changes in land use designation and development, in accordance with the proposed land use plan, would allow for future redevelopment and new development in the Planning Area. The proposed GPU would not change the land use designation of The General Store (Kelly's Korner) property but would add Mixed-Use Overlay to the Neighborhood Commercial land use designation to allow future development on the north side of the property while preserving the existing building. No change to the land use designation of either the Empty Saddle Club or Peninsula Heritage School properties are proposed. The Landmark Overlay Zone would remain on all three these properties, which would require any future development to comply with the requirements of the overlay zone to prevent significant impacts on these resources.

Future development may occur on properties which are designated historical resources and in areas that contain potential historical resources. Under CEQA Guidelines Section 15064.5(b)(1), a project has a significant impact on a historical resource if it causes substantial adverse change in the significance of a historical resource, meaning physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

Site-specific project environmental review would need to be conducted at the time discretionary development projects are proposed to identify any known or potential historical resources. Moreover, **Mitigation Measure MM-CUL-1**, below, requires the preparation of a historical resources assessment report prior to the alteration, demolition, or relocation of a building or structure over 45 years old. Industry standard typically identifies and evaluates for historical significance properties more than 45 years of age, to account for the necessary time to design, permit, and construct a project. It is possible that future development in accordance with the proposed GPU would require recordation and evaluation of buildings or properties, which are over 45 years old, including properties in and around the Peninsula Center Commercial District, which is the focus of the Commercial District Area Vision Plan. If a property is determined to be a historical resource, **Mitigation Measure MM-CUL-2** requires an analysis of how a future development project would impact the historical resource.

Proposed policies require that future developments consider the preservation of cultural and historic resources. More specifically, one of the goals of the update to the Conservation Element continues to promote the preservation of these resources, as identified above in the discussion of the current Conservation Element, by ensuring the protection of sites of historical and culturally valuable significance. In addition, as previously noted, RHEMC Section 17.38.010 contains provisions that address historical resources, and RHEMC Section 17.38.090 offers protections for historical resources through permit requirements.

However, while the above-mentioned goal and policies in the proposed GPU would reduce impacts to cultural resources associated with buildout of the proposed GPU, future development and redevelopment may result in adverse impacts to historical resources. Thus, impacts to historical resources resulting from the buildout of the proposed GPU would be potentially significant. Detailed review on a project-by-project basis is required pursuant to **Mitigation Measures MM-CUL-1** through **MM-CUL-3**.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU.

4.4 CULTURAL RESOURCES

Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a significant impact on historic resources due to the potential demolition and/or removal of historic resource(s) from a development site, future development projects in the Planning Area, such as the representative projects, have the potential to cause a substantial adverse change in the significance of a historical resource. Although individual development projects, such as the representative projects, would be required to comply with the provisions of the RHEMC and be consistent with the goals and policies of the proposed GPU, demolition or alteration of a historical resource, such that its significance is materially impaired, would be considered a significant impact. Accordingly, the representative projects have the potential to result in a significant impact on historic resources.

Mitigation Measures

MM-CUL-1: Prior to the issuance of a demolition permit for projects that propose to relocate, demolish, or alter a building or structure that is over 45 years old, possesses a distinctive architectural style, and was built during and representative of the period of significance for that architectural style (e.g., California Ranch of the 1940s and 1950s, Midcentury Modern of the 1940s-1960s, etc.), the City of Rolling Hills Estates shall require the applicant to submit a historical resources assessment report, if the building or structure has not been previously evaluated for potential historical significance. For single-family residential properties, a historical resources assessment report shall only be required if the involved building/structure is characteristic of the surrounding neighborhood and the demolition/alteration involves a façade or building volume that is/would be visible from the street or other publicly accessible vantage point. If the building or structure is determined to be a historical resource, the report shall include an assessment of the project's impacts to the resource. The report shall be prepared by a qualified Architectural Historian or Historian who meets the Secretary of the Interior's Professional Qualifications Standards, and shall satisfy federal and State guidelines for the identification, evaluation, and recordation of historical resources. Should the City conduct and/or approve a citywide or neighborhood/district historic resources inventory, within the bounds of that survey this mitigation measure shall only apply to potentially significant historic resources identified by the inventory. Similarly, should a historic context statement be prepared for any historical themes in Rolling Hills Estates, the guidance and recommendations of the historic context statement shall supersede the requirements of this mitigation measure for potentially significant historic resources within that theme.

MM-CUL-2: The Secretary of the Interior's Standards for the Treatment of Historic Properties shall be used to the maximum extent possible to ensure that projects involving the relocation, conversion, rehabilitation, or alteration of a historical resource and its setting, or related new construction, will not impair the significance of the historical resource. Use of the Secretary's Standards shall be overseen by an architectural historian or historic architect meeting the Secretary of the Interior's Professional Qualification Standards. Evidence of compliance with the Secretary's Standards shall be provided to the City in the form of a report identifying and photographing character-defining features and spaces and specifying how the proposed

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treatment of character-defining features and spaces and related construction activities will conform to the Secretary's Standards.

MM-CUL-3: If the City determines that significant impacts to historical resources cannot be avoided, the City shall require, at a minimum, that the affected historical resources be thoroughly documented before issuance of any permits, and may also require additional public education efforts and/or memorialization of the historical resource. Such recordation shall be prepared under the supervision of an architectural historian, historian, or historic architect meeting the Secretary of the Interior's Professional Qualification Standards, and should take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation. At a minimum, this recordation shall include an architectural and historical narrative; archival photographic documentation; and any supplementary information available, such as building plans and elevations and/or historic photographs. The documentation package shall be produced on archival paper and made available to researchers and the public through accession by appropriate institutions, such as the Local History Center at the Peninsula Center Library, the South Central Coastal Information Center at California State University, Fullerton, and/or the HABS/HAER/HALS collection housed in the Library of Congress. Depending on the significance of the historical resource, the City, at its discretion, may also require public education about the historical resource in the form of an exhibit, web page, brochure, or other format and/or memorialization of the historical resource on or near the proposed project site. If memorialized, such memorialization shall be a permanent installation, such as a mural, display, or other vehicle that recalls the location, appearance, and historical significance of the affected historical resource, and shall be designed in conjunction with a qualified architectural historian, historian, or historic architect.

Level of Significance After Mitigation

Generally, compliance with City General Plan policies, provisions of the RHEMC, and State and federal regulations pertaining to the alteration, demolition, and relocation of historical resources, in addition to **Mitigation Measures MM-CUL-1** and **MM-CUL-2**, would reduce impacts to historical resources to a less-than-significant level. However, in the event that one or more future projects cannot avoid demolition of a historical resource or alteration of a historical resource in a manner that would materially impair the resource, a significant impact would occur even with the implementation of **Mitigation Measure MM-CUL-3**. While implementation of the mitigation measures herein, in addition to compliance with City General Plan policies, provisions of the RHEMC, and State and federal regulations pertaining to historical resources, would reduce impacts of the buildout of the proposed GPU on historical resources to the maximum extent feasible, since demolition or other material impairment of a historical resource over the course of buildout of the proposed GPU cannot be precluded, impacts are considered significant and unavoidable.

Threshold 4.4(b): Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.?

Impact Analysis

Redevelopment and development of previously undeveloped areas have the potential to impact known and unknown archaeological resources. Typically, surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with most types of construction. As previously discussed, the records search conducted at the SCCIC identified 12 prehistoric archaeological resources recorded within the Planning Area. Although the majority of the Planning Area has been developed, buried resources may remain in areas where developments required only shallow or minimal ground disturbance, in open space areas, or in undeveloped parcels. Developed parcels that have been previously surveyed for the presence of archaeological resources with negative results are the least likely to have unidentified archaeological resources present below ground surface.

Proposed policies require that future developments consider the preservation of archaeological resources. More specifically, one of the goals of the update to the Conservation Element continues to promote the preservation of these resources, as identified above in the discussion of the current Conservation Element, by ensuring the protection of sites of archaeological and culturally valuable significance.

However, while implementation of the above-mentioned goal and policies in the proposed GPU would reduce impacts to archaeological resources associated with buildout of the proposed GPU, future development and redevelopment may result in adverse impacts to undiscovered archaeological resources. Therefore, impacts to archaeological resources resulting from the buildout of the proposed GPU would be potentially significant. Site-specific project environmental review would need to be conducted and archaeological resources studies required before ground disturbing and demolition activities are permitted to occur, as required by Mitigation Measure MM-CUL-4. The archaeological resources studies would identify resources on future development sites that are, or appear to be, eligible for listing in the National Register or California Register. Such studies would also recommend measures to protect archaeological resources.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a potentially significant impact on archaeological resources due to the potential inadvertent discovery during ground disturbance at a development site, future development projects in the Planning Area, such as the representative projects, have the potential to cause a substantial adverse change in the significance of an archaeological resource. Although individual development projects, such as the representative projects, would be required to be consistent with the goals and policies of the proposed GPU, the potential for inadvertent discoveries of sensitive archaeological resources would be considered a significant impact. Accordingly, the representative projects would result in a potentially significant impact on archaeological resources.

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Mitigation Measures

MM-CUL-4: To ensure identification and preservation of archaeological resources and avoid significant impacts to those resources, prior to grading approval by the Rolling Hills Estates Planning Commission, each project requiring such approval shall be screened to determine whether an Archaeological Resources Assessment report is required. Screening shall consider the type of project and whether ground disturbance will occur in native soils (i.e., previously undisturbed soils). If so, prior to grading approval by the Rolling Hills Estates Planning Commission, the City shall require an Archaeological Resources Assessment be conducted under the supervision of an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards.

Archaeological Resources Assessments shall include a California Historical Resources Information System records search at the South Central Coastal Information Center and a Sacred Lands File search through the Native American Heritage Commission. The records searches will determine if the proposed development area has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. If unpaved surfaces are present within the development area, and the entire development area has not been previously surveyed within the past 10 years, a Phase I pedestrian survey shall be undertaken in proposed development areas to locate any surface cultural materials that may be present.

MM-CUL-5: If the Archaeological Resources Assessment identifies potentially significant archaeological resources and impacts cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the Secretary of the Interior's Standards to determine significance prior to any ground-disturbing activities. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be undertaken. These may include a Phase III data recovery program implemented by a qualified archaeologist and performed in accordance with the California Office of Historic Preservation's "Archaeological Resource Management Reports (ARMR): Recommended Contents and Format" (1990) and "Guidelines for Archaeological Research Designs" (1991).

MM-CUL-6: If the Archaeological Resources Assessment did not identify archaeological resources but found the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the Secretary's

4.4 CULTURAL RESOURCES

Standards, and tribal consultation shall be conducted in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials shall be determined in consultation with the affiliated tribe(s), where relevant; this could include curation with a recognized scientific or educational repository, transfer to the tribe, or respectful reinternment in an area designated by the tribe.

MM-CUL-7: If an Archaeological Resources Assessment does not identify potentially significant archaeological resources but the site has moderate sensitivity for archaeological resources, an archaeologist who meets the Secretary's Standards shall be retained on call. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The pre-construction training shall be held in conjunction with a future development project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. The resource shall be evaluated for significance and tribal consultation shall be conducted, in the case of a tribal resource. If the discovery proves to be significant, the long-term disposition of any collected materials should be determined in consultation with the affiliated tribe(s), where relevant.

Level of Significance After Mitigation

Mitigation Measures MM-CUL-4 through **MM-CUL-7** were developed to reduce potential impacts associated with future development and redevelopment under the proposed GPU. **Mitigation Measure MM-CUL-4** requires an archaeological resources assessment be conducted for future development projects to identify any known archaeological resources and the sensitivity of the site. **Mitigation Measures MM-CUL-5** through **MM-CUL-7** detail the next steps required should the archaeological resources assessment identify known resources or determine the site to have high or moderate resource sensitivity. Implementation of **Mitigation Measures MM-CUL-4** through **MM-CUL-7**, in addition to compliance with the City's General Plan policies and State and federal regulations pertaining to archaeological resources, would reduce impacts of the buildout of the proposed GPU on archaeological resources to the maximum extent feasible; however, since destruction of an archaeological resource over the course of buildout of the proposed GPU cannot be precluded, impacts are considered significant and unavoidable.

4.4.2.4 CUMULATIVE IMPACTS

Impact Analysis

While some cultural resources have site-specific significance and impacts to them are project-specific, other cultural resources could have regional significance, and individual impacts to these resources could collectively result in greater, more adverse impacts.

Future development and redevelopment projects in the Palos Verdes Peninsula have the potential to result in cumulative impacts related to the physical demolition, destruction, relocation, or alteration of historical resources or their immediate surroundings, such that the significance of the historical resources would be materially impaired. Regulations, policies, and mitigation measures

4.4 CULTURAL RESOURCES

would minimize the probability of historical resources being adversely affected but ultimately may not prevent the destruction or demolition of a historical resource if preservation is determined to be infeasible, or prevent the alteration of a historical resource such that it would not be materially impaired. Even with regulations and mitigation measures in place, individual historical resources would still have the potential to be adversely impacted by future projects. Therefore, cumulative impacts would potentially be significant.

Significant cultural resources, including archaeological resources, are non-renewable components of finite classes of resources; therefore, all adverse effects contribute to the erosion of a shrinking base of resources. As a result, the potential for cumulative impacts to cultural resources is cumulatively significant. The potential for the permanent loss of cultural resources cannot be known at this time, and future development and redevelopment projects under the proposed GPU would combine with cumulative impacts to cultural resources in the surrounding cities on the Palos Verdes Peninsula to be cumulatively considerable. Therefore, cumulative impacts to cultural resources would be significant.

Mitigation Measures

Please refer to **Mitigation Measures MM-CUL-1** through **MM-CUL-7** above.

Level of Significance After Mitigation

Mitigation Measures MM-CUL-1 through **MM-CUL-3** would require a historical resources assessment be prepared to evaluate potential historical resources for significance, require conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties to reduce a project's impact on historical resources to less than significant, or if impacts cannot be avoided, require the recordation and memorialization of the affected historical resource. **Mitigation Measures MM-CUL-4** through **MM-CUL-7** require an archaeological resources assessment and detail the next steps required should the assessment identify archaeological resources or determine the site to have high or moderate archaeological resource sensitivity. Implementation of these measures would reduce the potential for adverse impacts on cultural resources both individually and cumulatively; however, there is the potential for significant impacts because documentation, memorialization, and data recovery do not mitigate impacts to a less-than-significant level. Therefore, cumulative impacts to cultural resources, including built environment and archaeological resources, are considered significant and unavoidable.

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In accordance with Appendix F and Appendix G of the CEQA Guidelines, this section of the PEIR analyzes the energy implications associated with the implementation of the proposed General Plan Update (GPU), focusing on three energy resources: electricity, natural gas, and petroleum-based fuels. This section includes a discussion of the energy characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates the potential impacts related to energy consumption that may result from future development under the proposed GPU.

4.5.1 ENVIRONMENTAL SETTING

4.5.1.1 REGULATORY FRAMEWORK

FEDERAL

Energy Policy and Conservation Act of 1975, Title III

In 1975, the Energy Policy and Conservation Act was approved and defines “Federal standards fuel economy reduction” to mean reduction of a manufacturer’s average fuel economy standard resulting from application of Federal standards under the Clean Air Act, the National Traffic and Motor Vehicle Safety Act, and the Noise Control Act. The Energy Policy and Conservation Act requires that the average fuel economy for passenger automobiles manufactured by any manufacturer in any model year after model year 1977 shall not be less than the number of miles per gallon established for such model year and a yearly report to the Congress on the implementation of average fuel economy standards.

STATE

Energy Conservation

In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted Assembly Bill 1575 (AB 1575), which created the CEC. The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require Environmental Impact Reports (EIRs) to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the California Natural Resources Agency created Appendix F, Energy Conservation, in the State’s California Environmental Quality Act Guidelines (CEQA Guidelines). CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy.

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In December 2018, the California Natural Resources Agency finalized updates to the CEQA Guidelines. New CEQA Guidelines Section 15126.2(b) treats “wasteful, inefficient, or unnecessary” energy consumption as a significant environmental impact. As a result, energy thresholds have been incorporated into Appendix G, Environmental Checklist Form, of the CEQA Guidelines.

Senate Bill 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly-owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. SB 100 requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), California Air Resources Board (CARB), and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of the policy. In March 2021, the CPUC, CEC, and CARB issued a joint report that includes an initial assessment of the additional energy resources and the resource building rates needed to achieve 100-percent clean electricity.¹ This initial assessment suggests SB 100 is technically achievable through multiple pathways, including construction of clean electricity generation and storage facilities sustained at record-setting rates; diversity in energy resources and technologies that lowers overall costs; retaining some natural gas power capacity, which may minimize costs while ensuring uninterrupted power supply during the transition to 100 percent clean energy; and increased energy storage and advancements in zero-carbon technologies to reduce natural gas capacity needs. According to the report, implementation of SB 100 was modeled in a “high flexibility” scenario, in which the grid’s ability to shift high demand to times of surplus energy is improved, which would result in nearly \$1 billion in annual cost savings by 2045 and a reduction in the amount of energy storage and natural gas needed to support the grid. The report also explored other scenarios, including no-combustion of biomass and fossil fuels and natural gas; inclusion of zero-carbon firm resources, such as 100-percent green hydrogen-fueled turbines and natural gas with systems that can capture and store 100 percent of carbon emissions; and accelerated timelines to achieve the 100-percent target. The report recommends the following be further analyzed: verification that scenario results satisfy the State’s grid reliability requirements; continued evaluation of the potential effects of emerging resources, such as off-shore wind, long-duration energy storage, green hydrogen technologies, and demand flexibility; and assessment of environmental, social, and economic costs and benefits of the additional clean electricity generation capacity and storage needed to implement SB 100.²

¹ California Public Utilities Commission (CPUC), California Energy Commission (CEC), California Air Resources Board (CARB), 2021 SB 100 Joint Agency Report – Achieving 100 Percent Clean Electricity in California: Initial Assessment, March 15, 2021.

² CPUC, CEC, CARB, 2021 SB 100 Joint Agency Report Summary – Achieving 100% Percent Clean Electricity in California, March 15, 2021.

Renewable Portfolio Standard

In 2002, a State law established the basic policy framework for the increased use of renewable energy resources in California, known as the Renewables Portfolio Standard (RPS). Specific requirements were established for investor-owned utilities, including a 20 percent target and provisions for the types of renewable resources that could be used to meet the target. The major eligible renewable energy resources, as defined by the CEC, include biomass, geothermal, solar, wind, and small hydroelectric facilities. Under the law, publicly-owned utilities (POUs) were directed to pursue voluntary actions to increase the use of renewable energy in their portfolios but were allowed the flexibility to define their targets and the types of resources that could meet those targets. The CEC and the CPUC work collaboratively to implement the RPS.

In 2006, new state policy heightened the need to increase the use of renewable energy as part of the state's GHG reduction efforts. In April 2011, Governor Brown signed SB X1-2 that revised the RPS target to be 33 percent renewables by 2020. The new RPS standards apply to all electricity retailers in the State, including POUs, investor-owned utilities, electricity service providers, and community choice aggregators. In October 2015, Governor Brown signed SB 350, which expands and increases the target of the RPS program to 50 percent by the end of 2030. SBs X1-2 and 350 included new enforcement provisions and direct CARB to collect financial penalties for any Notice of Violation issued by the CEC to a POU for its failure to comply with requirements of the State's RPS Program.

California Building Energy Efficiency Standards (Title 24)

The 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations (CCR), Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2020. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. Under 2019 Title 24 standards, nonresidential buildings will use about 30 percent less energy, mainly due to lighting upgrades, when compared to 2016 Title 24 standards. The standards offer developers better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

California Green Building Standards

California Green Building Standards Code (CALGreen Code) is California's first green building code and the first state-mandated green building code in the nation. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. The CALGreen Code (California Code of Regulations, Title 24, Part 11) was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. The 2019 CALGreen Code went into effect on January 1, 2020. The CALGreen Code requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting; heating, ventilation, and air conditioning [HVAC]; and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that

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sustainable construction is not prohibitively expensive and that there is a significant cost-savings potential in green building practices and materials.

California Public Utilities Commission Long Term Energy Efficiency Strategic Plan

The CPUC adopted the State's first Long Term Energy Efficiency Strategic Plan (Strategic Plan) in September 2008 with the goal of promoting energy efficiency and a reduction in GHGs.³ In January 2011, a lighting chapter was adopted and added to the Strategic Plan. The Strategic Plan is California's single roadmap to achieving maximum energy savings in the State from 2009 and beyond. The Strategic Plan contains the practical strategies and actions to attain significant Statewide energy savings, as a result of a year-long collaboration by energy experts, utilities, businesses, consumer groups, and governmental organizations in California, throughout the West, nationally, and internationally. The plan includes the four big bold strategies:

1. All new residential construction in California will be zero net energy by 2020.
2. All new commercial construction in California will be zero net energy by 2030.
3. Heating, ventilation, and air conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate.
4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

California Energy Commission Integrated Energy Policy Report

In 2002, the California State legislature adopted SB 1389, which requires the CEC to develop an Integrated Energy Policy Report (IEPR) every two years. SB 1389 requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2020 Integrated Energy Policy Report Update (2020 IEPR Update) Volume I and Volume III on March 23, 2021, and Volume II on April 15, 2021.⁴ The 2020 IEPR Update provides the results of the CEC's assessments of a variety of energy issues facing California, many of which will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The year of 2020 was unprecedented as the State continues to face the impacts and repercussions of several events including the COVID-19 pandemic, electricity outages, and Statewide wildfires. In response to these challenging events, the 2020 IEPR Update covers a broad range of topics, including transportation, microgrids, and the California Energy Demand Forecast. Volume I of the 2020 IEPR Update focuses on California's transportation future and the transition to zero-emission vehicles (ZEVs); Volume II examines microgrids, lessons learned from a decade of State-

³ CPUC, Long Term Energy Efficiency Strategic Plan: Achieving Maximum Energy Savings in California for 2009 and Beyond, September 2008.

⁴ CEC, Final 2020 Integrated Energy Policy Report Update – Volume I: Blue Skies, Clean Transportation, March 23, 2021; CEC, Final 2020 Integrated Energy Policy Report Update – Volume III: California Energy Demand Forecast Update, March 23, 2021; CEC, Final 2020 Integrated Energy Policy Report Update – Volume II: The Role of Microgrids in California's Clean and Resilient Energy Future, Lessons Learned from the California Energy Commissions Research, April 15, 2021.

supported research, and stakeholder feedback on the potential of microgrids to contribute to a clean and resilient energy system; and Volume III reports on California's energy demand outlook, updated to reflect the global pandemic and help plan for a growth in zero-emission plug in electric vehicles. Overall, the 2020 IEPR Update identifies actions the State and others can take that would strengthen energy resiliency, reduce GHG emissions that cause climate change, improve air quality, and contribute to a more equitable future.

LOCAL

Rolling Hills Estates Climate Action Plan

Alignment with California's Climate Change Action Plan, the City adopted the Climate Action Plan (CAP) on December 12, 2017. The City's CAP is a valuable tool to lower GHG emissions across various sectors in a manner that is most feasible for the community. It identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. Development and adoption of this CAP allows the City to:

- Understand the community GHG emissions that it now produces;
- Identify strategies at the local level that will result in GHG emissions reductions;
- Develop a plan to implement strategies; and
- Monitor and report progress toward climate change goals.

In 2015, the City set GHG emission reduction goals consistent with the State's AB 32 GHG emission reduction targets. The City target was calculated as 15 percent decrease from 2005 levels by 2020 as recommended in the State AB 32 Scoping Plan. A larger-term goal was established for 2035 to reduce emissions by 49 percent below 2005 levels.

The City is committed to providing a more livable, equitable, and economically vibrant community and sub-region through the implementation of energy efficiency measure and subsequent reduction of GHG emission. The CAP set a list of goals relevant to Energy Efficiency. Refer to Section 4.7, *Greenhouse Gas Emissions*, of this PEIR for more details of specific goals related to energy conservation.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law. The elements, along with their goals and policies, that are related to energy are presented below.

Transportation Element

The Rolling Hills Estates General Plan Transportation Element (Transportation Element) is a State-mandated element and fulfills the requirements of Section 65302(b). The Transportation Element contains the goals and policies that emphasize the need for providing an efficient circulation system and a plan for improving the existing roadway network to handle traffic

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increases due to both regional and local growth. The Transportation Element includes a circulation plan which provides for a comprehensive circulation system designed to accommodate the projected transportation needs of the City at build-out of the land use plan. The Transportation Element identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities. The Transportation Element's goal and policy related to energy are as follows:

Goal 4: Promote greater use of public transit as an alternative means of transportation.

Policy 4.1: Encourage and promote greater use of public transportation including carpools, van pools, and bus service.

Housing Element

The Rolling Hills Estates General Plan Housing Element (Housing Element) is a State-mandated element and fulfills the requirements of Section 65302(c). The Housing Element identifies existing and projected housing needs and provides a statement of goals, policies, quantified objectives and scheduled programs for the preservation, improvement and development of housing. The Housing Element is also required to identify adequate sites for housing and to make adequate provision for the existing and projected needs of all economic segments of the community. The Housing Element's goal and policy related to energy are as follows:

Goal 1: Preserve the City's Housing Stock, Quality of Life and Rural Character.

Policy 1.5: Promote water and energy conservation.

4.5.1.2 EXISTING CONDITIONS

ELECTRICITY

Clean Power Alliance (CPA) provides electricity to the Planning Area. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, electricity generation is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit; minus the amount of energy the unit consumes. Generation is typically measured in kilowatt-hours (kWh), megawatt-hours (MWh), or gigawatt-hours (GWh).

NATURAL GAS SERVICES

The Southern California Gas Company (SoCalGas) provides natural gas services to the Planning Area. Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth's surface and is composed primarily of methane (CH₄). It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in the coming years as it is a relatively clean alternative to other fossil fuels, such as oil and coal. In California and throughout the western United States, many new electrical

generation plants fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. Nearly 45 percent of natural gas burned in California was used for electricity generation.⁵ While the supply of natural gas in the United States and production has increased greatly, California produces little and imports 90 percent of its natural gas.⁶

PETROLEUM-BASED FUELS

Petroleum products are fuels made from crude oil and hydrocarbons contained in natural gas. Petroleum products can also be made from coal, natural gas, and biomass. A 42-gallon (U.S.) barrel of crude oil yields about 45 gallons of petroleum products because of refinery processing gain. A barrel of crude oil would yield 19.4 gallons gasoline, 12.5 gallons distillate, 4.4 gallons 4.4 jet fuel, other product 6.5 gallons, 1.5 gallons of hydrocarbon gas liquids, and 0.5 residual fuel oil.⁷ Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup truck, and sport utility vehicles.⁸ Gasoline sold in California at retail is made up of 90-percent petroleum-based gasoline (as specified by the California Air Resources Board) and 10-percent ethanol. Ethanol became the primary blending oxygenate in gasoline in 2003, as Methyl Tertiary Butyl Ether (MTBE) was fully phased out of by that year.⁹

ENERGY USAGE

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 7,802.3 trillion BTUs in 2019 (the most recent year for which this specific data is available), which equates to an average of 197.5 million BTUs per capita.¹⁰ Of California's total energy usage, the breakdown by sector is 39.4 percent transportation, 23.1 percent industrial, 18.8 percent commercial, and 18.7 percent residential.¹¹ Electricity and natural gas in California are generally consumed by stationary users such as residences, commercial, and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2020, taxable gasoline sales (including aviation gasoline) in California accounted for 14,008,219,800 gallons of gasoline.¹² The electricity consumption attributable to Los Angeles County from 2010 to 2019 is shown in **Table 4.5-1**. As indicated in **Table 4.5-1**, electricity consumption in the County rose until 2012 but has overall decreased from 2014 to 2019.

⁵ CEC, Supply and Demand of Natural Gas in California, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, accessed May 25, 2021.

⁶ CEC, Supply and Demand of Natural Gas in California, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, May 25, 2021.

⁷ U.S. Energy Information Administration, *Petroleum Supply Monthly*, June 2021, preliminary data.

⁸ CEC, California Gasoline Data, Facts, and Statistics, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>, accessed on September 30, 2021.

⁹ CEC, California Gasoline Data, Facts, and Statistics, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>, accessed on September 30, 2021.

¹⁰ U.S. Energy Information Administration, Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2019, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=CA, accessed by September 30, 2021.

¹¹ U.S. Energy Information Administration, Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2019, https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_te.html&sid=CA, accessed by September 30, 2021.

¹² California Department of Tax and Fee Administration, Net Taxable Gasoline Gallons (Including Aviation Gasoline), <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>, accessed May 25, 2021.

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**Table 4.5-1
Electricity Consumption in Los Angeles County 2010-2019**

Year	Electricity Consumption (in millions of kilowatt hours)
2010	68,258
2011	68,197
2012	69,271
2013	68,373
2014	69,953
2015	69,532
2016	69,414
2017	68,657
2018	67,907
2019	66,119

Source: California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed May 25, 2021.

The natural gas consumption in Los Angeles County from 2010 to 2019 is shown in **Table 4.5-2**. Similar to electricity consumption, natural gas consumption in Los Angeles County dropped in 2014 and 2015 but has steadily risen since then.

**Table 4.5-2
Natural Gas Consumption in Los Angeles County 2010-2019**

Year	Natural Gas Consumption (in millions of Therms)
2010	3,047.74
2011	3,055.99
2012	2,958.82
2013	3,066.67
2014	2,793.98
2015	2,761.79
2016	2,878.39
2017	2,956.72
2018	2,921.51
2019	3,048.32

Source: California Energy Commission, *Natural Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed July 1, 2021.

Automotive fuel consumption in Los Angeles County from 2011 to 2021 is shown in **Table 4.5-3**. As shown in **Table 4.5-3**, on-road automotive fuel consumption in the County declined from 2011 to 2012, increased from 2012 to 2017, and has been declining since. Heavy-duty vehicle fuel consumption dropped in 2012 and has steadily risen since 2012.

**Table 4.5-3
Automotive Fuel Consumption in Los Angeles County 2011-2021**

Year	On-Road Automotive Fuel Consumption (gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Construction Equipment) (gallons)
2011	4,236,651,198	339,867,222
2012	4,198,980,534	338,853,704
2013	4,216,912,594	361,667,359
2014	4,253,550,697	362,244,178
2015	4,385,856,315	361,744,298
2016	4,505,175,042	384,515,771
2017	4,519,219,673	383,126,269
2018	4,424,988,496	387,832,414
2019	4,316,736,552	390,339,591
2020	4,227,065,544	391,991,276
2021 (projected)	4,138,735,098	392,769,572

Source: California Air Resources Board, *EMFAC2017 v1.0.2.*, <https://www.arb.ca.gov/emfac/2017/>, accessed May 25, 2021.

4.5.2 IMPACT ANALYSIS

4.5.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on energy resources based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact on energy resources is considered significant if implementation of the proposed GPU would:

Threshold 4.5(a): *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.*

Threshold 4.5(b): *Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.*

4.5.2.2 METHODOLOGY

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis under Threshold (a) relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- Criterion 1: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- Criterion 2: The effects of the project on local and regional energy supplies and on requirements for additional capacity.

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- Criterion 3: The effects of the project on peak and base period demands for electricity and other forms of energy.
- Criterion 4: The degree to which the project complies with existing energy standards.
- Criterion 5: The effects of the project on energy resources.
- Criterion 6: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the energy usage of the buildout of the proposed GPU is presented and addresses Criterion 1. The discussion on construction-related energy use focuses on Criteria 2, 4, and 5. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses Criteria 2, 4, and 6, and the building energy demand analysis discusses Criteria 2, 3, 4, and 5.

The analysis under Threshold (b) focuses on the proposed GPU's consistency with three Statewide energy programs, including California Building Energy Efficiency Standards (Title 24), California Green Building Standards (CALGreen) Code, and California Public Utilities Commission Long Term Energy Efficiency Strategic Plan. The consistency is determined by how the proposed GPU matches the program objectives.

4.5.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.5(a): Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

This analysis focuses on three sources of energy that are relevant to the proposed GPU: electricity, natural gas, and transportation fuel for vehicle trips associated with implementation of the proposed GPU. The analysis of electricity is based on the California Emissions Estimator Model version 2020.4.0 (CalEEMod) modeling results for the implementation of proposed GPU. The estimated electricity consumption is based primarily on CalEEMod's default settings for the County, and consumption factors provided by the CPA and the SoCalGas, who are the electricity and natural gas providers for the City. The results of the CalEEMod and energy consumption modeling are included in **Appendix C**, Air Quality/Greenhouse Gas Emissions/Energy Data. The amount of operational fuel consumption was estimated using the CARB Emissions Factor 2017 (EMFAC2017) computer program which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in Los Angeles County and the City's annual vehicle miles traveled (VMT) outputs from CalEEMod based on Traffic Data for Rolling Hills Estates General Plan 2040 Update (Traffic Data) prepared by Fehr & Peers dated in September 2021.

The estimated energy consumption as a result of implementation of the proposed GPU is summarized in **Table 4.5-4**. As shown in **Table 4.5-4**, when compared to existing conditions, the energy usage under the low-range buildout scenario would constitute an approximate 0.0455 percent increase over Los Angeles County's typical annual electricity consumption and an approximate 0.0193 percent increase over Los Angeles County's typical annual natural gas consumption. The operational vehicle fuel consumption under the low-range buildout scenario would increase Los Angeles County's consumption by 0.0350 percent. Compared to existing

conditions, the energy usage under the high-range buildout scenario would constitute an approximate 0.0566 percent increase over Los Angeles County's typical annual electricity consumption and an approximate 0.0255 percent increase over Los Angeles County's typical annual natural gas consumption. The operational vehicle fuel consumption under the high-range buildout scenario would increase Los Angeles County's consumption by 0.0926 percent (**CEQA Appendix F - Criterion 1**).

**Table 4.5-4
General Plan Update and Countywide Energy Consumption**

Energy Type	Project Annual Energy Consumption ^a	Los Angeles County Annual Energy Consumption ^b	Percentage Increase Countywide ^b
Electricity Consumption			
Future Low-range	30,106 MWh	66,118,673	0.0455%
Future High-range	37,402 MWh	66,118,674	0.0566%
Natural Gas Consumption			
Future Low-range	589,618 therms	3,048,320,959	0.0193%
Future High-range	778,581 therms	3,048,320,960	0.0255%
Automotive Fuel Consumption^c			
Future Low-range	659,147 gallons	1,881,314,667 gallons	0.0350%
Future High-range	1,742,184 gallons	1,881,314,667 gallons	0.0926%
Notes:			
^a As modeled in CalEEMod version 2020.4.0.			
^b The project's electricity and natural gas consumption are compared to the total consumption in Los Angeles County in 2019. The project's automotive fuel consumption is compared with the projected Countywide fuel consumption in 2021. Los Angeles County electricity consumption data source: California Energy Commission, Electricity Consumption by County, http://www.ecdms.energy.ca.gov/elecbycounty.aspx , accessed July 1, 2021. Los Angeles County natural gas consumption data source: California Energy Commission, Gas Consumption by County, http://www.ecdms.energy.ca.gov/gasbycounty.aspx , accessed July 1, 2021.			
^c Project fuel consumption calculated based on CalEEMod results. Countywide fuel consumption is from the California Air Resources Board EMFAC2017 model.			
Refer to Appendix C for assumptions used in this analysis.			

Construction-Related Energy

Implementation of the proposed GPU would not directly result in new development within the Planning Area; however, it envisions additional development, which could result in new construction activities associated with future development. Construction activities would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials, such as lumber and glass.

The proposed GPU would not directly result in new development. Therefore, construction-related energy consumption that may occur at any one time is speculative and cannot be accurately determined at this stage of the planning process. Development projects would be subject to environmental review, and specific mitigation measures would be implemented to reduce construction-related energy consumption impacts during construction.

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Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during grading, paving, building construction, and architectural coatings. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that heavy-duty diesel equipment not in use for more than five minutes be turned off. Construction equipment used in the development of future projects under the proposed GPU would also be required to comply with the latest U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) engine emissions standards, which require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**CEQA Appendix F - Criterion 4**).

Substantial reduction in energy inputs for construction materials can be achieved by selecting green building materials composed of recycled materials that require less energy to produce than non-recycled materials.¹³ The integration of green building materials can help reduce environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these building industry source materials.¹⁴ It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual characteristics that would necessitate the use of construction equipment, building materials, or methods that would be less energy efficient than at comparable construction sites in the region or the State. Therefore, fuel energy and construction materials consumed during construction would not represent a significant demand on energy resources (**CEQA Appendix F - Criterion 5**).

Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature, and, as such, impacts would be less than significant.

Energy Consumption in the Planning Area

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. **Table 4.5-4** provides an estimate of the daily fuel consumed by vehicles traveling to and from the Planning Area. Based on the Traffic Data for the Rolling Hills Estates General Plan Update, prepared by Fehr & Peers (dated September 2021), the proposed GPU would generate 575,845 daily VMT under the low-range buildout scenario and 631,575 daily VMT under the high-range buildout scenario. As indicated in **Table 4.5-4**, daily trips generated by future development under the buildout of the proposed GPU are estimated to consume approximately 659,147 gallons of fuel per year, which would increase the County's automotive fuel consumption by 0.0350 percent under

¹³ California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://www.calrecycle.ca.gov/greenbuilding/materials#Material>, accessed July 6, 2021.

¹⁴ California Department of Resources Recycling and Recovery, *Green Building Materials*, <https://www.calrecycle.ca.gov/greenbuilding/materials#Material>, accessed July 6, 2021.

the low-range buildout scenario and approximately 1,742,184 gallons of fuel per year, which would increase the County's automotive fuel consumption by 0.0926 percent under the high-range buildout scenario (**CEQA Appendix F - Criterion 2**).

The key drivers of transportation-related fuel consumption are job locations/commuting distance and many personal choices on when and where to drive for various purposes. Those factors are outside of the scope of the design of the proposed GPU. However, the proposed GPU would promote implementation of the City's CAP, which encourages the installation of electric vehicle (EV) charging stations in the Planning Area in compliance with CALGreen Code. This would encourage and support the use of electric vehicles within the Planning Area (**CEQA Appendix F - Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips as a result of implementation of the proposed GPU would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region, and, as such, impacts would be less than significant.

Building Energy Demand

The CEC developed 2020 to 2030 forecasts for energy consumption and peak demand in support of the 2019 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections.¹⁵ CEC forecasts that the Statewide annual average growth rates of energy demand between 2019 and 2030 would be up to 1.10 percent for electricity and 0.16 percent for natural gas.¹⁶ As shown in **Table 4.5-4**, operational energy consumption of the implementation of proposed GPU would represent approximately 0.0455-percent increase in electricity consumption and 0.0566-percent increase in natural gas consumption over the current Countywide usage under the low-range buildout scenario. Under the high-range buildout scenario, the energy consumption would be 0.0193-percent increase in electricity consumption and 0.0255-percent increase in natural gas consumption over the current Countywide usage, as shown in **Table 4.5-4**. The increase in electricity would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the proposed GPU would be consistent with the CEC's energy consumption forecasts. As such, implementation of the GPU would not require additional energy capacity or supplies (**CEQA Appendix F - Criterion 2**). In addition, implementation of the proposed GPU would not result in unique or more intensive peak or base period electricity demand (**CEQA Appendix F - Criterion 3**).

The land development associated with the proposed GPU would be required to comply with 2019 Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the 2019 Title 24 standards significantly reduces energy usage (30 percent compared to the 2016 Title 24 standards). The Title 24 Building Energy Efficiency Standards are updated every three years and become more stringent between each update. The proposed GPU would be consistent with current (1992) General Plan Transportation Element Goal 4 (Policy 4.5) and Housing Element Goal 1 (Policy 1.5) by encouraging and promoting greater use of public transportation, including carpools, van pools, and bus service, and promoting water and energy conservation (**CEQA Appendix F - Criterion 4**).

¹⁵ CEC, *California Energy Demand 2020-2030 Revised Forecast*, February 2020.

¹⁶ CEC, *California Energy Demand 2020-2030 Revised Forecast*, February 2020.

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Furthermore, the electricity provider, CPA, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent of total procurement by 2030, and 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The CPA provides the electricity generated by renewable sources to the Planning Area. New residential developments in the Planning Area would be automatically enrolled in 100 percent renewable electricity, but could opt down to a minimum of 40 percent renewable electricity or opt out to Southern California Edison (SCE). SCE, as part of RPS, would achieve 100 percent renewables by the year 2045. As such, the increase in reliance of such energy resources further ensures that new development projects would not result in the waste of the finite energy resources (**CEQA Appendix F - Criterion 5**).

Therefore, implementation of the proposed GPU would not cause wasteful, inefficient, and unnecessary consumption of building energy, and, as such, impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, energy, in the form of electricity, natural gas, and petroleum-based fuels, consumed by the representative projects have already been accounted for in the energy consumption estimated for the Planning Area from buildout of the proposed GPU shown in **Table 4.5-4**. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on energy consumption, the energy consumption by the representative projects themselves would not be any more inefficient, wasteful, or unnecessary to result in a significant impact on energy resources. In addition, as discussed above, individual development projects, such as the representative projects, would be required to comply with applicable energy efficiency standards, including the requirements of Title 24 standards and the CALGreen Code. Accordingly, the representative projects would result in a less-than-significant impact on energy resources.

Conclusion

As depicted in **Table 4.5-4**, energy consumption due to implementation of GPU would represent nominal increase in electricity, natural gas, and automobile fuel consumption over the current Countywide usage under low-range buildout scenario and high-range buildout scenario. The proposed GPU would adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Additionally, the project would not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

The GPU Sustainability Element would help achieve the Planning Area's goal of reducing energy consumption by increasing building energy efficiency, promoting renewable energy usage in the Planning Area, promoting better commission and monitor energy systems to increase the energy efficiency. As such, the proposed GPU would not result in the inefficient, wasteful, or unnecessary consumption of energy, and impacts would be less than significant.

Mitigation Measures

Impacts related to energy consumption would be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to energy consumption would be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact level remains less than significant.

Threshold 4.5(b): *Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Impact Analysis

Implementation of the proposed GPU would comply with the applicable goals identified in Statewide energy plans, as listed in **Table 4.5-5**. The proposed GPU contains energy-efficient goals and policies that would help implement energy-efficient measures and would subsequently reduce energy consumption within the Planning Area.

**Table 4.5-5
General Plan Update Consistency with the Statewide Energy Plans**

Programs and Policies	Primary Objective	Consistency
California Building Energy Efficiency Standards (Title 24)	Requires the design of building shells and building components to conserve energy.	Consistent. The proposed GPU would promote energy-efficiency building and innovative building, evaluate local “green” building standard, and implement LEED certificate or similar building standards for the Planning Area’s future development projects. Additionally, the proposed GPU would require incorporation of state-of-the-art energy features in building designs that meet or exceed the most recent Building Energy Efficiency Standards in Title 24.
California Green Building Standards (CALGreen) Code	The CALGreen Code requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure.	Consistent. As discussed above, the proposed GPU would be consistent with Title 24 standards. Additionally, the proposed GPU would require evaluation of feasible local “green” building standards and adopt requirements for new and existing buildings to exceed the CALGreen Code.

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**Table 4.5-5
General Plan Update Consistency with the Statewide Energy Plans**

Programs and Policies	Primary Objective	Consistency
California Public Utilities Commission Long Term Energy Efficiency Strategic Plan	Promote energy efficiency and a reduction in greenhouse gases. The plan includes the four big bold strategies: <ol style="list-style-type: none"> 1. All new residential construction in California will be zero net energy by 2020. 2. All new commercial construction in California will be zero net energy by 2030. 3. Heating, ventilation, and air conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate. 4. All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020. 	Consistent. This plan promotes energy efficiency and a reduction in greenhouse gas emissions. The proposed GPU contains policies aimed at improving emissions and monitor energy systems by supporting State agencies' efforts, promoting the installation of heat recovery and co-generation facilities, and seeking additional funding.
Sources: 2019 California Green Building Standards Code, Title 24, Part 11; California Public Utilities Commission Energy Efficiency Strategic Plan, January 2011 Update; SB 100 California Renewables Portfolio Standard Program: emissions of greenhouse gases, September 10, 2018.		

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, any future development projects implemented under the proposed GPU, such as the representative projects, would be required to comply with applicable energy efficiency standards, including the requirements of Title 24 standards and the CALGreen Code, applicable goals identified in Statewide energy plans, and energy-efficient goals and policies contained in the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to conflict with State and local plans, the representative projects themselves would also be consistent with Statewide energy plans and local goals and policies. Accordingly, the representative projects would result in a less-than-significant impact related to conflict with applicable energy plans. The proposed GPU would be consistent with Statewide Energy Plans. Additionally, new developments under the proposed GPU would utilize electricity provided by CPA that would default to 100-percent renewable energy for residential uses and 50-percent renewable energy for non-residential uses. Therefore, impacts associated with renewable energy or energy efficiency plans would be less than significant.

Mitigation Measures

Impacts related to conflict with applicable energy plans would be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to conflict with applicable energy plans would be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact level remains less than significant.

4.5.2.4 CUMULATIVE IMPACTS

Impact Analysis

The geographic context for cumulative energy consumption impacts for electricity and natural gas is Countywide and relative to CPA's and SoCalGas' service areas. While the geographic context for the transportation-related energy use is more difficult to define, it is meaningful to consider the proposed GPU in the context of Countywide consumption. Future growth within the Planning Area is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure. As discussed above, there would be nominal increases in the County's electricity, natural gas, and automobile fuel consumption under the high-range buildout scenario and low-range buildout scenario, as shown in **Table 4.5-4**. Additionally, new developments under the proposed GPU would utilize electricity provided by CPA that would default to 100-percent renewable energy for residential uses and 50-percent renewable energy for non-residential uses. Furthermore, individual new development projects in the Planning Area would be subject to Title 24 and CALGreen standards, as well as goals and policies of the CAP. Thus, future development projects under the proposed GPU would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently.

Mitigation Measures

Cumulative impacts related to energy consumption and energy plans would be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to energy consumption and energy plans would be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact level remains less than significant.

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4.6 GEOLOGY AND SOILS

This section of the Draft PEIR discusses the potential geology and soil impacts associated with the implementation of the proposed GPU. This section also evaluates potential impacts to paleontological resources in the Planning Area. The analysis contained in this section is based on the current (1992) Rolling Hills Estates General Plan; the Rolling Hills Estates General Plan 2040 Existing Conditions Report, prepared by Dyett & Bhatia, dated January 2018; and a records search conducted by the Natural History Museum of Los Angeles County in May 2021 (provided in **Appendix D**).

4.6.1 ENVIRONMENTAL SETTING

4.6.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU related to geologic hazards, soils, or paleontological resources.

STATE

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PCR], Chapter 7.5, Section 2621, et seq.) was passed in 1972 to mitigate the hazards of surface faulting and fault rupture by establishing regulatory zones around active faults. These zones extend from 200 feet to 500 feet on each side of the known fault and identify areas where a potential surface rupture could be hazardous for buildings used for human occupancy. Development projects located within these zones are required to prepare special geotechnical studies to characterize the effects from any potential surface ruptures.

The Alquist–Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as “earthquake fault zones,” around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. Maps are distributed to all affected cities and counties for the control of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. Local agencies must enforce the Alquist–Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than state law requires. According to the Alquist–Priolo Earthquake Fault Zoning Act, before a project located within an earthquake fault zone can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (PRC Sections 2690–2699) was enacted to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events. The California Geological Survey prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to fault hazards. SHMA requires responsible agencies to regulate development projects within these areas to ensure that the geologic and soil conditions of the project site are investigated and appropriate

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mitigation measures, if required, are incorporated into development plans. Pursuant to PRC Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard.

California Building Code (CBC)

The California Building Code (California Code of Regulations [CCR] Title 24) is a compilation of building standards, including seismic safety standards for new buildings. The CBC includes provisions for demolition and construction, as well as regulations regarding building foundations and soil types. The CBC applies to all occupancies in California, except where stricter standards have been adopted by local agencies.

The CBC is published on a triennial basis, and supplements and errata can be issued throughout the cycle. The 2019 edition of the CBC became effective on January 1, 2020 and incorporates by adoption the 2018 edition of the International Building Code of the International Code Council, with California amendments. The 2019 CBC incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program to mitigate losses from an earthquake and provide for the latest in earthquake safety.

Public Resources Code (PRC) Section 5097.5

PRC Section 5097.5 prohibits excavation, removal, or destruction of paleontological resources from public lands, except with the permission of the public agency that has jurisdiction over the land. For the purposes of Section 5097.5, “public lands” means lands owned by, or under the jurisdiction of the state, city, county, district, authority, or public corporation, or any public agency.

Public Resources Code Section 30244

PRC 30244 requires developments to implement reasonable mitigation for adverse impacts to paleontological resources from development on public land.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

RHEMC Chapter 15.04 (Building Code) provides minimum standards to regulate development in the City. Chapter 15.04 incorporates by reference the Los Angeles County Building Code, Residential Code, and Green Building Standards, which are codified in Title 26, Title 30, and Title 31, respectively, of the Los Angeles County Code. Grading standards for residential districts that are intended to preserve and promote the City's rural character, protect hillsides and topography, and ensure the public health, safety and general welfare are contained in RHEMC Chapter 17.07. RHEMC Chapter 17.07.030 specifies when grading approval would be required and Chapter 17.07.04 lists grading approval exceptions. In addition, RHEMC Chapter 17.07.080 establishes standards and design criteria for all zoning districts within the City. Construction on slope areas in the City are regulated by RHEMC Chapter 17.18.50.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and

implementation measures and contains seven sections or elements in accordance with State planning law. The elements, along with their goals and policies, that are related to geological, soil, and paleontological resources are presented below:

Conservation Element

The Rolling Hills Estates General Plan Conservation Element (Conservation Element) identifies significant natural and cultural resources, including paleontological resources, and establishes goals and policies to address the management and preservation of these resources. The following goal and policy are applicable to paleontological resources:

Goal 3: Promote the preservation of cultural, historical and natural resources within the City.

Policy 3.1: Implement General Plan guidelines for the protection of sites of paleontological, archaeological, historical or culturally valuable significance.

Public Safety Element

The Rolling Hills Estates General Plan Public Safety Element (Public Safety Element) sets goals and policies to address the potential for injury, damage, and disruption due to natural catastrophes and manmade hazards, including geologic hazards such as earthquakes and landslides. The Public Safety Element also contains a comprehensive program to deal with the different hazards and disasters that may occur in the City. The following goal and policies relate to proposed developments in the City and their potential for exposure to existing geologic hazards or creation of new hazards to adjacent land uses:

Goal 2: Require that the City's Planning and Engineering Departments to review projects future development in the City.

Policy 2.1: Discourage development which is adjacent to earthquake faults and other geological hazards.

Policy 2.2: Prohibit residential development on non-engineered fill of any kind.

Policy 2.3: Develop stringent site design and maintenance standards for areas with high fire hazard or soil erosion potential.

Policy 2.4: Regularly review the technical data on public safety and seismic safety for use in the decision-making process.

Policy 2.5: Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (Chapter 70 County Building Code) and ensure regular inspection of grading operations.

In addition to the above goal and policies, the Public Safety Element also designates a Hazards Management Overlay zone, which requires the following actions to be completed by all development within this overlay: (1) undergo a preliminary environmental assessment to determine the nature of additional study required; (2) complete an appropriate evaluation by seismic, flooding, geotechnical, or wildfire risk professionals to determine the nature and extent of the risk; and (3) identify appropriate mitigation and monitor the implementation of the mitigation.

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The Rolling Hills Estates General Plan Land Use Element (Land Use Element) includes maps of the location of the Hazards Management Overlay zone for each Planning Area, if applicable. In Planning Areas 1 and 2, the overlay designation applies to the northernmost portion where the land traversed by the Palos Verdes Fault (see Exhibit 2-2 and Exhibit 2-4, respectively, of the Land Use Element). In Planning Area 6, which encompasses the entire Peninsula Center Commercial District (Commercial District), the overlay designation applies to the central portion comprising the entire Commercial District, which is traversed by the Cabrillo Fault (see Exhibit 2-12 of the Land Use Element). Exhibit 8-1 of the Public Safety Element more specifically identifies Fault Caution Zones, landslide areas, and major slopes within the City.

2020 Multi-Jurisdictional Hazard Mitigation Plan (2020 HMP)

The Disaster Mitigation Act of 2000 (Public Law 106-390) requires State and local governments to prepare mitigation plans to document their mitigation planning process and identify hazards, potential losses, mitigation needs, goals, and strategies. In response to this mandate, the Cities of Rolling Hills Estates and Rancho Palos Verdes prepared the joint 2020 HMP, which identifies hazards and ways to minimize damage by natural and manmade disasters and ensures continuing eligibility for Hazard Mitigation Grant Program funding. The 2020 HMP is an update to the joint 2014 Multi-Jurisdictional Hazard Mitigation Plan.

4.6.1.2 EXISTING CONDITIONS

The Planning Area is located at the northern end of the Peninsular Range geomorphic province, a 900-mile northwest-southeast trending structural block that extends from the tip of Baja California to the Transverse Ranges and includes the Los Angeles Basin.¹ Specifically, the Planning Area is located on the Palos Verdes Peninsula, an uplifted tectonic fault block of seafloor sediments and volcanics rising from sea level along the west and south faces, up to approximately 1,470 feet above mean sea level (amsl) along the crest of the Palos Verdes Hills, and down to approximately 100 feet amsl along the floor of the Los Angeles Basin in the vicinity of the Torrance Airport.² The City ranges in elevation from approximately 300 feet amsl in the canyons and gullies located throughout the City to approximately 1,200 feet amsl at the southwestern portion of the City along the northern slopes of the Palos Verdes Hills.³

FAULTS

The Planning Area is not located within a designated Alquist-Priolo Earthquake Fault Zone, and no Special Studies Zones have been designated within its boundaries.⁴ However, the Planning Area is located in the seismically active region of Southern California. Numerous active and potentially active faults with surface expressions (fault traces) have been mapped adjacent to, within, and beneath the Planning Area. Active earthquake faults are faults where surface rupture has occurred within the last 11,000 years. Surface rupture of a fault generally occurs within 50 feet of an active fault line.

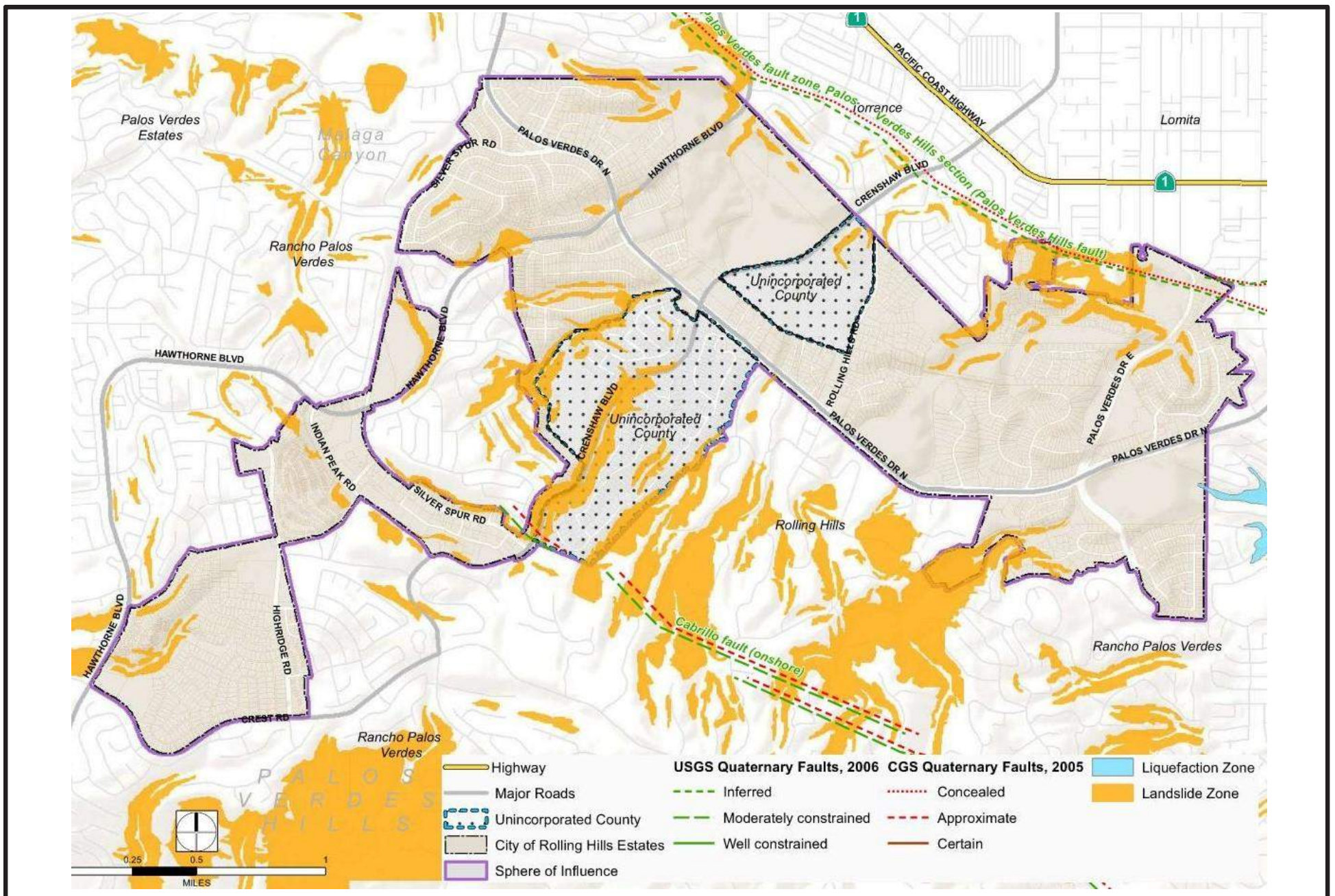
As shown in **Figure 4.6-1**, the Planning Area is traversed by two known “potentially active” faults, the Palos Verdes Fault and the Cabrillo Fault, with potential to cause strong seismic ground shaking in the City. The Palos Verdes Fault is located within the northeastern portion of the Planning Area and

¹ Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

² Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

³ Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

⁴ California Department of Conservation, California Geological Survey, AQ Zapp: California Earthquake Hazards Zone Application, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed January 21, 2021.



Source: California Geological Survey, 1999 and 2005; USGS, 2006.

FIGURE 4.6-1
Earthquake Fault, Landslide, and Liquefaction Zones

4.6 GEOLOGY AND SOILS

is capable of generating a magnitude 7.0 earthquake. The Cabrillo Fault is located within the south-central portion of the Planning Area near the intersection of Silver Spur Road and Crenshaw Boulevard and is capable of generating a magnitude 6.6 earthquake. According to the current General Plan, the onshore segment of the Cabrillo Fault is hidden by landslides, which complicates attempts to confirm its location and evaluate onshore activity. In addition, although the San Andreas, Whittier-Elsinore, and Newport-Inglewood Faults do not traverse the Planning Area, these faults also have potential to cause strong seismic ground shaking in the Planning Area and are capable of generating earthquakes that exceed magnitude 7.0. The closest of these faults is the Newport-Inglewood Fault, located approximately nine miles from the City. The Whittier-Elsinore and San Andreas Faults are located more than 20 miles from the Planning Area.

SOIL CONDITIONS

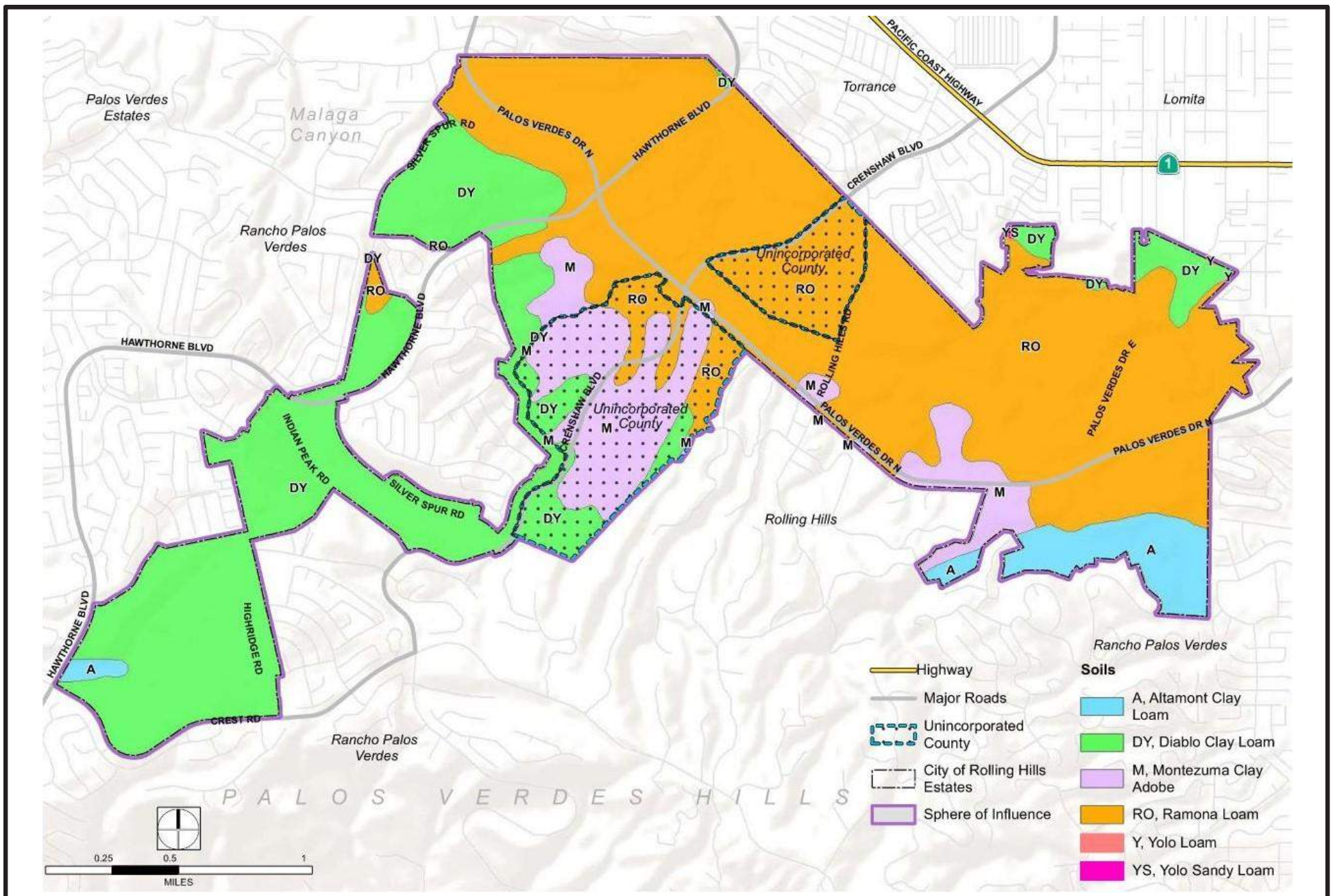
The Palos Verdes Peninsula was submerged by the Pacific Ocean and uplifted three times during the Miocene epoch (8–15 million years ago) through movement along faults. During periods of inundation, erosion from mountains of the surrounding Los Angeles Basin deposited fine-grained sediments, which, in places, consist primarily of diatoms or volcanic ash. Lava flows erupted upon or within the ocean sediments during the early phases of deposition. These sediments and volcanics are considered part of the Monterey Formation, which is composed primarily of deep marine deposits of diatomite, diatomaceous siltstone, mudstone, dolostone, and chert. These deposits lend themselves in varying degrees to expansive soils, and/or susceptibility to erosion. As shown in **Figure 4.6-2**, the Planning Area is composed of the following soil types: Altamont Clay Loam (122 acres), Diablo Clay Loam (824 acres), Montezuma Clay Adobe (309 acres), Ramona Loam (1,487 acres), Yolo Loam (0.5 acre), and Yolo Sandy Loam (0.5 acre). Altamont Clay Loam, Diablo Clay Loam, and Montezuma Clay Adobe are expansive clayey soils with a high shrink/swell potential.

LIQUEFACTION

Liquefaction occurs when saturated soils lose their strength and behave like a liquid as a result of strong ground shaking. The three geologic conditions that must be present in order for liquefaction to occur are (1) strong ground shaking; (2) shallow groundwater, generally less than 50 feet in depth; and (3) the presence of unconsolidated sandy alluvium, typically Holocene in age. As shown in **Figure 4.6-1**, the majority Planning Area is not within a liquefaction zone. Only a very small area south of Palos Verdes Drive North between the Palos Verdes Reservoir and Green Hills Memorial Park adjacent to the Planning Area's eastern boundary is within a liquefaction zone.

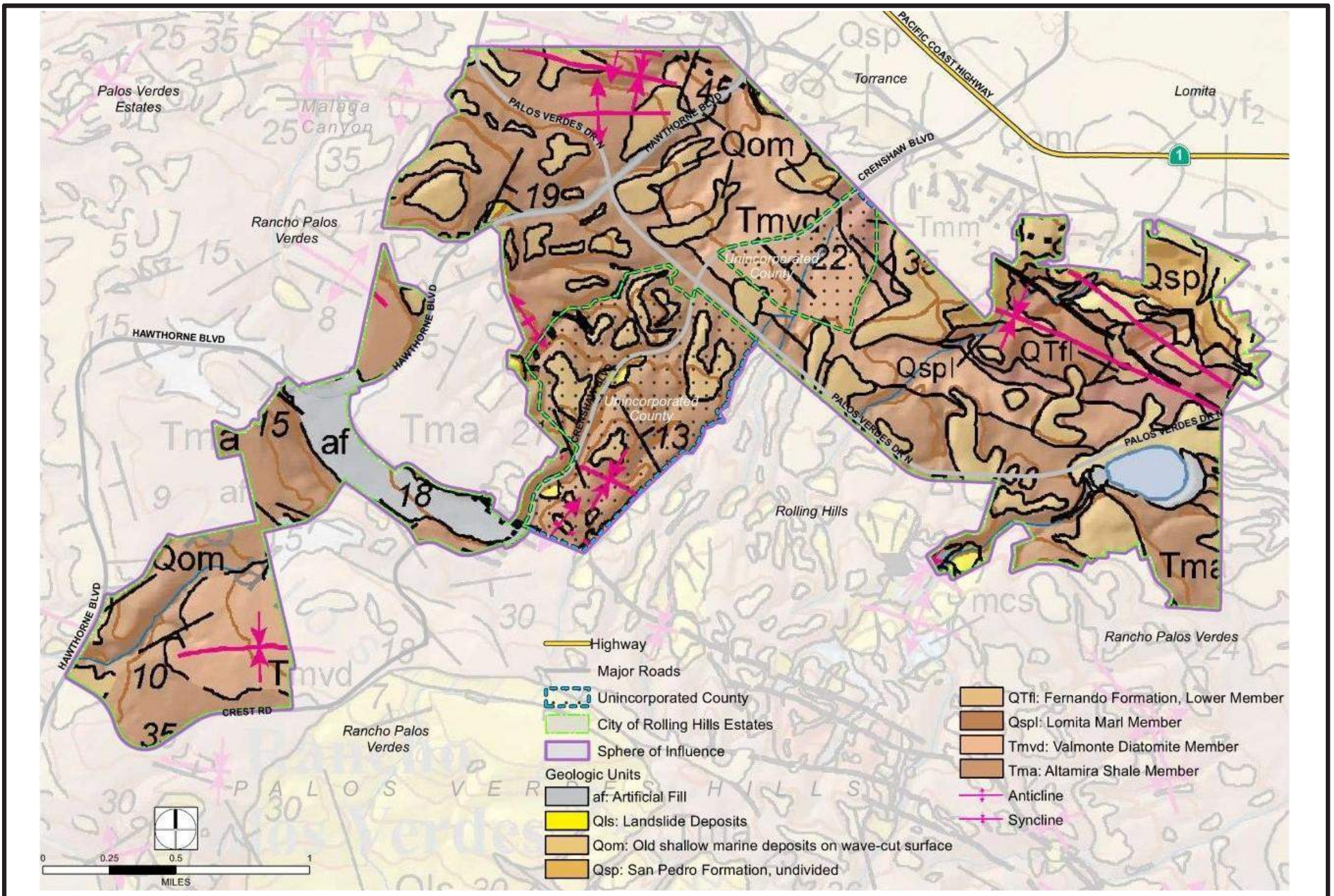
LANDSLIDES AND SLOPE INSTABILITY

As shown in **Figure 4.6-3**, the majority of the Planning Area is underlain by shale and siltstone units of the Monterey Formation (Altamira Shale), which are conducive to landsliding and slope instability characteristic of the Palos Verdes Peninsula. According to the seismic hazard zone maps for the Redondo Beach and Torrance Quadrangles, the Planning Area encompasses numerous earthquake-induced landslide zones, particularly along Crenshaw Boulevard, along the northern boundary of the Planning Area, and the areas south of Palos Verdes Drive North between Crenshaw Boulevard and Silver Spur Road as shown in **Figure 4.6-1**. In addition, the potential for unstable ground conditions and landslides exists in all areas in the Planning Area with steep slopes.



Source: Dyett & Bhatia, 2018.

FIGURE 4.6-2
Soil Types in the Planning Area



Source: California Geological Survey Geologic Map of the Long Beach Quadrangle, 2016.

FIGURE 4.6-3
Geologic Map of the Planning Area

The current General Plan postulates that the Silver Spur Landslide Complex underlies a large portion of the residential area northeast of the Planning Area's Commercial District, which is roughly bounded by Hawthorne Boulevard to the north, Crenshaw Boulevard to the south, Silver Spur Road to the east, and Indian Peak Road to the west. More specifically, there are portions between Deep Valley Drive and Crenshaw Boulevard and on the south side of Indian Peak Road that are within earthquake-induced landslide areas. Additionally, an active landslide area exists between Indian Peak Road and Deep Valley Road. This landslide area owes its origin to the saturation of a massive fill by shallow groundwater infiltration. Therefore, the eastern portion of the Commercial District, in particular, is considered prone to seismically induced landslides.

PALEONTOLOGICAL RESOURCES

As discussed above, the Palos Verdes Peninsula was submerged beneath the Pacific Ocean and uplifted three times. Consequently, potential fossil-bearing units are present either at the surface or in the subsurface soils in the Planning Area. Thus, the Planning Area is sensitive for paleontological resources.

A paleontology collection records search for the locality and specimen data within the Planning Area was conducted by the Natural History Museum of Los Angeles County in May 2021 and found several fossil localities from the Monterey Formation (Altamira Shale and Lomita Marl) within the Planning Area. These localities have yielded specimens of the following at the surface: baleen whale (*Cetotheriidae*), red algae (*Rhodophyta*), echinoderm (*Echinoidea*), sea snails (*Liribittium amillatum*, *L. quadrifilatum*), top snails (*Lirularia magna*, *L. pedroana*; *Norrisia norrisii*), murex snail (*Paciocinebrina foveolate*, *Caesia perpinguis*), turban snail (*Chlorostoma funebris*, *Pomaulax gibberosa*), dove snails (*Alia carinata*), worm snails (*Petalococonchus compactus*), slipper snail (*Crepidula onyx*), dwarf turbans (*Homalopoma berryi*, *H. mimicum*, *H. luridum*), wentletrap (*Hirtoscala tinctum*), venus clam (*Leukoma staminea*), winkle (*Lacuna unifasciata*), carditid (*Glans carpenteri*; *Cyclocardia occidentalis*, *C. ventricosa*), scallop (*Leopecten stearnsii*, *Chlamys opuntia*), and luccinid clams (*Lucinoma annulatum*). In addition, other localities have yielded specimens of the following at unknown depths: sperm whale (*Physeteridae*), dwarf turbans, venus clam, carditid, bittersweet clams (*Glycymeris septentrionalis*), surf clam (*Pseudomardium*), turban snail, moon snail (*Naticidae*), cockle (*Nemocardium centifilosum*), lucines (*Epilucina californica*), whelk (*Kelletia kelletii*), murex snail (*Acanthinucella spirata*), falsejingle (*Pododermus*), triton (*Fusitriton*), barnacles (*Sessilia*), barley snail (*Pseudodiala*), wentletrap (*Hirtoscala*), echinoderm, bryozoan (*Bryozoa*), hatchet shell (*Thyasira flexuosa*), tusk shell (*Gadila aberrans*), unspecified invertebrates, and other unsorted specimens.

Numerous other fossil localities exist within the Palos Verdes Peninsula outside of the Planning Area. Baleen whale was also located at the surface at Silver Spur Elementary School, and bison (*Bison*) and ground sloth (*Paramylodon*) were located 250 feet above mean sea level at Green Hills Memorial Park. Other localities have yielded specimens of the following at unknown depths: bison, fish (*Osteichthyes*), mackerel shark (*Isurus*); invertebrates: lucines (*Lucinoma*, *Epilucina*), tower shell (*Turritella*), spindle snail (*Barbarofusus*), turrid snail (*Antiplanes*), turban snail, triton (*Fusitriton*), tellin (*Macoma*), frog shells (*Crossata*), corrugated clam (*Humilaria*), scallop, and falsejingle.

4.6 GEOLOGY AND SOILS

4.6.2 IMPACT ANALYSIS

4.6.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts related to geology and soils based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact related to geology and soils is considered significant if implementation of the proposed GPU would:

Threshold 4.6(a): ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.***
- ii. Strong seismic ground shaking.***
- iii. Seismic-related ground failure, including liquefaction.***
- iv. Landslides.***

Threshold 4.6(b): ***Result in substantial soil erosion or the loss of topsoil.***

Threshold 4.6(c): ***Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.***

Threshold 4.6(d): ***Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.***

Threshold 4.6(e): ***Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.***

Threshold 4.6(f): ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.***

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in **Appendix A** of this Draft PEIR) determined that the Planning Area is not located within a designated Alquist-Priolo Earthquake Fault Zone. Therefore, the proposed GPU would have no impact related to Threshold (a)i. Impacts related to Threshold (a)ii., which involves strong seismic ground shaking were determined to be less than significant since future development would be constructed in accordance with the standards defined in the CBC and would be subject to review by the City's Building and Safety Department. With the exception of a very small portion of the Planning Area, the City is not located in a liquefaction hazard zone, and no land use change is anticipated for this small portion. Therefore, the Initial Study concluded that there would be no impacts related to Threshold (a)iii. Future development within the Planning Area would be required to comply with

existing regulations to reduce erosion potential, including South Coast Air Quality Management District Rule 403 and the National Pollutant Discharge Elimination System requirements. Thus, impacts related to soil erosion or loss of topsoil were determined to be less than significant in the Initial Study for Threshold (b). Impacts related to expansive soils under Threshold (d) were also determined to be less than significant since future development would be constructed in accordance with the CBC and would be subject to review by the City's Building and Safety Department. Finally, future development within the Planning Area would be required to connect to the existing public sewer system with the exception of the potential development of accessory dwelling units (ADU) in single-family neighborhoods that utilize existing septic tanks or alternative wastewater disposal systems. In such cases, property owners would be required to demonstrate that their on-site system meets the capacity requirements to adequately serve the addition of an ADU on their property, and impacts related to Threshold (e) were determined to be less than significant. As such, no further analysis of these issues is necessary. Analysis of impacts related to Thresholds (a)(iv), (c), and (f) is provided below.

4.6.2.2 METHODOLOGY

The program-level analysis provided in this section evaluates potential impacts based on the location and type of future development implemented under the proposed GPU in relation to the existing geologic hazards (specifically related to landslide zones and steep slopes) identified in the City's current (1992) General Plan and the Rolling Hills Estates General Plan 2040 Existing Conditions Report. The analysis in this section is also based on review of California Geological Survey maps.

In addition, potential impacts are evaluated based on the paleontological sensitivity of the Planning Area and the results of a records search conducted by the Natural History Museum of Los Angeles County.

4.6.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.6(a)(iv): Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Threshold 4.6(c): Would the Project 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?

Impact Analysis

As discussed above under Section 4.6.1.2 Existing Conditions above, within the Planning Area, there is potential for unstable ground conditions and landslides in all areas with steep slopes. In addition, the City contains numerous landslide zones, particularly along Crenshaw Boulevard, along the northern boundary of the Planning Area, and the areas south of Palos Verdes Drive North between Crenshaw Boulevard and Silver Spur Road as shown in **Figure 4.6-1**. As discussed in Section 2.0, Project Description, of this Draft EIR, future development within the Planning Area would be focused in the Commercial District and infill locations. The Commercial District is underlain by the Silver Spur Landslide Complex and is in proximity to the Cabrillo Fault. The precise location and boundaries of the Silver Spur Landslide Complex is unknown; however, there is potential for future developments within the Commercial District to be located on an unstable geologic unit. In

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addition, infill developments within the Planning Area could also be located on steep slopes. The Commercial District is located within the Hazard Management Overlay zone. All future development within the Commercial District would be subject to the requirements of the Hazard Management Overlay zone, which includes geotechnical evaluation and implementation of recommended design and safety measures. Any future infill developments located on parcels with the Hazard Management Overlay Zone shown on Exhibits 2-2, 2-4, and 2-12 of the current General Plan Land Use Element would also be required to perform a geotechnical evaluation and implement any recommended design and safety measures. More specifically, the proposed GPU contains goals and policies that require new construction and significant alterations to properties within potential landslide areas to be evaluated for site stability, including identification of potential impacts to adjacent properties, during project design and review.

Furthermore, future developments would be required to comply with the grading standards established in the RHEMC to reduce landslide potential and ensure soil stability. RHEMC Chapter 17.18.050 prohibits slopes greater than 25 percent from being substantially graded or filled; slopes greater than 33.3 percent from being improved; and requires a 35-foot setback from the crest of a hill for any proposed structure greater than five feet in height. Moreover, all new buildings would be required to comply with the CBC, as well as the City's Building Code (RHEMC Chapter 15.04). Compliance with all applicable regulations and requirements would ensure that the implementation of the proposed GPU would not directly or indirectly cause potential substantial adverse effects, including to risk of loss, injury, or death involving landslides; and would ensure that future development as a result of the proposed GPU would not be located on a geologic unit that is unstable, or that would become unstable, and potentially result in landslide. Therefore, impacts related to landslides and unstable geologic units or soil would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to landslides and unstable geologic units or soil, future development activity, such as the representative projects, would not result in significant impacts related to on- or off-site landslide. In addition, as discussed above, individual development projects, such as the representative projects, would be required to comply with the grading standards established in the RHEMC and CBC to reduce landslide potential and ensure soil stability. Compliance with all applicable regulations and requirements would ensure that development of representative projects would not directly or indirectly cause potential substantial adverse effects, including to risk of loss, injury, or death involving landslides; and would ensure that these representative projects would not be located on a geologic unit that is unstable, or that would become unstable, and potentially result in landslide. Accordingly, impacts related to landslides and unstable geologic units or soil related to the development of representative projects would be less than significant.

Mitigation Measures

Impacts related to landslides and unstable geologic units or soil would be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to landslides and unstable geologic units or soil would be less than significant. Therefore, no mitigation measures are required or included, and the impact level remains less than significant.

Threshold 4.6(f): *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Impact Analysis

The Planning Area encompasses areas that may contain fossil-bearing units and are, therefore, considered sensitive for paleontological resources. While future development within the Planning Area would be focused in the Commercial District, which is primarily underlain by artificial fill, as shown in **Figure 4.6-3**, and infill locations that have been previously graded to accommodate the existing or previous structures and uses, there remains the possibility that fossils are present in the soil in the Planning Area and that ground disturbance by future development under the proposed GPU could damage such fossils. Future development and redevelopment projects must be considered on a project-by-project to determine whether a full paleontological assessment is required based on previous ground disturbance at the development site, the extent of ground-disturbing activities, and depth of excavation. Ground-disturbing activities (e.g., excavation, grading, vegetation removal, and construction) associated with future development and redevelopment projects allowed under the proposed GPU would have the potential to unearth, damage, and/or destroy known or unknown paleontological resources and have the potential to result in adverse impacts. Thus, impacts to paleontological resources or sites or unique geologic features would be potentially significant prior to mitigation.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a potentially significant impact on paleontological resources due to the potential inadvertent discovery of paleontological resources during ground disturbance at a development site, future development activity, such as the representative projects, may cause a substantial adverse change in the significance of a paleontological resource. Therefore, the potential for inadvertent discoveries of paleontological resources would be considered a significant impact. Accordingly, the representative projects would result in a potentially significant on paleontological resources prior to mitigation.

Mitigation Measures

MM-GEO-1: To ensure identification and preservation of significant paleontological resources and avoid significant impacts to those resources, prior to the issuance of a grading approval by the City of Rolling Hills Estates Planning Commission, each project requiring such approval shall be screened to determine whether a full paleontological resources assessment is required. Screening shall consider whether the proposed grading activity will extend into known undisturbed fossil-bearing strata (i.e., those of the Monterey Formation, including Lomita Marl Member, Valmonte Diatomite Member, and Altamira Shale Member). If so, the City shall require a paleontological resources assessment be conducted by a paleontologist that meets Bureau of Land Management or Society of Vertebrate

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Paleontology standards (i.e., a qualified paleontologist) prior to the issuance of a grading approval. If the paleontological resources assessment identifies the potential for destruction of significant paleontological resources, an avoidance and/or recovery plan shall be developed and implemented under the supervision of a qualified paleontologist to the satisfaction of the City of Rolling Hills Estates.

MM-GEO-2: In the event that any prehistoric subsurface paleontological resources are encountered during future construction or the course of any ground disturbance activities, all such activities shall halt immediately, at which time the applicant shall notify the City and consult with a qualified paleontologist to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined to be unnecessary or infeasible by the City. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted.

Level of Significance After Mitigation

Impacts related to paleontological resources would be less than significant with the implementation of **Mitigation Measures MM-GEO-1** and **MM-GEO-2**.

4.6.2.4 CUMULATIVE IMPACTS

Impact Analysis

Due to the site-specific nature of geological conditions (i.e., soils, geological features, subsurface features, seismic features, etc.), geologic impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. Nonetheless, cumulative growth in the Planning Area through 2040 would expose a greater number of people to seismic hazards, particularly within the City's Commercial District. However, future development projects would be subject to established guidelines and regulations pertaining to building design and seismic safety, including those set forth in the CBC and City's Building Code. Furthermore, future development projects would be required to prepare site specific geotechnical evaluations that would identify potential impacts related to underlying geologic and soil conditions and ensure that development permitted by the GPU would not exacerbate any existing geologic hazards. With adherence to applicable regulations and any site-specific recommendations provided in the require geotechnical evaluations, the proposed GPU's contribution to impacts related to geology and soils would not be cumulatively considerable, and cumulative impacts would be less than significant.

With regard to paleontological resources, as previously stated, the Palos Verdes Peninsula was previously submerged beneath the Pacific Ocean. Thus, the Planning Area has high sensitivity for paleontological resources. However, in accordance with **Mitigation Measures MM-GEO-1** and **MM-GEO-2**, future development projects, depending on the proposed extent of ground disturbance activities, would be required to conduct a paleontological resources assessment and/or halt any ground disturbing activities in the event of discovery of paleontological resources during construction; to conduct an assessment to determine the significance of the discovered resource; and to implement avoidance or data recovery measures, if necessary. With implementation of these requirements, the proposed GPU's contribution to impacts related to

paleontological resources would not be cumulative considerable, and cumulative impacts would be less than significant.

Mitigation Measures

Cumulative impacts related to geology, soils, and paleontological resources were determined to be less than significant. Therefore, no additional mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to geology, soils, and paleontological resources were determined to be less than significant. Therefore, no additional mitigation measures were required or included, and the impact level remains less than significant.

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4.7 GREENHOUSE GAS EMISSIONS

This section of the PEIR discusses the potential Greenhouse Gas (GHG) impacts associated with the implementation of the proposed GPU. This section includes a discussion of the GHG characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant plans, policies, and regulations.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates the potential GHG impacts that may result from the proposed GPU.

4.7.1 ENVIRONMENTAL SETTING

4.7.1.1 REGULATORY FRAMEWORK

FEDERAL

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm, carbon dioxide equivalent (CO₂e)¹ concentration, is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

To date, no federal standards have been established for nationwide GHG reduction targets or any regulations or legislation enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

¹ Carbon Dioxide Equivalent (CO₂e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

4.7 GREENHOUSE GAS EMISSIONS

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (USEPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the USEPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, methane [CH₄], nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the USEPA's assessment of the scientific evidence that form the basis for the USEPA's regulatory actions.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, the George W. Bush Administration issued Executive Order 13432 in 2007 directing the USEPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 to 2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 to 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 mpg if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 to 2021, and NHTSA intends to set standards for model years 2022 to 2025 in a future rulemaking. On January 12, 2017, the USEPA finalized its decision to maintain the current GHG emissions standards for model years 2022 to 2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 to 2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, the USEPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 Federal Register [FR] 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the USEPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, President Trump directed the USEPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Presidential Executive Order 13783

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of CO₂, N₂O, and CH₄.

STATE

Various Statewide and local initiatives to reduce California’s contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of GHG emissions are not yet fully understood, that there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation would be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Executive Order S-1-07

Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of Statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs the California Air Resources Board (CARB) to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in Assembly Bill 32 (AB 32), which requires California to reduce GHG emissions to 1990 levels by 2020.

Executive Order S-3-05

Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

4.7 GREENHOUSE GAS EMISSIONS

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary would also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08

Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of the State's climate adaptation strategy. This would result in consistent guidance from experts on how to address GHG emissions in the State of California.

Executive Order S-14-08

Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Senate Bill 100

SB 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, 60 percent by December 31, 2030, and 100 percent by December 31, 2045. The bill would require the California Public Utilities Commission (CPUC), CEC, CARB, and all other State agencies to incorporate that policy into all relevant planning. In addition, SB 100 would require the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every 4 years thereafter, that includes specified information relating to the implementation of the policy.

Executive Order S-20-04

Executive Order S-20-04, the California Green Building Initiative, (signed into law on December 14, 2004), establishes a goal of reducing energy use in State-owned buildings by 20 percent from

4.7 GREENHOUSE GAS EMISSIONS

a 2003 baseline by 2015. It also encourages the private commercial sector to set the same goal. The initiative places the California Energy Commission (CEC) in charge of developing a building efficiency benchmarking system, commissioning and retro-commissioning (commissioning for existing commercial buildings) guidelines and developing and refining building energy efficiency standards under Title 24 to meet this goal.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Executive Order B-30-15

This order added the interim target to reduce Statewide GHG emissions 40 percent below 1990 levels by 2030 and required CARB to update the AB 32 Scoping Plan to identify measures to meet the 2030 target.

Assembly Bill 1493

AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State.”

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. When fully phased in, the near-term standards would result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards would result in a reduction of about 30 percent.

Assembly Bill 3018

AB 3018 established the Green Collar Jobs Council (GCJC) under the California Workforce Investment Board (CWIB). The GCJC would develop a comprehensive approach to address California’s emerging workforce needs associated with the emerging green economy. This bill would ignite the development of job training programs in the clean and green technology sectors.

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Senate Bill 97

SB 97, signed in August 2007 (Chapter 185, Statutes of 2007; Public Resources Code (PRC) Sections 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under the California Environmental Quality Act (CEQA). This bill directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions (or the effects of GHG emissions), as required by CEQA.

OPR published a technical advisory recommending that CEQA lead agencies make a good-faith effort to estimate the quantity of GHG emissions that would be generated by a proposed project. Specifically, based on available information, CEQA lead agencies should estimate the emissions associated with project-related vehicular traffic, energy consumption, water usage, and construction activities to determine whether project-level or cumulative impacts could occur, and should mitigate the impacts where feasible. OPR requested CARB technical staff to recommend a method for setting CEQA thresholds of significance as described in CEQA Guidelines Section 15064.7 that would encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

The Natural Resources Agency adopted the CEQA Guidelines Amendments prepared by OPR, as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments and filed them with the Secretary of State for inclusion in the CCR. The CEQA Guidelines Amendments became effective on March 18, 2010.

Senate Bill 375

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires MPOs to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that integrates land use and transportation strategies in that MPOs regional transportation plan in order to achieve GHG emissions reductions targets. CARB, in consultation with MPOs, would provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets would be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets.

Senate Bill 1368

SB 1368 (Chapter 598, Statutes of 2006) is the companion bill of AB 32 and was signed into law in September 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007. SB 1368 also required the CEC to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas fired plant. Furthermore, the legislation states that all electricity provided to California, including imported electricity, must be generated by plants that meet the standards set by CPUC and CEC.

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Senate Bill 32 (SB 32)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

Executive Order B-55-18

This order establishes a new Statewide goal to achieve carbon neutrality no later than 2045 and achieve and maintain net negative emissions thereafter. However, to date, this goal has not been codified by the State Legislature.

CARB SCOPING PLAN

On December 11, 2008, CARB adopted its first Climate Change Scoping Plan (Scoping Plan), which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business as Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce CO₂e emissions by 174 million metric tons (MT). This reduction of 42 million MTCO₂e, or almost 10 percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data were available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.² The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

In December 2017, CARB adopted the Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update reflects the 2030 target of a 40 percent

² California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed May 26, 2021.

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reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan establishes a new emissions limit of 260 million MTCO₂e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030. The 2017 Scoping Plan contains the following goals:

1. SB 350
 - Achieve 50-percent Renewables Portfolio Standard (RPS) by 2030.
 - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard (LCFS)
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
 - Increase ZEV buses, delivery, and other trucks.
4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
 - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - CARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements.
8. 20-percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

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California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands.

In addition to Statewide strategies, the 2017 Scoping Plan also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than six MTCO_{2e} or less per capita by 2030 and two MTCO_{2e} or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds – consistent with the Scoping Plan and the State's long-term GHG goals – and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a climate action plan or other plan to reduce GHG emissions is appropriate.

CALIFORNIA CODE OF REGULATION TITLE 24

In 1978, the CEC established Title 24, California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements. The 2016 standards substantially reduce electricity and natural gas consumption. Additional savings result from the application of the standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save additional electricity. These savings are cumulative, doubling as years go by. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings whose permit applications are dated on or after January 1, 2020, must comply with 2019 Standards. California's energy efficiency standards are updated on an approximate three-year cycle.

California Green Building Standards (CALGreen) Code is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards in an effort to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. The CALGreen Code was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. The 2019 CALGreen Code (California Code of Regulations, Title 24, Part 11) went into effect on January 1, 2020. The CALGreen Code requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g. lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively

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expensive, and that there is a significant cost-savings potential in green building practices and materials.

REGIONAL

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a Policy on Global Warming and Stratospheric Ozone Depletion in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

Southern California Association of Governments

On September 3, 2020, the Regional Council of SCAG formally adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments – Connect SoCal* (2020–2045 RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the State-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

LOCAL

Rolling Hills Estates Climate Action Plan

In alignment with California's Climate Change Action Plan, the City adopted the Climate Action Plan (CAP) on December 12, 2017. The City's CAP is a valuable tool to lower GHG emissions across various sectors in a manner that is most feasible for the community. It identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. Development and adoption of this CAP allows the City to:

- Understand the community GHG emissions that it now produces;
- Identify strategies at the local level that will result in GHG emissions reductions;
- Develop a plan to implement strategies; and
- Monitor and report progress toward climate change goals.

In 2015, the City set GHG emission reduction goals consistent with the State's AB 32 GHG emission reduction targets. The City's target was calculated as a 15-percent decrease from 2005 levels by 2020 as recommended in the State AB 32 Scoping Plan. A longer-term goal was established for 2035 to reduce emissions by 49 percent below 2005 levels. The goals set in each chapter of the CAP are listed as below.

Land Use and Transportation (LUT)

The transportation sector produces significant portions of a city's GHG emissions, due to the reliance on fossil fuels. LUT strategies that offer zero-emissions mobility options or those that modify transportation behaviors can help reduce the amount of carbon that is produced in the City. Combining land use and transportation strategies can lead to a broad set of co-benefits and improve the mobility of residents, employers and visitors.

Goal LUT: A – Accelerate the market for EV vehicles.

Goal LUT: B – Encourage ridesharing.

Goal LUT: C – Encourage Transit usage.

Goal LUT: D – Adopt active transportation initiatives.

Goal LUT: E – Parking Strategies.

Goal LUT: F – Organizational Strategies.

Goal LUT: G – Land Use Strategies.

Goal LUT: H – Digital Technology Strategies.

Energy Efficiency (EE)

Due to increasing electricity and natural gas demands, the built environment is a significant contributor to GHG emissions. Improving energy efficiency of new and existing buildings and infrastructure at the residential, commercial, and municipal level will result in significant GHG reduction.

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Goal EE: A – Increase energy efficiency in existing residential units.

Goal EE: B – Increase energy efficiency in new residential developments.

Goal EE: C – Increase energy efficiency in existing commercial units.

Goal EE: D – Increase energy efficiency in new commercial developments.

Goal EE: E – Increase energy efficiency through water efficiency.

Goal EE: F – Decrease energy demand through reducing urban heat island effect.

Goal EE: G – Participate in education, outreach and planning for energy efficiency.

Goal EE: H – Increase energy efficiency in municipal buildings.

Goal EE: I – Increase energy efficiency in city infrastructure.

Goal EE: J – Reduce energy consumption in the long run.

Solid Waste (SW)

Waste prevention and recycling – jointly referred to as waste reduction – help to better manage solid waste and reduce GHG emissions.

Goal SW: A – Increase diversion and reduction of residential waste.

Goal SW: B – Increase diversion and reduction of commercial waste.

Goal SW: C – Reduce and divert municipal waste.

Urban Greening (UG)

Urban greening includes spaces, such as parks, forests, green roofs, local agriculture, street trees, and community gardens. These spaces are “carbon sinks” as they store GHG emissions that are otherwise emitted into the atmosphere.

Goal UG: A – Increase and maintain urban greening in the community.

Goal UG: B – Increase and maintain urban greening in municipal facility.

Energy Generation and Storage (EGS)

Energy generation and storage involve supporting clean renewable energy, and decreasing dependence on traditional, GHG-emitting power sources.

Goal EGS: A – Support energy generation and storage in the community.

4.7.1.2 EXISTING CONDITIONS

The Planning Area is located in the South Coast Air Basin (Basin), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. The Basin’s terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

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The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and/or dispersion of air pollutants throughout the Basin.

GLOBAL CLIMATE CHANGE AND GREENHOUSE GASES

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.” The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short wave radiation emitted by the Sun is absorbed by Earth; Earth emits a portion of this energy in the form of long wave radiation; and GHGs in the upper atmosphere absorb this long wave radiation and then both emit some of this long wave radiation into space and re-radiate some toward Earth. This “trapping” of the long wave (thermal) radiation emitted back toward Earth is the underlying process of the greenhouse effect.³

The most abundant GHGs are water vapor and CO₂. Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-radiate long wave radiation.

GHGs include, but are not limited to, the following:⁴

- Water Vapor (H₂O). Although H₂O has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the H₂O in our atmosphere, respectively. The primary human-related source of H₂O comes from fuel combustion in motor vehicles; however, this is not believed to contribute a significant amount (less than one percent) to atmospheric concentrations of H₂O. The IPCC has not determined a GWP for H₂O.
- Carbon Dioxide (CO₂). CO₂ is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of CO₂ in the atmosphere has increased 43 percent.⁵ CO₂ is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWPs for other GHGs.
- Methane (CH₄). CH₄ is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of CH₄ are landfills, natural gas systems, and enteric fermentation. CH₄ is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The GWP of CH₄ is 25.

³ The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth’s surface to 10 to 12 kilometers.

⁴ Intergovernmental Panel on Climate Change, *Climate Change, Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, 2007.

⁵ U.S. Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2016*, April 2018.

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- Nitrous Oxide (N₂O). N₂O is produced by both natural and human related sources. Primary human-related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N₂O is 298.
- Hydrofluorocarbons (HFCs). HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing, as the continued phase out of CFCs and HCFCs gains momentum. The GWP of HFCs range from 12 to 14,800.⁶
- Perfluorocarbons (PFCs). PFCs are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. PFCs are potent GHGs with a GWP several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).⁷ The GWP of PFCs range from 7,390 to 12,200.
- Sulfur hexafluoride (SF₆). SF₆ is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF₆ is the most potent GHG that has been evaluated by the IPCC with a GWP of 22,800. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio compared to CO₂ (4 parts per trillion [ppt] in 1990 versus 365 ppm, respectively).⁸

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone (O₃) depleters; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

- Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The GWPs of HCFCs range from 77 for HCFC-123 to 2,310 for HCFC-142b.⁹
- 1,1,1 trichloroethane. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The GWP of methyl chloroform is 146 times that of carbon dioxide.¹⁰
- Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the USEPA Final Rule (57 FR 3374) for the phase

⁶ U.S. Environmental Protection Agency, Overview of Greenhouse Gases, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>, accessed May 26, 2021.

⁷ U.S. Environmental Protection Agency, Overview of Greenhouse Gases, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>, accessed May 26, 2021.

⁸ U.S. Environmental Protection Agency, Overview of Greenhouse Gases, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>, accessed May 26, 2021.

⁹ U.S. Environmental Protection Agency, *Ozone-Depleting Substances Class II ODS*, <https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances>, accessed May 26, 2021.

¹⁰ U.S. Environmental Protection Agency, *Ozone-Depleting Substances Class II ODS*, <https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances>, accessed May 26, 2021.

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out of O₃ depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with Global Warming Potentials ranging from 4,750 for CFC 11 to 14,420 for CFC 13.¹¹

GHG EMISSIONS INVENTORY

United States GHG Emissions Inventory

The United States is the second largest emitter of GHG globally (behind China) and emitted approximately 6.6 billion MTCO₂e in 2019, not including GHG absorbed by forests and agricultural land. The largest source of GHG in the United States (29 percent) comes from burning fossil fuels for transportation. Electrical power generation accounted for the second largest portion (25 percent) and industrial emissions accounted for the third largest portion (23 percent) of U.S. GHG emissions. Agriculture accounted for 10 percent of the U.S. emission, and commercial and residential accounted for 13 percent.¹²

California GHG Emissions

In 2019 (the most recently available data), California emitted 418 million MTCO₂e of GHG, below the AB 32 2020 target of 431 million MTCO₂e. Emissions vary from year-to-year depending on the weather and other factors, but California has achieved the AB 32 2020 target every year since 2016 and will continue to implement its GHG reductions program to ensure the State remains on track to meet its climate targets in 2020 and beyond. These reductions come while California's economy grows and continues to generate jobs. According to the California Greenhouse Gas Emission Inventory-2018 Edition by the CARB, transportation was the single largest source of the State's GHG emissions and accounted for 39.7 percent of the Statewide total. California's industrial sector generated 21.1 percent of the State's GHG total and electricity generation (including electricity generated out-of-State but used in California) was responsible for 14.1 percent of the GHG total. The agricultural sector at 7.6 percent, residential and commercial sector at 10.5 percent, and waste and High GWP accounted for the remaining GHG emissions.¹³

GHG EMISSIONS SECTORS/CALCULATION METHODOLOGY

Energy Consumption

Energy-related emissions are from the consumption of both electricity and natural gas. These emissions are both direct (e.g., building energy consumption) and indirect (e.g., produced off-site from energy production and water consumption [including water treatment and delivery]). Energy consumption emissions were calculated using the California Emissions Estimator Model (CalEEMod) and the GPU land use data. Electricity would be provided to the Planning Area via Clean Power Alliance (CPA). Emission factors for CPA were calculated based on the electricity consumption in the Planning Area in 2020. Although it is expected that emission factors would decrease in the future due to higher percentage of renewable energy, as a conservative analysis,

¹¹ U.S. Environmental Protection Agency, *Ozone-Depleting Substances Class II ODS*, <https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances>, accessed May 26, 2021.

¹² Inventory of U.S. Greenhouse Gas Emissions and Sinks, <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>, 2020.

¹³ California Greenhouse Gas 2000-2018 Emissions Trends and Indicators Report, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ghg_inventory_trends_00-18.pdf, accessed on July 8, 2021.

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the same emission factors were used for both existing conditions and future buildout conditions. The emissions inventory used electricity and natural gas usage rates for residential, commercial, and industrial land uses for the existing year 2021 and the GPU build-out year 2040; refer to **Appendix C**, *Air Quality/Greenhouse Gas Emissions/Energy Data*, of this PEIR, for the assumptions and calculations used in this analysis.

Transportation

The Planning Area's transportation sector generates GHG emissions. The California Air Pollution Control Officers Association (CAPCOA) publishes a resource for local government to assess emission reductions from GHG mitigation measures. According to the August 2010 publication *Quantifying Greenhouse Gas Mitigation Measures*, the GPU Land Use Element and Circulation Element's policies can be a means of reducing VMT. The CAPCOA report recognizes that land use planning provides the best opportunity to influence GHG emissions through a reduction in overall VMT. This is accomplished by reducing the distance people travel in combination with a substantial increase in local job opportunities. In addition to the land use based VMT reductions, further reductions (while limited) are possible by providing alternative transportation options.

While the CAPCOA report is primarily focused on the quantification of project-level mitigation measures, the VMT estimates for the Planning Area have been calculated using the 2016-2035 SCAG RTP/SCS travel demand model; refer to **Appendix C** of this PEIR for the assumptions and calculations used in this analysis. This is possible since the traffic model calculates average trip lengths based on actual land use designations, characteristics, and interactions. The VMT extracted from the model takes into account land use patterns and trip generation, as well as the distribution of these trips within the Planning Area and between the Planning Area and surrounding areas. It is also important to recognize that each vehicle trip has two ends, commonly referred to as an origin and a destination. Therefore, the calculation must divide the initial VMT estimate in half to account for the contribution of both ends of the trip. For trips internal to the Planning Area, the VMT attributable to both ends of the trip is accounted for. Trips that involve one trip-end outside the Planning Area are allocated 50 percent to the Planning Area and 50 percent to the other end of the trip. The daily and annual VMT presented in Section 4.16, Transportation, of this PEIR, were calculated using this methodology, and were directly used for the mobile source GHG emissions modeling. All shopping, recreational, social, and work-related trips contribute to the VMT estimates.

Solid Waste

Emissions from waste result primarily from organic waste occurring at landfills where the waste is disposed. CH₄ is the primary GHG from waste and the emissions result from chemical reactions and microbes acting upon the waste as the biodegradable materials break down. Solid waste generation and disposal data were calculated with CalEEMod defaults based off the Planning Area's land uses for the existing year 2021 and the proposed GPUs build-out year 2040; refer to **Appendix C** of this PEIR for the assumptions used in this analysis.

Water and Wastewater

GHG emissions from water and wastewater result from the electricity used to extract, convey, treat, and distribute water, reported as kilowatt-hours per million gallons supplied by CEC. The Planning Area is served by two water districts, the California Water Service (CWS) and the West Basin Municipal Water District (WBMWD). The water and wastewater usage for the existing year

4.7 GREENHOUSE GAS EMISSIONS

2021 and the proposed GPU buildout year 2040 were calculated using CalEEMod defaults for the Planning Area’s land uses; refer to Appendix C of this PEIR for the assumptions and calculations used in this analysis.

2021 GHG EMISSIONS INVENTORY

Table 4.7-1 presents the Planning Area’s existing (2021) GHG emissions inventory for the different source categories in CalEEMod. As indicated in **Table 4.7-1**, the existing GHG emissions are 97,322.74 metric tons (MT) CO₂e per year for the Planning Area. On a per capita basis, the annual emission in the Planning Area is 8.5 MTCO₂e per year per capita.

**Table 4.7-1
Existing (2021) GHG Emissions Inventory for the Planning Area**

Source Type/Category ^b	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e ^c
	Metric Tons/year ^a	Metric Tons/year ^a	Metric Tons of CO ₂ e ^b	Metric Tons/year ^a	Metric Tons of CO ₂ e ^b	
Area	1,303.61	1.33	33.20	0.03	8.60	1,345.44
Energy	16,789.45	0.15	3.70	0.14	42.20	16,835.34
Mobile	69,351.65	4.86	121.00	3.15	940.00	70,412.83
Waste	2,243.07	132.56	3,314.00	0.00	0.00	5,557.11
Water	2,541.52	16.68	417.00	0.46	138.00	3,172.02
Total for the Planning Area^c	92,229.31	155.58	3,888.90	3.79	1,128.80	97,322.74
Total Per Service Population Emissions^d	8.5 MTCO₂e/year/SP					

Notes:

^a Emissions estimates calculated using CalEEMod version 2020.4.0.

^b Emissions estimates calculated using the land use categories/intensities depicted in Section 4.8, Land Use and Planning, of this PEIR.

^c The numbers may not add up exactly due to rounding.

^d Based off the existing (2021) conditions service population of 11,498. Service population is the total of population and employment in the Planning Area. The existing population data (8,098 persons) is from E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. The Planning Area’s existing employment (3,400) is from California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, Rolling Hills Estates Annual Average 2010 and 2020. Refer to Section 4.10, Population and Housing, of this PEIR.

Source: **Appendix C**, of this PEIR, for assumptions used in this analysis.

4.7.2 IMPACT ANALYSIS

4.7.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU’s GHG emissions impacts based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, a GHG emissions impact is considered significant if implementation of the proposed GPU would:

Threshold (a): **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

Threshold (b): **Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

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The City of Rolling Hills Estates has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, OPR, CARB, CAPCOA, or any other State or regional agency has not adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. While the SCAQMD has explored developing significance thresholds for GHG emissions, the only such threshold that the SCAQMD has adopted is a significance threshold of 10,000 MTCO_{2e} per year for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency.

For background, the SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) with the intent of providing guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Based on the last Working Group meeting held in September 2010 (Meeting No. 15), the Working Group suggested adoption of a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- Tier 1. If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- Tier 2. If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- Tier 3. If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, this suggested tiered approach includes an assessment of GHG emissions. The Working Group proposed a "bright-line" screening-level threshold of 3,000 MTCO_{2e} annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO_{2e} for commercial projects, 3,500 MTCO_{2e} for residential projects, or 3,000 MTCO_{2e} for mixed-use projects. These bright-line thresholds were based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. The Working Group suggested that projects that do not exceed the bright-line threshold would have a nominal, and therefore less than cumulatively considerable impact on GHG emissions.

- Tier 4. If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted. Tier 4 consists of 3 options to demonstrate that a project's GHG emissions are not significant:
 - Option 1: Reduce business as usual (BAU) emissions by 30 percent. Once GHG emissions are calculated, the applicant would need to incorporate design features and/or implement mitigation measures to demonstrate a 30 percent reduction.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan Measures.
 - Option 3: Establish sector-based performance standards. The efficiency standard for projects is 3.0 MTCO_{2e} per service population per year and the efficiency standard for plans is 4.1 MTCO_{2e} per service population per year relative to a 2035 target date.

- Tier 5. Mitigation offsets to achieve target significance threshold.

While the Working Group suggested the above tiered threshold approach, it was not adopted by the SCAQMD Board. Likewise, neither the bright-line screening thresholds nor the service population thresholds were adopted by the SCAQMD Board, and neither thresholds have been re-evaluated by the Working Group or the SCAQMD to consider subsequent relevant GHG legislation, including SB 32. Therefore, as noted above, there are no adopted numerical thresholds of significance that apply to the proposed GPU.

4.7.2.2 METHODOLOGY

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess GHG emissions quantitatively or qualitatively. This section recommends certain factors be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments to CEQA Guidelines Section 15064.4 do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as CAPCOA, so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (see CEQA Guidelines Section 15064(h)(3)).

The City of Rolling Hills Estates has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Similarly, the SCAQMD, OPR, CARB, CAPCOA, or any other State or regional agency has not adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions.

The analysis also calculates the amount of GHG emissions that would be attributable to the Project using recommended air quality models, as described below. The primary purpose of quantifying the Project's GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. While no numerical thresholds of significance exist to evaluate the significance of an increase in GHG emissions, projects that result in no net increase in GHG emissions would clearly not cause a significant impact related to GHG emissions.

CONSISTENCY WITH PLANS

The proposed GPU's GHG impacts are evaluated by assessing its consistency with applicable Statewide, regional, and local GHG reduction plans and strategies. As discussed previously, the

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City has established goals and actions to reduce the generation and emission of GHGs from both public and private activities in the City's CAP.

The OPR encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. While the City's CAP is not qualified for CEQA tiering purposes, the CAP does provide strategies and measures to reduce the City's GHG emissions consistent with the State's AB 32 reduction targets. In addition, the California CAT Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05. On a Statewide level, the Climate Change Scoping Plan provides measures to achieve AB 32 and SB 32 targets. On a regional level, the SCAG 2020-2045 RTP/SCS contains measures to achieve VMT reductions required under SB 375. Thus, if the proposed GPU complies with these plans, policies, regulations, and requirements, the proposed GPU would result in a less-than-significant impact because it would be consistent with the overarching State, regional, and local plans for GHG reduction.

A consistency analysis is provided below and describes the proposed GPU's compliance with or exceedance of performance-based standards included in the regulations outlined in the applicable portions of the Climate Change Scoping Plan, 2020-2045 RTP/SCS, and the City's CAP.

QUANTIFICATION OF EMISSIONS

In view of the above considerations, this EIR quantifies the proposed GPU's total annual GHG emissions. Emissions estimates were calculated using CalEEMod version 2020.4.0. See the subsection (GHG Emissions Sectors/Calculation Methodology) above for descriptions of how the emissions inventories were calculate for each sector.

4.7.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.7(a): *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Threshold 4.7(b): *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Impact Analysis

PROJECTED GREENHOUSE GAS EMISSIONS

Table 4.7-2 and **Table 4.7-3** present the proposed GPU buildout (2040) GHG emissions inventory for the different source categories. The change in GHG emissions for year 2040 is based on the difference between existing developed land uses and developed land uses projected in the proposed GPU. As indicated in **Table 4.7-2**, the Areawide GHG emissions at proposed GPU buildout year 2040 would be approximately 85,634.08 MTCO₂e per year under the low-range scenario and 94,419.68 MTCO₂e per year for the high-range scenario. On a per capita basis, the annual emissions per capita in the Planning Area in 2040 would be approximately 6.8 MTCO₂e per year per service population under low-range scenario and 7.7 MTCO₂e per year per service population under high-range scenario.

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**Table 4.7-2
Rolling Hills Estates General Plan Update (2040) GHG Emissions Inventory under the
Low-Range Buildout Scenario**

Source Type/Category ^b	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e ^c
	Metric Tons/year ^a	Metric Tons/ year ^a	Metric Tons of CO ₂ e ^b	Metric Tons/ year ^a	Metric Tons of CO ₂ e ^b	
Area	2,516.31	2.56	64.10	0.06	16.90	2,597.33
Energy	17,410.80	0.15	3.80	0.15	43.40	17,457.99
Mobile	55,436.11	3.71	92.70	2.25	671.00	56,199.94
Waste	2,387.90	141.12	3,528.00	0.00	0.00	5,915.92
Water	2,495.59	21.78	544.00	0.51	153.00	3192.90
Total for the Planning Area^c	80,246.71	169.32	4,232.60	2.97	884.30	85,364.08
Total Per Service Population Emissions^d	6.8 MTCO₂e/year/SP					
Existing (2021) Total Emissions Total Per Service Population Emissions	97,322.74 MTCO₂e 8.5 MTCO₂e/year/SP					
Exceed Existing Total Emissions/Total Per Service Population Emissions?	No / No					
Notes:						
^a Emissions estimates calculated using CalEEMod version 2020.4.0.						
^b Emissions estimates calculated using the land use categories/intensities depicted in <i>Section 4.8, Land Use and Planning</i> .						
^c The numbers may be slightly off due to rounding.						
^d Service population is based off the anticipated 2040 population of 9,786 and employment of 2,710 under low-range buildout scenario, for the City of Rolling Hills Estates, for a total of 12,496. Refer to Section 4.10, Population and Housing, of this PEIR. Service population is the total of population and employment number in the Planning Area.						
Source: Appendix C , of this PEIR, for assumptions used in this analysis.						

As depicted in **Table 4.7-2** and **Table 4.7-3**, the majority of the GHG emissions from the proposed GPU would come from the mobile and energy sectors. The mobile emissions are predominantly due to the vehicle trips and trip length within the Planning Area, which is outside of the Planning Area’s control. It is anticipated that California will have technological advancements¹⁴ in the transportation sector and lower-carbon fuels¹⁵ in the future; however, these reductions are not taken into account due to the unknown quantifiability of these future reductions. In terms of the energy sector emissions, Senate Bill 100 anticipates that by December 31, 2024, 40 percent of the energy provided by publicly-owned electric utilities will come from renewable energy. This will continue to increase to 45 percent by December 31, 2027, 50 percent by December 31, 2030 and 100 percent by December 31, 2045. Although GHG reductions from the utilization of renewable energy are expected for the energy production within the Planning Area, these reductions were not considered in this analysis of the total energy sector GHG emission due to their speculative nature.

¹⁴ California Air Resources Board, California’s Advanced Clean Cars Midterm Review, January 18, 2017.

¹⁵ California Air Resources Board, Low Carbon Fuel Standards, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard>, June 24, 2021.

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**Table 4.7-3
Rolling Hills Estates General Plan Update (2040) GHG Emissions Inventory under the
High-Range Buildout Scenario**

Source Type/Category ^b	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e ^c
	Metric Tons/year ^a	Metric Tons/year ^a	Metric Tons of CO ₂ e ^b	Metric Tons/year ^a	Metric Tons of CO ₂ ^b	
Area	3,332.34	3.40	84.90	0.08	22.40	3,439.64
Energy	19,349.08	0.17	4.30	0.16	48.90	19,402.26
Mobile	60,798.74	4.07	102.00	2.47	736.00	61,636.47
Waste	2,567.51	151.74	3,793.00	0.00	0.00	6,360.90
Water	2,779.62	25.00	625.00	0.59	176.00	3580.41
Total for the Planning Area^c	88,827.29	184.37	4609.20	3.30	983.30	94,419.68
Total Per Service Population Emissions^d	7.7 MTCO₂e/year/SP					
Existing (2021) Total Emissions /Total Per Service Population Emissions	97,322.74 / 8.5 MTCO₂e/year/SP					
Exceed Existing Total Emissions/Total Per Service Population Emissions?	No / No					
Notes:						
^a Emissions estimates calculated using CalEEMod version 2020.4.0.						
^b Emissions estimates calculated using the land use categories/intensities depicted in <i>Section 4.8, Land Use and Planning</i> .						
^c The numbers may be slightly off due to rounding.						
^d Service population is based off the anticipated 2040 population of 12,317 and employment of 3,057 under high-range buildout scenario, for the City of Rolling Hills Estates, for a total of 15,374. Refer to <i>Section 4.10, Population and Housing</i> . Service population is the total of population and employment number in the Planning Area.						
Source: Appendix C , of this PEIR, for assumptions used in this analysis.						

As shown in **Table 4.7-2**, at buildout (2040), the Planning Area is estimated to generate 85,364.08 MTCO₂e per year under low-range buildout scenario, which is less than the existing (2021) Planning Area emissions of 97,322.74 MTCO₂e per year. Based on the anticipated population of 9,786 and employment of 2,710 of the Planning Area in 2040 under low-range buildout scenario, the Planning Area would generate GHG emissions of 6.8 MTCO₂e per year per service population in 2040, which is less than the existing (2021) 8.5 MTCO₂e per year per service population. As shown in **Table 4.7-3**, at buildout (2040), the Planning Area is estimated to generate 94,419.68 MTCO₂e per year under high-range buildout scenario, which is less than the existing (2021) Planning Area emissions of 97,322.74 MTCO₂e per year. Based on the anticipated population of 12,317 and employment of 3,057 of the Planning Area in 2040, the Planning Area would generate GHG emissions of 7.7 MTCO₂e per year per capita in 2040 under high-range buildout scenario, which is less than the existing (2021) 8.5 MTCO₂e per year per service population.

The proposed GPU's Sustainability Element would further reduce GHG emissions from buildout of the Planning Area by cooperating with the State to implement SB 32, lowering the emissions caused by motor vehicles through education and outreach strategies, promoting energy-efficient building construction and operation practices, and implementing "carbon sinks" to help meet the Rolling Hills Estates CAP's current goal.

CONSISTENCY WITH THE CARB SCOPING PLAN

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). In 2008, CARB approved its first Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms, such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2017 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target of 40 percent below 1990 levels by 2030 codified by SB 32. These measures build upon those identified in the First Update to the Scoping Plan (2013). **Table 4.7-4** evaluates the proposed GPU’s consistency with the 2017 Scoping Plan to determine whether it would result in adverse cumulative impacts to global climate change.

As shown in **Table 4.7-4**, the proposed GPU would not conflict with the implementation of the 2017 Scoping Plan. Many of the programs are not applicable at a General Plan level, such as developing LCFS and the cap-and-trade program; however, some programs are applicable and supported by the proposed GPU. The proposed GPU goals and policies that support the implementation of the Scoping Plan would improve air quality, reduce GHG emissions, encourage alternative modes of transportation, such as walking, biking, and public transportation, and divert waste from landfills. Overall, the proposed GPU is consistent with the 2017 Scoping Plan.

**Table 4.7-4
General Plan Update Consistency with the 2017 Scoping Plan**

Programs and Policies	Primary Objective	Consistency
SB 350	Reduce GHG emissions in the electricity sector through the implementation of the 50 percent RPS, doubling of energy savings, and other actions as appropriate to achieve GHG emissions reductions planning targets in the Integrated Resource Plan process.	Not Applicable. SB 350 requires that 50 percent of the energy provided to Rolling Hills Estates is from renewable sources and is required by law to submit an Integrated Resource Plan which includes a Renewable Portfolio Standard of 50 percent by 2030. As of June 2017, the City of Rolling Hills Estates has been part of CPA, and the majority of electricity delivered to the Planning Area is 100 percent renewable energy.
Low Carbon Fuel Standard	Transition to cleaner/less-polluting fuels that have a lower carbon footprint.	Not Applicable. This Statewide policy establishes carbon reduction standards for transportation fuels and does not directly apply to the proposed GPU.
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems and reduction of vehicle miles traveled.	Consistent. The proposed GPU promotes lowering the emissions caused by motor vehicles through education and outreach strategies that reduce vehicle miles traveled and encouraging the adoption of near-zero emission and zero-emission vehicles.

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**Table 4.7-4
General Plan Update Consistency with the 2017 Scoping Plan**

Programs and Policies	Primary Objective	Consistency
SB 1383	Approve and Implement Short-Lived Climate Pollutants strategy to reduce highly potent GHGs.	Consistent. This policy addresses methane emissions generated from landfill disposal of organic waste. The proposed GPU contains policies aimed at promoting CAP goals and policies that contains solid waste management.
California Sustainable Freight Action Plan	Improve freight efficiency, transition to zero emission technologies, and increase competitiveness of California's freight system.	Not Applicable. This policy addresses goods movement efficiencies that are not affected by the proposed GPU.
Post-2020 Cap-and-Trade Program	Reduce GHGs across largest GHG emissions sources.	Not Applicable. This program involves capping emissions from electricity generation and industrial facilities. The proposed GPU does not include industrial land uses that could be subject to the Cap-and-Trade Program.
Source: California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.		

CONSISTENCY WITH THE 2020-2045 RTP/SCS

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS includes performance goals that were adopted to help focus future investments on the best-performing projects and different strategies to preserve, maintain, and optimize the performance of the existing transportation system. These goals are discussed in greater detail in Section 4.8, Land Use and Planning, of this PEIR. The SCAG 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. Five key SCS strategies are included in the 2020-2045 RTP/SCS to help the region meet its regional VMT and GHG reduction goals, as required by the State. **Table 4.7-5** shows the proposed GPU's consistency with these five strategies found within the 2020-2045 RTP/SCS. As shown therein, the proposed GPU would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

CONSISTENT WITH CITY'S CLIMATE ACTION PLAN

The City of Rolling Hills Estates CAP is a valuable tool that will lower GHG emissions across various sections in a manner that is most feasible for the Planning Area. It identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. The CAP identifies key energy efficiency targets and separate associated goals, policies, and actions for community and municipal activities. **Table 4.7-6** discusses the proposed GPU's consistency with the applicable CAP goals in each chapter.

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**Table 4.7-5
Consistency with the 2020-2045 RTP/SCS**

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
<ul style="list-style-type: none"> • Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to “right size” parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking) 	<p>Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.</p>	<p>Consistent. The proposed GPU would promote cooperating with the State to implement SB 32, which calls for reducing GHG emissions to 40 percent below 1990 levels by 2030; Executive Order S-3-05, which calls for 80 percent below 1990 levels by 2050; and future legislation designed to reduce GHG emissions. Additionally, the GPU would also promote lowering the emissions caused by motor vehicles through education and outreach strategies that reduce VMT and encourage the adoption of near-zero emission and zero-emission vehicles. Furthermore, the proposed GPU and, in particular, the Commercial District Vision Plan promote and encourage the redevelopment of underperforming retail developments; infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods; a mix of uses that integrate residential uses close to destinations. As such, the proposed GPU would be consistent with the strategy.</p>
Promote Diverse Housing Choices		
<ul style="list-style-type: none"> • Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local 	<p>PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.</p>	<p>Consistent. The proposed GPU’s Housing Element encourages sound and logical residential growth while providing for the Planning Area’s fair share of the region’s need for affordable housing. As such, the proposed GPU would be consistent with this reduction strategy.</p>

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Table 4.7-5
Consistency with the 2020-2045 RTP/SCS

<p>jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions</p>		
<p>Leverage Technology Innovations</p>		
<ul style="list-style-type: none"> • Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation 	<p>HQTA, TPAs, NMA, Livable Corridors.</p>	<p>Consistent. Projects under the proposed GPU would be required to comply with all applicable provisions of Title 24 and the CALGreen Code at the time of construction. These building codes would require electric vehicle (EV) charging stations, designated EV parking, as well as bike parking and storage. Furthermore, as of 2020, Title 24 requires photovoltaic solar panels on residential development. Therefore, proposed development within the proposed GPU would leverage technology innovations and help the Planning Area, County, and State meet its GHG reduction goals. The proposed GPU would be consistent with this reduction strategy.</p>
<p>Support Implementation of Sustainability Policies</p>		
<ul style="list-style-type: none"> • Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local 	<p>Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.</p>	<p>Consistent. The proposed GPU would promote implementing “carbon sinks,” such as urban forest and soil amendments, regenerative, revegetation, and redevelopment projects. Additionally, future projects implementing the proposed GPU would analyze sustainability policies and would be required to comply with the most recent version of Title 24 and the CALGreen Code. Thus, the proposed GPU would be consistent with this reduction strategy.</p>

4.7 GREENHOUSE GAS EMISSIONS

**Table 4.7-5
Consistency with the 2020-2045 RTP/SCS**

<p>jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies</p> <ul style="list-style-type: none"> • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy 		
Promote a Green Region		
<ul style="list-style-type: none"> • Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space 	<p>Green Region, Urban Greening, Greenbelts and Community Separators.</p>	<p>Consistent. The proposed GPU would implement “carbon sinks” to help meet the Rolling Hills Estate CAP’s current goal of reducing GHG emissions by 49 percent below 2005 levels, and future reduction goals resulting from updates to the Rolling Hills Estates CAP. Additionally, future projects under the proposed GPU development would be required to comply with all applicable Title 24 and CALGreen Code measures, which would help reduce energy consumption and reduce GHG emissions. Thus, the proposed GPU would support climate change resilience and local policies for efficient development that reduces energy consumption and GHG emissions. The proposed GPU would be consistent with this reduction strategy.</p>
<p>Source: Southern California Association of Governments, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal, September 3, 2020.</p>		

4.7 GREENHOUSE GAS EMISSIONS

**Table 4.7-6
Consistency with the Climate Action Plan**

Chapters and Goals	Project Consistency
<p><u>Land Use and Transportation (LUT)</u></p> <p>Goal LUT: A – Accelerate the market for EV vehicles.</p> <p>Goal LUT: B – Encourage ridesharing.</p> <p>Goal LUT: C – Encourage Transit usage.</p> <p>Goal LUT: D – Adopt active transportation initiatives.</p> <p>Goal LUT: E – Parking Strategies.</p> <p>Goal LUT: F – Organizational Strategies.</p> <p>Goal LUT: G – Land Use Strategies.</p> <p>Goal LUT: H – Digital Technology Strategies.</p>	<p>Consistent. The proposed GPU would promote residents’ and business owners’ awareness and education of traffic congestion’s effect on air pollution and GHG emissions, help create voluntary programs that reduce traffic throughout the Planning Area, and coordinate land use, circulation, and infrastructure improvement efforts with regional planning agencies and surrounding municipalities. Additionally, the proposed GPU would encourage alternate modes of transportation, and improve site accessibility and wayfinding by encouraging landscaping, benches, minimized parking areas and curb cuts along commercial street frontages, and clear pedestrian-scale wayfinding for areas of interest to enhance accessibility for people walking and bicycling. As such, the proposed GPU would be consistent with the goals in Land Use and Transportation Chapter.</p>
<p><u>Energy Efficiency (EE)</u></p> <p>Goal EE: A – Increase energy efficiency in existing residential units.</p> <p>Goal EE: B – Increase energy efficiency in new residential developments.</p> <p>Goal EE: C – Increase energy efficiency in existing commercial units.</p> <p>Goal EE: D – Increase energy efficiency in new commercial developments.</p> <p>Goal EE: E – Increase energy efficiency through water efficiency.</p> <p>Goal EE: F – Decrease energy demand through reducing urban heat island effect.</p> <p>Goal EE: G – Participate in education, outreach and planning for energy efficiency.</p> <p>Goal EE: H – Increase energy efficiency in municipal buildings.</p> <p>Goal EE: I – Increase energy efficiency in city infrastructure.</p> <p>Goal EE: J – Reduce energy consumption in the long run.</p>	<p>Consistent. The GPU would promote various energy consumption reduction strategies by raising awareness of energy conservation and usage of green materials, implementing requirements for new and existing buildings to meet the most recent Title 24 standards, encouraging exceedance of the CALGreen Code, and striving to meet net zero requirements by 2040. The proposed GPU would also promote the usage of renewable energy and energy monitoring systems. As such, the proposed GPU would be consistent with the goals in Energy Efficiency Chapter.</p>
<p><u>Solid Waste (SW)</u></p> <p>Goal SW: A – Increase diversion and reduction of residential waste.</p> <p>Goal SW: B – Increase diversion and reduction of commercial waste.</p> <p>Goal SW: C – Reduce and divert municipal waste.</p>	<p>Consistent. In implementing the proposed GPU, the City would consider waste haulers’ ability and commitment and proven record of recycling and composting waste. Similarly, the City would pursue efforts, through community partners, education, and outreach, to increase composting, recycling, and organic waste processing; and provide opportunities for reducing waste generation. As such, the proposed GPU would be consistent with the goals in Solid Waste Chapter.</p>

**Table 4.7-6
Consistency with the Climate Action Plan**

Chapters and Goals	Project Consistency
<u>Urban Greening (UG)</u> Goal UG: A – Increase and maintain urban greening in the community. Goal UG: B – Increase and maintain urban greening in municipal facility.	Consistent. The proposed GPU would preserve prime habitat and significant ecological areas, preserve greenfield, control invasive species, and restore disturbed soils. As such, the proposed GPU would be consistent with the goals in the Urban Greening Chapter.
<u>Energy Generation and Storage (EGS)</u> Goal EGS: A – Support energy generation and storage in the community.	Consistent. The proposed GPU would promote the application of active solar energy systems in residential development and explore the possibility of identifying Planning Area facilities that can accommodate solar installation and additional alternative fuel vehicle infrastructure. Additionally, the Accessory Dwelling Units (ADU) program would create off-the-shelf, pre-approved plans for ADUs that are net-zero energy. As such, the proposed GPU would be consistent with the Energy Generation and Storage Strategy.
Sources: City of Rolling Hills Estate, Climate Action Plan, 2017.	

Based on the above analysis, since implementation of the proposed GPU would result in a net reduction in total annual GHG emissions from the Planning Area and a net reduction in annual GHG emissions on a per-service-population-basis, and since the proposed GPU is consistent with the 2017 Scoping Plan, the 2020-2045 RTP/SCS, and the City’s CAP, the proposed GPU’s impacts related to GHG emissions are considered less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. **Tables 4.7-7 through 4.7-9**, below, provide estimates of the GHG emissions for each of the three representative projects. Since the representative projects are a subset of buildout of the proposed GPU, the GHG emissions generated by the representative projects have already been accounted for in the GHG emissions inventories in **Tables 4.7-2 and 4.7-3**, above. Similarly, as with the overall buildout of the proposed GPU, the representative projects would be consistent with the 2017 Scoping Plan, the 2020-2045 RTP/SCS, and the City’s CAP, as they would comply with the latest and most stringent energy and water conservation codes and requirements and would be compact development integrated into the City’s mixed-use Commercial District, enhancing the synergistic nature of the land uses in the Commercial District and offering opportunities for walking, cycling, and other alternative forms of transportation to and from destinations within the Commercial District. As the GHG impacts of the representative projects are less than, and a subset of, the GHG impacts of buildout of the proposed GPU, and since the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to GHG emissions, the representative projects themselves would not cause any potentially significant impacts related to GHG emissions. Accordingly, the GHG emissions impacts of the representative projects would be less than significant.

4.7 GREENHOUSE GAS EMISSIONS

**Table 4.7-7
Small Scale Project Projected Annual Greenhouse Gas Emissions**

Source	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e/yr ^{b,c}
	Metric Tons/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	
Direct Emissions						
Construction (amortized over 30 years)	6.28	<0.01	0.02	<0.01	0.16	6.46
Area Source	8.16	<0.01	0.02	<0.01	0.04	8.22
Mobile Source	492.89	0.04	1.00	0.02	7.30	501.20
<i>Total Direct Emissions^b</i>	<i>507.33</i>	<i>0.04</i>	<i>1.04</i>	<i>0.03</i>	<i>7.50</i>	<i>515.87</i>
Indirect Emissions						
Energy	152.02	<0.01	0.04	<0.01	0.04	152.10
Water Demand	9.68	0.12	3.10	<0.01	0.87	13.65
Solid Waste	7.67	0.45	11.30	0.00	0.00	19.01
<i>Total Indirect Emissions^b</i>	<i>169.37</i>	<i>0.58</i>	<i>14.44</i>	<i><0.01</i>	<i>0.91</i>	<i>185.21</i>
Total Project-Related Emissions^b	701.08 MTCO₂e/yr					
Notes: MTCO ₂ e/yr = metric tons of carbon dioxide equivalent per year						
^a Emissions calculated using the CalEEMod version 2020.4.0, as recommended by the SCAQMD. ^b Totals may be slightly off due to rounding. ^c Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed October 7, 2021.						
Refer to Appendix C for assumptions used in this analysis.						

**Table 4.7-8
Medium Scale Project Projected Annual Greenhouse Gas Emissions**

Source	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e/yr ^{b,c}
	Metric Tons/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	
Direct Emissions						
Construction (amortized over 30 years)	33.91	<0.01	0.08	<0.01	0.87	34.86
Area Source	29.14	<0.01	0.07	<0.01	0.15	29.35
Mobile Source	1315.44	0.10	2.50	0.06	18.50	1336.46
<i>Total Direct Emissions^b</i>	<i>1378.49</i>	<i>0.11</i>	<i>2.64</i>	<i>0.07</i>	<i>19.52</i>	<i>1400.67</i>
Indirect Emissions						
Energy	347.74	<0.01	0.09	<0.01	1.00	348.84
Water Demand	29.87	0.36	9.00	<0.01	2.50	41.44
Solid Waste	10.67	0.63	15.80	0.00	0.00	26.43
<i>Total Indirect Emissions^b</i>	<i>388.28</i>	<i>1.00</i>	<i>24.89</i>	<i>0.01</i>	<i>3.50</i>	<i>416.72</i>
Total Project-Related Emissions^b	1,817.39 MTCO₂e/yr					
Notes: MTCO ₂ e/yr = metric tons of carbon dioxide equivalent per year						
^a Emissions calculated using the CalEEMod version 2020.4.0, as recommended by the SCAQMD. ^b Totals may be slightly off due to rounding. ^c Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed October 7, 2021.						
Refer to Appendix C for assumptions used in this analysis.						

4.7 GREENHOUSE GAS EMISSIONS

**Table 4.7-9
Hotel Project Projected Annual Greenhouse Gas Emissions**

Source	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO ₂ e/yr ^{b,c}
	Metric Tons/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	Metric Tons/yr ^a	Metric Tons of CO ₂ e/yr ^a	
Direct Emissions						
Construction (amortized over 30 years)	31.69	<0.01	0.08	<0.01	0.84	32.61
Area Source	0.01	<0.01	<0.01	0.00	0.00	0.01
Mobile Source	1025.83	0.08	2.00	0.05	14.70	1042.50
<i>Total Direct Emissions^b</i>	<i>1057.53</i>	<i>0.08</i>	<i>2.08</i>	<i>0.05</i>	<i>15.54</i>	<i>1075.12</i>
Indirect Emissions						
Energy	651.76	<0.01	0.19	<0.01	2.20	654.13
Water Demand	9.90	0.15	3.80	<0.01	1.10	14.80
Solid Waste	7.41	0.44	10.90	0.00	0.00	18.36
<i>Total Indirect Emissions^b</i>	<i>669.08</i>	<i>0.60</i>	<i>14.89</i>	<i>0.01</i>	<i>3.30</i>	<i>687.28</i>
Total Project-Related Emissions^b	1762.40 MTCO₂e/yr					
Notes: MTCO ₂ e/yr = metric tons of carbon dioxide equivalent per year						
^a Emissions calculated using the CalEEMod version 2020.4.0, as recommended by the SCAQMD. ^b Totals may be slightly off due to rounding. ^c Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, <i>Greenhouse Gas Equivalencies Calculator</i> , http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator , accessed October 7, 2021.						
Refer to Appendix C for assumptions used in this analysis.						

Mitigation Measures

Impacts related to GHG emissions were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to GHG emissions were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.7.2.4 CUMULATIVE IMPACTS

Impact Analysis

The topic of GHG emissions is inherently a cumulative impact. As evaluated in the analysis of Threshold 4.7(a), above, the proposed GPU would result in a net reduction in the Planning Area's GHG emission, both on a total-emissions basis and on a per-service-population basis. As evaluated in the analysis of Threshold 4.7(b), above, the proposed GPU would not conflict with and would be consistent with the Scoping Plan, the 2020-2045 RTP/SCS, and the City's CAP. Therefore, the proposed GPU would not result in a considerable contribution to significant GHG emission impacts.

Mitigation Measures

The proposed GPU's contribution to cumulative impacts related to GHG emissions was determined to be not considerable. Therefore, no mitigation measures are required.

4.7 GREENHOUSE GAS EMISSIONS

Level of Significance After Mitigation

The proposed GPU's contribution to cumulative impacts related to GHG emissions was determined to be not considerable without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.8 LAND USE AND PLANNING

This section identifies existing land use conditions and provides an analysis of potential impacts associated with implementation of the proposed General Plan Update (GPU).

4.8.1 ENVIRONMENTAL SETTING

4.8.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU regarding land use and planning.

STATE

There are no State regulations or planning programs that apply to the proposed GPU regarding land use and planning.

REGIONAL

Regional planning agencies, such as the Southern California Association of Governments (SCAG), recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans that affect the City of Rolling Hills Estates.

SCAG has evolved as the largest council of governments in the United States, functioning as the Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial) and 191 cities. The region encompasses an area of more than 38,000 square miles. As the designated MPO, the federal government mandates SCAG to research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address these concerns. The City of Rolling Hills Estates is specifically represented by the subregional agency, South Bay Cities Council of Governments (SBCCOG), within SCAG.

SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program. SCAG is responsible for the development of demographic projections and is also responsible for development of the integrated land use, housing, employment, transportation programs, measures, and strategies for the Air Quality Management Plan (AQMP).

Regional Transportation Plan/Sustainable Communities Strategy

The passage of California Senate Bill 375 in 2008 requires that an MPO, such as SCAG, prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas emissions from automobiles and light duty trucks (California Government Code Section 65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning and maximize transportation

4.8 LAND USE AND PLANNING

investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016-2040 RTP/SCS closely integrates land use and transportation so that the region can grow smartly and sustainably. SCAG works closely with local jurisdictions to develop the 2016-2040 RTP/SCS, which incorporates local growth forecasts, projects and programs, and includes complementary regional policies and initiatives. The 2016-2040 RTP/SCS considers new patterns of development as the regional economy continues to recover and grow, the composition of population changes, the housing market responds to evolving needs, and demands and mobility innovations emerge. The 2016-2040 RTP/SCS also includes a long-term strategic vision for the region that will help guide decisions for transportation and how land is used, as well as the public investments in both, through 2040. In September 2019, SCAG's Regional Council adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS). The 2020-2045 RTP/SCS includes goals that fall into four core categories: economy, mobility, environment and healthy/complete communities. The 2020-2045 RTP/SCS explicitly lays out goals related to housing, transportation technologies, equity and resilience in order to adequately reflect the increasing importance of these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets. The 2020-2045 RTP/SCS' guiding policies take these goals and focus them, creating a specific direction for plan investments.

Growth Forecasts

SCAG's Forecasting Section is responsible for producing socio-economic estimates and projections at multiple geographic levels and in multiple years. The Forecasting Section develops, refines, and maintains SCAG's regional and small area socio-economic forecasting/allocation models. Adopted 2016-2040 RTP/SCS Growth Forecasts provide population, household, and employment data for 2040. The socio-economic estimates and projections are used by federal, and State mandated long-range planning efforts, such as the RTP, AQMP, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment. SCAG's Adopted RTP/SCS Growth Forecasts are used to assess a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint; refer to Section 6.3, Growth-Inducing Impacts, of this PEIR.

Intergovernmental Review

SCAG's Intergovernmental Review Section is responsible for performing consistency review of regionally significant local plans, projects, and programs with SCAG's adopted regional plans. The criteria for projects of regional significance are outlined in CEQA Guidelines Sections 15125 and 15206. The proposed GPU is considered regionally significant; as such, Project consistency with SCAG's RTP/SCS policies is analyzed below.

LOCAL

City of Rolling Hills Estates General Plan

The existing City of Rolling Hills Estates General Plan (1992 General Plan) was adopted in 1992 and contains the following State-mandated and optional elements:

4.8 LAND USE AND PLANNING

- Land Use
- Transportation
- Housing (comprehensively updated in 2014)
- Conservation
- Open Space and Recreation
- Noise
- Public Safety

The 1992 General Plan Land Use Element identifies land use designations for all parcels in the Planning Area, along with goals and policies for the types and forms of land uses in the City. The purpose of the land use plan is to regulate land uses and provide guidance for the City's land use related decision.

The Land Use Element designates the following land uses for the City (refer to **Figure 2.3-1**, Existing General Plan Land Use Designations, in Section 2.0, Project Description, of this PEIR):

Very Low Density Residential: The Very Low Density Residential land use designation provides for single-family detached residential units with a maximum density of 1 unit per 5 acres or 1 unit per acre and a population density of 3 persons per acre.

The maximum density of this land use designation may be exceeded with General Plan Housing Element policy in accordance with the density bonus provisions of the California Government Code Section 65915 and Rolling Hills Estates Municipal Code (RHEMC) Section 17.76.020.

Low Density Residential: The Low Density Residential designation provides for single-family detached units with a maximum density of 2 units per acre and a population density of 6 persons per acre.

The maximum density of this land use designation may be exceeded with General Plan Housing Element policy in accordance with the density bonus provisions of California Government Code Section 65915 and RHEMC Section 17.76.020.

Medium Density Residential: The Medium Density Residential designation provides for single-family detached residential with a maximum density of between 2-4 units per acre, depending on applicable zone district. Population density ranges from 6 to 11 person per acre.

The maximum density of this land use designation may be exceeded with General Plan Housing Element policy in accordance with the density bonus provisions of California Government Code Section 65915 and RHEMC Section 17.76.020.

High Density Residential: The High Density Residential designation provides for multiple-family attached residential development with a maximum density of 8 units per acre and a population density of 22 persons per acre.

The maximum density of this land use designation may be exceeded with General Plan Housing Element policy in accordance with the density bonus provisions of California Government Code Section 65915 and RHEMC Section 17.76.020.

Commercial General: The Commercial General land use designation provides for retail uses that rely on automobile traffic and attract customers from a citywide and/or regional trade area. The maximum intensity of development is 3.0:1 floor area ratio (FAR).

Commercial Office: The Commercial Office land use designation provides for a variety of professional and administrative uses. The maximum intensity of development is 1.0:1 FAR.

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Neighborhood Commercial: The Neighborhood Commercial land use designation provides for a variety of retail uses that serves the needs of nearby neighborhoods. In addition to retail uses, areas designated Neighborhood Commercial can also include business and professional services. The maximum intensity of development is 4.0:1 FAR.¹

Commercial Recreation: The Commercial Recreation designation applies to archery ranges, tennis courts, equestrian facilities, riding dubs, golf courses, and country clubs. The maximum intensity of development is 0.25:1 FAR.

Institutional: The Institutional land use designation allows development of fire stations, police stations, public and private schools, recreation centers, churches, libraries, and other non-commercial, non-residential, or non-industrial purposes. The maximum density of development is 0.75:1 FAR.

Open Space: The Open Space designation provides open space for outdoor recreation, buffering of land uses, preservation of natural resources, managed production of resources, and protection of health and public safety. Areas designated as Open Space include public parks and private land reserved. No density or intensity standards are applied within this designation.

In addition to the land use designations, the current (1992) General Plan includes the following Overlay Designations:

- Cultural Resources Overlay. This designation applies to a portion of the City where archaeological resources are known or suspected to exist. The Conservation Element details appropriate actions that must be followed when a property is included within this designation. All areas designated as having a high sensitivity in the Conservation Element are included within this overlay designation.
- Horse Overlay. This designation applies to a substantial portion of the City, where keeping of horses is permitted and where horse keeping areas are required to be preserved. This designation is identical to the Horse Overlay zone district outlined in the Zoning Ordinance.
- Scenic Corridor Overlay. The Conservation Element includes a Scenic Corridor Overlay designation, which applies to a number of arterial roadways in the City, specifically Hawthorne Boulevard, Palos Verdes Drive North, Crenshaw Boulevard, and Silver Spur Road. This overlay designation applies to all properties abutting the designated roadways. The Conservation Element outlines specific guidelines that need to be adhered to in future development along these corridors.
- Parks Development Overlay. This designation applies to those areas of the City where new park facilities development may occur pursuant to General Plan Land Use Policy. This overlay designation is different from the other overlay zones in that it functions like a floating zone. The designation indicates a general area where future development is likely without identifying specific parcels. Three areas of the City have been included in this designation: Dapplegray School, Palos Verdes Landfill, and George F. Canyon.

¹ The current (1992) General Plan identifies the maximum floor area ratio for Neighborhood Commercial as 4 to 1; however, this appears to be a typographical error. The proposed GPU would correct this error by changing this maximum floor area ratio to 0.4 to 1.

- Ecological Resource Overlay. This overlay designation applies to those portions of the City where sensitive habitats are located. Any areas within the City identified as having a high ecological sensitivity in the Conservation Element is located within this overlay designation. The Conservation Element indicates specific guidelines that must be adhered to when planning and developing in these areas.
- Multi-use Trail Overlay. The Open Space and Recreation Element contains a Master Plan of Trails, which identifies both existing and future trails. This designation is consistent with the Trails Master Plan in terms of location and classification of the trail.
- Hazards Management Overlay. The Public Safety Element indicates those areas of the City that may be subject to some type of environmental hazard. These areas subject to seismic risk, flood hazard, or slope stability are included within the Hazards Management Overlay. The Public Safety Element outlines the guidelines that must be adhered to when this designation applies.
- Mixed-Use Overlay. This land use designation is very site specific and applies only to those areas included with the Commercial General land use designations. The designation permits residential development to be constructed in areas with this land use designation. The residential units may either share the structure or parcel. The development density cannot exceed 22 units per acre and all applicable parking standards must be met. This designation is designed to promote mixed use development in and around the Peninsula Center commercial district and at the corner of Hawthorne and Crest, adjacent to Cresta Verdes.

City of Rolling Hills Estates Municipal Code

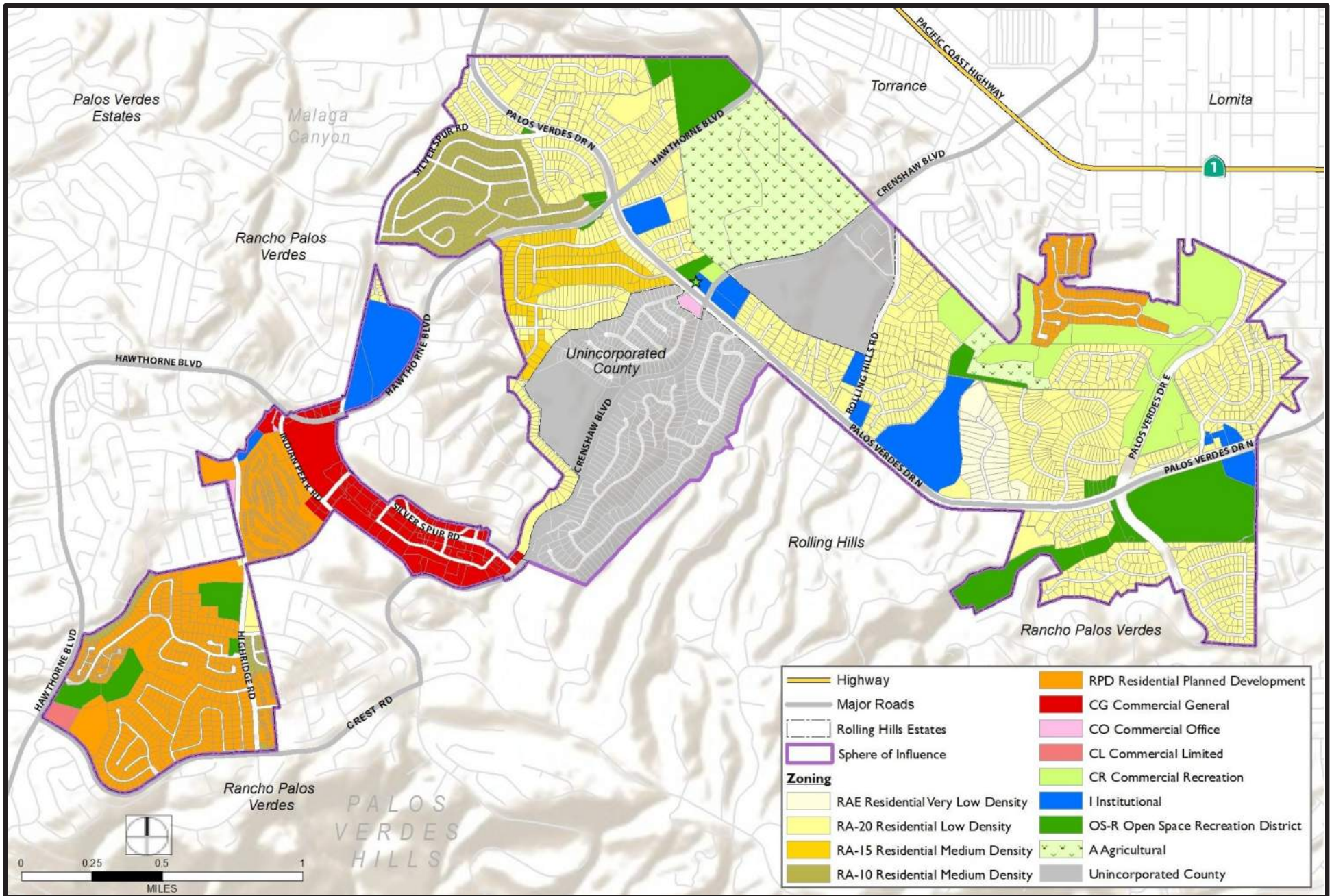
In 1992, the Rolling Hills Estates City Council adopted the *Rolling Hills Estates Code of Ordinances* (codified through Ordinance No. 734) which is known and referred to as Title 17, Zoning, or the Rolling Hills Estates Municipal Code (RHEMC). The RHEMC establishes regulations and provisions related to the use of land and resources within the City of Rolling Hills Estates. The RHEMC is as an implementation tool to achieve the goals and policies established within the General Plan, serve the public health, safety and general welfare of the City of Rolling Hills Estates, and provide the economic and social advantages resulting from an orderly planned use of land and resources.

The RHEMC divides the City into zoning districts; refer to **Figure 4.8-1**, Existing Zoning Map. The following are descriptions of the existing zoning districts:

Estate Density & Very Low Density Residential. The Estate Density & Very Low Density Residential (RAE) district provide single-family detached residential units on moderate to large lots consistent with the Very Low Density Residential designation.

Low Density Residential. The Low Density Residential (R-A) districts (R-A-20, R-A-15, R-A-10, and A) provide single-family detached residential homes on smaller lots consistent with the Low Density Residential designation.

Residential Planned Development. The Residential Planned Development (RPD) district is intended for cluster housing under appropriate conditions. In addition, it is the purpose the RPD district to provide for development that is open space and recreation oriented. It is recognized that owners of cluster housing units in the residential planned development ordinarily do not have



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017.

FIGURE 4.8-1
Existing Zoning Map

4.8 LAND USE AND PLANNING

private open space areas available to themselves and, therefore, must depend on the proper development of common open space areas. As such, one of the purposes of this district is to ensure any residential planned development provides adequate available, usable common open space areas.

Medium Density Residential. The Medium Density Residential (RA) districts (RA-10,000, RA-15,000, and RPD) provide single-family detached residential units on smaller lots with a minimum of 10,000 (RA-10,000) and 15,000 (RA-15,000) square feet respectively. Residential Planned Development (RPD) is also included. The districts are consistent with the Medium Density Residential designation.

High Density Residential. The High Density Residential district (RPD) provides multiple-family attached residential development, as well as apartments, and senior housing consistent with the High Density Residential designation.

Several areas in the City have been developed as Residential Planned Developments. These areas are in the southwestern portion of the City and include Highridge, The Ranch, The Terraces, Cresta Verdes, and other condominium/townhouse projects, as well as The Residences at Rolling Hills Country Club in the northeastern portion of the City.

Commercial General. The Commercial General (C-G) district provides for retail uses that rely primarily on automobile traffic and attract customers Citywide and/or in the regional trade area consistent with the Commercial-General designation.

Commercial Office. The Commercial Office (C-O) district provides for a variety of professional and administrative uses. The C-O district is consistent with the Commercial Office designation.

Commercial Limited. The Commercial Limited (C-L) district applies to business and professional offices, retail stores, services, and public or private clubs.

Commercial General. The Commercial General (C-G) district applies to business and professional offices, retail stores, services, sale or service of products, hotel, storage, parking structure, nurseries/garden, and restaurants and delis. The C-G district is consistent with the Commercial General designation.

Commercial Recreation. The Commercial Recreation (C-R) district applies to archery ranges, tennis courts, equestrian facilities, riding dubs, golf courses, and country dubs. The C-R district is consistent with the Commercial Recreation designation.

Open Space/Recreation. The Open Space/Recreation (OS-R) district includes an inventory of both public and private open space consistent with the general plan's open space element. This land is devoted to the preservation of natural resources and outdoor recreation. Parks, open space areas, scenic corridors and habitats of wildlife species make up these lands and fulfill the requirements of California Government Code Section 65560 to 65570. This section is intended to protect and preserve these areas from urban development and to ensure that these natural resources are protected from destruction. The OS-R district corresponds within the Open Space designation.

Institutional. The Institutional (I) district allows development of fire stations, police stations, public and private schools, recreation centers, churches, libraries, and other non-commercial, non-residential, or non-industrial purposes. The I district is consistent with the Institutional designation.

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Scientific Research and Development. The Scientific Research and Development (SR&D) district is to address the wide range of private, public and quasi-public institutional facilities within the City. The uses established in this zone are intended to provide public benefit by responding to the health, safety, educational, cultural and public service needs of the community.

Agriculture. The Agricultural districts (Residential Agriculture [R-A] and Agriculture [A]) are intended to accommodate estate/ranching development, as well as farms, among other uses.

Quarry. The Quarry (Q) district allows for quarrying, excavation of rock, sand and gravel, rock crushing, batching plants, processing of aggregate, landfill, land reclamation, mining, and block and tile plants.

In addition to the zoning districts, the City's Zoning Code establishes three overlay zones: Horse Overlay, Mixed-Use Overlay, and Landmark Overlay. The Horse Overlay and Mixed-Use Overlay zones are identical to the corresponding overlays identified in the current (1992) General Plan. The Landmark Overlay zone, which is not included in the current (1992) General Plan, identifies the structures, sites, and areas that are to be protected, enhanced, or perpetuated for historical or architectural importance.

4.8.1.2 EXISTING CONDITIONS

EXISTING LAND USES

Residential is the most common land use in the Planning Area, which in total accounts for about 60 percent of uses on the ground in the Planning Area. Most neighborhoods consist of only single-family residential development, though there are a few neighborhoods consisting of single-family attached/townhomes or multi-family residential development.

Most commercial land uses in Rolling Hills Estates include offices, mixed commercial and office uses, and general commercial areas located along or near Silver Spur Road, forming the community's primary Commercial District. A few other commercial uses are located throughout the City, including small clusters at the intersections of Palos Verdes Drive North with Rolling Hills Road and Montecillo Drive. Commercial land represents a very small portion of the community, as only 4.5 percent of land in the City is used for commercial purposes.

Public and community facilities, including churches, City administrative buildings, schools, medical facilities, and land used for utilities, together account for 11 percent of all land uses in the Planning Area. Schools/educational facilities, including Palos Verdes Peninsula High School, Dapplegray Elementary School, and Chadwick School (located in the sphere-of-influence [SOI]) are distributed throughout the community. Public facilities include the Peninsula Center Library, located at 701 Silver Spur Road, and Rolling Hills Estates City Hall, located at 4045 Palos Verdes Drive North. The Palos Verdes Reservoir, located at the southeast corner of Palos Verdes Drive North and Palos Verdes Drive East in Rolling Hills Estates, represents most of the land categorized as utilities in the Planning Area.

Parks and recreational uses represent about 24 percent of land in the Planning Area. This category includes City-managed parks, open spaces, and horse arenas, as well as private properties not managed by the City including the Rolling Hills Country Club, the South Coast Botanic Garden (in the SOI), and parks in the SOI.

4.8.2 IMPACT ANALYSIS

4.8.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's land use impacts based on the thresholds of significance identified in Appendix G of the CEQA Guidelines, the Initial Study Environmental Checklist, which contains questions relating to land use and planning. Based on these criteria, a land use impact is considered significant if adoption and/or implementation of the proposed GPU would:

Threshold 4.8(a): Physically divide an established community.

Threshold 4.8(b): Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in **Appendix A** of this PEIR) determined that implementation of the proposed GPU could involve development of vacant land or under-developed parcels, intensification of existing land uses in certain portions of the Planning Area, and the introduction of new land uses to certain portions of the Planning Area. Land use changes proposed in the Planning Area are intended to tie into the existing uses and surrounding neighborhoods. Development would occur within existing suburban areas and infill sites, which is not expected to divide an established community. As such, no impact related to the physical division of an established community would occur related to threshold 4.8.2.1(a), and no further analysis of this issue is necessary.

4.8.2.2 METHODOLOGY

For the purposes of this impact analysis, a significant impact would occur if Project implementation would result in significant environmental impacts due to a conflict with SCAG's adopted goals and policies as articulated in the RTP/SCS and the applicable rules and regulations of the City Zoning Ordinance.

The proposed GPU focuses on updating the following seven General Plan Elements and the addition of an eighth element: update the existing Land Use, Mobility (formerly Transportation), Housing, Conservation, Open Space and Recreation, Noise, and Safety (formerly Public Safety) Elements; and propose a new Sustainability Element.

The proposed land use plan identifies the type designation, existing and proposed acreage, and proposed change of future development within the City; refer to **Table 2.5-1**, Proposed Changes to the General Plan Land Use Map, in Section 2.0, Project Description, of this PEIR. The proposed land use plan designates all land in the Planning Area to one of the 12 following land use designations:

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial General
- Commercial Office
- Neighborhood Commercial
- Commercial Recreation
- Institutional
- Open Space
- Mixed-Use Overlay
- CD Mixed-Use Overlay (new)

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Based on the proposed land use designations, existing and proposed acreage, and proposed change of future development, the proposed GPU is projected to create a net increase in residential units (878 to 1,458 units; 26 to 65 percent increase) and an overall net decrease in commercial square footage (236,726 to 148,290; 15 to 9 percent reduction); refer to **Table 2.5-4**, Estimated 2040 Buildout of the Planning Area (Low and High Range Scenarios), in Section 2.0, Project Description, of this PEIR. It is acknowledged that most of this planned residential growth and reduced commercial square footage would occur in the Commercial District.

4.8.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.8(a): *Would the cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Impact Analysis

RTP/SCS

The 2016-2040 RTP/SCS establishes regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation system in Southern California and reduce greenhouse gas (GHG) emissions. The proposed GPU's consistency with relevant transportation planning policies contained within the 2016-2040 RTP/SCS are assessed in **Table 4.8-1**. As indicated in **Table 4.8-1**, the proposed GPU would support further implementation of the 2016-2040 RTP/SCS policies.

**Table 4.8-1
SCAG 2016-2040 RTP/SCS Goals Project Consistency Analysis**

SCAG 2016-2040 RTP/SCS Goals	Project Consistency Analysis
GOAL 1. Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable. Specifically, Goal 1 of the 2016-2040 RTP/SCS is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines. Nevertheless, the proposed GPU does include policies related to the City’s economic development that indirectly connect to the overall economic development and competitiveness of the SCAG region.
GOAL 2. Maximize mobility and accessibility for all people and goods in the region.	Consistent. The proposed Mobility Element would continue to meet RTP/SCS Goal 2 by progressing toward a sustainable transportation system that focuses on maximizing network connectivity and mobility, operational balance, pedestrian and bicycle accommodations, and transit readiness. Further, the proposed Land Use Element further supports the integration of transportation and land use planning to provide mobility options and comfort for pedestrians and bicyclists, by fostering a walkable mixed-use Commercial District, particularly along Silver Spur Road.
GOAL 3. Ensure travel safety and reliability for all people and goods in the region.	Consistent. The proposed GPU includes policies related to providing safe and convenient access between various land uses that indirectly connect to the overall travel safety and reliability of people and goods in the SCAG region. The proposed Land Use Element includes several policies related to integrating transportation

**Table 4.8-1
SCAG 2016-2040 RTP/SCS Goals Project Consistency Analysis**

SCAG 2016-2040 RTP/SCS Goals	Project Consistency Analysis
	<p>and land use planning to encourage greater mobility and reliability through integration of various transportation modes, and safe and convenient access between land uses, including residential, business, commercial, schools/public facilities, and recreational/open space areas (e.g., equestrian trails). Additionally, City roadways, pedestrian walkways, and bicycle routes would continue to follow safety standards established by local and regional agencies, such as the Los Angeles Metropolitan Transportation Authority, California Department of Transportation, City of Rolling Hills Estates, and County of Los Angeles.</p>
<p>GOAL 4. Preserve and ensure a sustainable regional transportation system.</p>	<p>Consistent. As stated, the proposed GPU includes goals and policies related to allowing new development and growth into the City while maintaining adequate infrastructure, including a sustainable regional transportation network.</p> <p>The existing transportation facilities in the City include a public transportation system, bicycle facilities, pedestrian facilities, equestrian facilities, and a road network with public parking. In 2015, the City adopted a Green Street Policy (Resolution No. 2339) to implement green street BMPs as elements of street and roadway projects including public works capital improvement projects that provide water quality improvement, groundwater replenishment, attractive streetscapes, traffic calming, pedestrian and bicycle accessibility, reduction in the heat island effect, and creation of linear or pocket parks.</p> <p>The proposed Land Use Element and Mobility Element would ensure that City rights-of-way provide adequate infrastructure for the movement of vehicles, bicycles, and pedestrians with facilities that provide safety and comfort for all modes of transportation.</p>
<p>GOAL 5. Maximize the productivity of our transportation system.</p>	<p>Consistent. The proposed Land Use Element and Mobility Element include policies that control and direct future land use development in a way that effectively utilizes the transportation system. The proposed land use plan includes a balance of integrated land uses. The purpose of the Mobility Element is to provide a safe, multimodal, efficient transportation system that meets the current and future needs of the City.</p>
<p>GOAL 6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).</p>	<p>Consistent. The Mobility Element goals and policies are aimed at providing safe, viable alternatives to the automobile when traveling throughout the Planning Area, while continuing to provide efficient automobile circulation and recognizing the distinct, rural feel of the City. The proposed Land Use Element and Mobility Element include several goals and policies related to enhancing active transportation networks in the City to improve the overall health of residents and the natural community. Policies encourage the integration of transportation and land use planning to provide mobility options for pedestrians, equestrians, bicyclists, transit users, and motorists. The proposed Land Use Element includes policies related to providing a</p>

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**Table 4.8-1
SCAG 2016-2040 RTP/SCS Goals Project Consistency Analysis**

SCAG 2016-2040 RTP/SCS Goals	Project Consistency Analysis
	<p>balance of high-quality active and passive public open spaces, a regional trail system, and recreational facilities, which all encourage more active transportation and improve the health of residents.</p> <p>Goals and policies under the proposed Conservation Element serve as a management guide for the maintenance of healthy air quality. This includes monitoring standards and regulations implemented by SCAQMD and coordination with adjacent jurisdictions to track air quality violations within the City and the larger Peninsula.</p> <p>Last, the proposed GPU would also implement a new Sustainability Element. The purpose of the Sustainability Element is to identify potential opportunities for the City to engage the community in establishing a blueprint for steady, responsible action in addressing the effects of climate change, to leave a cleaner, more resilient environment for future generations in terms of air quality, greenhouse gas emissions, energy use, water resources, quality of life, land use, mobility, and waste management and recycling.</p>
<p>GOAL 7. Actively encourage and create incentives for energy efficiency, where possible.</p>	<p>Consistent. The proposed Sustainability Element encourages energy conservation to sustain existing and future economic and population growth. Participation is encouraged in local, regional, and State programs that promote energy conservation and alternative energy sources. This element promotes energy-efficient building construction and operation practices that reduce emissions and improve air quality. Reduction of energy consumption is also encouraged through consideration of local “green” building standards, prioritizing energy-efficient design guidelines for new and renovated City buildings and the acquisition of energy-efficient equipment, use of public awareness programs, and the promotion of innovative building, site design, and orientation techniques that minimize energy use, among others.</p>
<p>GOAL 8. Encourage land use and growth patterns that facilitate transit and active transportation.</p>	<p>Consistent. Refer to response to 2016-2040 RTP/SCS Goal 6.</p>
<p>GOAL 9. Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.</p>	<p>Not Applicable. Specifically, Goal 9 of the 2016-2040 RTP/SCS is not adopted for the “purpose of avoiding or mitigating an environmental effect,” per Appendix G of the CEQA Guidelines. Nevertheless, the General Plan Update includes policies related to safety and security from natural disasters and criminal activities that indirectly connect to the overall security of the regional transportation system in the SCAG region.</p> <p>The proposed Safety Element includes policies and programs related to the protection and preparation of the community for natural and man-made disasters as they relate to the regional transportation network. For example, the Safety Element would full integrate the Multi-Jurisdictional Hazard Mitigation Plan (MJHMP).</p>

**Table 4.8-1
SCAG 2016-2040 RTP/SCS Goals Project Consistency Analysis**

SCAG 2016-2040 RTP/SCS Goals	Project Consistency Analysis
Source: Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf , accessed August 5, 2021.	

SCAG has adopted the 2020-2045 RTP/SCS in September 2019. As such, the proposed GPU's consistency to relevant transportation planning policies contained within the 2020-2045 RTP/SCS are assessed in **Table 4.8-2**. As indicated in **Table 4.8-2**, the proposed GPU would support further implementation of the recently adopted 2020-2045 RTP/SCS policies as well.

**Table 4.8-2
SCAG 2020-2045 RTP/SCS Goals Project Consistency Analysis**

SCAG 2020-2045 RTP/SCS Goals	Project Consistency Analysis
GOAL 1. Encourage regional economic prosperity and global competitiveness.	Not Applicable. Refer to response to 2016-2040 RTP/SCS Goal 1.
GOAL 2. Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. Refer to response to 2016-2040 RTP/SCS Goal 2 and Goal 3.
GOAL 3. Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. Refer to response to 2016-2040 RTP/SCS Goal 4 and Goal 9.
GOAL 4. Increase person and goods movement and travel choices within the transportation system.	Consistent. Refer to response to 2016-2040 RTP/SCS Goal 2.
GOAL 5. Reduce greenhouse gas emissions and improve air quality.	Consistent. Refer to response to 2016-2040 RTP/SCS Goal 6.
GOAL 6. Support healthy and equitable communities.	Consistent. The Mobility Element fosters the creation of a more walkable community, providing public health benefits through increased opportunities for exercising and socializing, economic benefits by boosting foot traffic in the Commercial District, and sustainability benefits by reducing residents' reliance on their personal autos. Further, the new Sustainability Element includes policies to locate City facilities equitably so that they are accessible to all members of the community.
GOAL 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Consistent. Refer to response to 2016-2040 RTP/SCS Goal 6.

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**Table 4.8-2
SCAG 2020-2045 RTP/SCS Goals Project Consistency Analysis**

SCAG 2020-2045 RTP/SCS Goals	Project Consistency Analysis
GOAL 8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent. The Mobility Element encourages establishing a Pilot Project Program that outlines project identification, evaluation, and stakeholder participation to explore emerging technologies and their application in the Planning Area. Consideration of e-bike share and zero-emissions delivery zones as potential first pilots are made.
GOAL 9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent. The GPU encourages diverse housing types, particularly in the Commercial District along Silver Spur Road. Particular policies applicable to this district encourage reconfiguration of Silver Spur Road to include a smaller right-of-way, increased on-street parking, roadway design that encourages safe use by all travelers, as well as encouraging free trolley or shuttle loop concept.
GOAL 10. Promote conservation of natural and agricultural lands and restoration of habitats.	Consistent. The Conservation Element includes policies pertaining to the preservation of existing vegetation in open space corridors in its natural state while being sensitive to fire protection policies. Policies would also include consideration to review and amend existing development standards to adhere to the state's Model Water Efficiency Landscape Ordinance (MWEL0); promote the use of native vegetation and maintenance of existing habitats. It is acknowledged that there are no agricultural lands in the Planning Area.
Source: Southern California Association of Governments, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, September 2019, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocialplan_0.pdf?1606001176 , accessed August 18, 2021.	

Rolling Hills Estates Municipal Code

Due to the comprehensive nature of land use issues, the proposed GPU Land Use Element may not be able to address issues in the same level of detail as other local physical planning documents, plans, and ordinances. The proposed land use designations, including the new the CD Mixed-Use Overlay, described in the Land Use Element indicate general categories of allowed uses and development intensities within each land use category. The zoning ordinance is an implementation tool for the General Plan and establishes more specific regulations for land development.

The City of Rolling Hills Estates' legislative enactments, including zoning, must be consistent with the General Plan. Each of Rolling Hills Estates' General Plan land use categories corresponds to one or more zoning districts. The proposed GPU includes policies and implementation strategies to ensure the zoning ordinance is revised to conform to the General Plan text and map. More specifically, the proposed GPU calls for amending the Zoning Ordinance to implement the following:

- **Institutional Use:** Several large institutional properties were identified as opportunities to allow affordable housing accommodations for staff. These include Dapplegray Elementary

School, Palos Verdes Peninsula High School, and Rolling Hills Covenant Church. These properties have vacant land that may be suitable for housing development. These institutions may partner with a developer or develop properties on their own. A maximum density of 2 du/acre would be allowed as it is compatible with the densities around these properties. While the density is based on the total acreage of the parcel, the development is expected to concentrate on a single part of the parcel as a cluster development and not dominate the primary use of the parcel.

- **Commercial General:** The Commercial General designation had a FAR of 3.0 in the 1992 General Plan. The study of existing developments has shown that the average FAR of Commercial General development is 1.14, and the maximum FAR used as of 2020 is 2.09. The community's desire to maintain a rural feel is also reflected in the vision statement and guiding principles. This has to be balanced with the proposed increase in residential density for Commercial General land (via the Mixed-Use Overlay) from 22 du/acre to 30 du/acre and the choice of using the proposed density bonus program. Hence, the General Plan Update proposes to reduce the FAR to a maximum of 2.5 for the Commercial General land use designation.
- **Neighborhood Commercial:** The Neighborhood Commercial designation had a FAR of 4.0 in the 1992 General Plan. This is more than the Commercial General FAR and not consistent with existing or expected uses on Neighborhood Commercial-designated parcels as the average FAR for overall development on the Neighborhood Commercial parcels is 0.29. The intent of Neighborhood Commercial is to serve the daily commercial needs of neighborhoods in the vicinity; hence, the intensity is envisioned to be less than a Commercial General area that serves the needs of the City and surrounding communities. Thus, the 4.0 FAR is believed to be a typographical error; therefore, the General Plan Update Land Use Plan reduces the FAR to 0.4.
- **Mixed-Use Overlay Districts:** In addition to the Mixed-Use Overlay District in the 1992 General Plan, the General Plan Update land use proposes a second Mixed-Use Overlay covering the Commercial District. The 1992 Mixed-Use Overlay covered Commercial General and Neighborhood Commercial land. It was decided that the base residential density for mixed-use development in the Commercial District (i.e., the Commercial General-designated land) should be increased to 30 du/acre along with a City density bonus program that would allow the developers to build up to 45 du/acre for projects that provide extraordinary community benefit. Hence, a new overlay district, Commercial District Mixed-Use Overlay, is proposed for Commercial General-designated land. The existing Mixed-Use Overlay zone would remain in place over Neighborhood Commercial and extend to the Commercial Office designation to provide greater development flexibility.
- **Changes to Overlays:** There are eight overlays identified in the 1992 General Plan Land Use Element. Six of the eight overlays are included in the General Plan Update, while two are excluded since they are now obsolete. The General Plan Update also clarifies the remaining overlays. Generally, the term "overlay" is used for Zoning districts (rather than in a General Plan) and can create confusion when both the City's General Plan and Zoning code/map contain disparate overlays. The changes to the overlays from the 1992 General Plan to the General Plan Update are described in the following bullets:

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- Cultural Resources Overlay: The Cultural Resource Overlay designation identified in the 1992 General Plan applies to a portion of the City where archaeological resources are known or suspected to exist. The General Plan Update renames this designation to “Cultural Resource Sensitivity Area,” while maintaining the same mapped area.
- Horse Overlay: A substantial portion of the City is located within a Horse Overlay Zone district which identifies those areas where the keeping of horses is permitted and where horse keeping areas are required to be preserved. This 1992 General Plan’s Horse Overlay designation is identical to that outlined in the Zoning Ordinance. This is carried forward as is in the General Plan Update.
- Scenic Corridor Overlay: The 1992 Conservation Element includes a Scenic Corridor Overlay designation which applies to Hawthorne Boulevard, Palos Verdes Drive North, Crenshaw Boulevard, and Silver Spur Road. The 1992 Overlay applies to all properties abutting the designated roadways. While the intent of the 1992 Overlay is preserved in the General Plan Update Conservation Element, the name has been changed to Scenic Corridors. A framework for the development of Guidelines has been suggested in the Conservation Element.
- Parks Development Overlay: The 1992 Park Development Overlay covered three areas of the City that were contemplated for future park development: Dapplegray School, Palos Verdes Landfill, and George F. Canyon. Dapplegray School was retained by the School District and is no longer a candidate for park development. Similarly, Los Angeles County has maintained control of the Palos Verdes Landfill site and the potential for development of the site is remote and speculative. George F. Canyon is already developed for recreational use and, while improvements may occur on this site, broad direction from the General Plan on such potential future improvements is not necessary or warranted. Since the Overlay has served its purpose, it is now obsolete and is not included in the General Plan Update.
- Ecological Resource Overlay: The 1992 General Plan applies this Overlay to those portions of the City where sensitive habitats are located. Any areas within the City identified as having high ecological sensitivity in the Conservation Element were included within this Overlay designation. While the intent of this Overlay is preserved in the General Plan Update Conservation Element, specific areas are identified, documented, and mapped instead of one overlay zone. These include Species Occurrence and Critical Habitat.
- Multi-use Trail Overlay: A Multi-use Trail Overlay was included in the 1992 Open Space and Recreation Element with the intent of identifying a Master Plan of Trails to map both existing and future trails. Since then, the trail system has been built out. The General Plan Advisory Committee indicated that there is no need for further development of trails in the City. Hence, this Overlay is replaced with City’s Trails Map.
- Hazards Management Overlay: The 1992 Hazards Management Overlay covered those areas of the City which may be subject to some type of environmental hazard, including seismic risk, flood hazard, or slope stability. While the intent of the Overlay is preserved in the General Plan Update Safety Element, specific hazards are separated, explained, and mapped instead of one overlay zone. These include Wildfire Hazard Areas,

Earthquake Fault, Landslide, and Liquefaction Zones, Geology, FEMA Flood Zones, and Reservoir Inundation Areas.

- **Mixed- Use Overlay:** The 1992 Mixed-Use Overlay Zone land use designation covered only to those areas included in the Commercial General and Neighborhood Commercial land use designations. The designation permits residential development to be constructed in areas with these land use designations at a density of 22 dwelling units per acre. The residential units may share the structure or parcel. The General Plan Update recommends changes to the Mixed-use Overlay Zone. These include the removal of the Commercial General zoned parcels from the Overlay and the addition of the Commercial Office zoned parcels to the Overlay Zone. The General Plan Update also recommends a new Mixed-Use Overlay Zone specifically for the Commercial District with increased density (30 dwelling units per acre, plus opportunities for a density bonus up to 45 dwelling units per acre).

In addition to these overlays, the City established the Landmark Overlay Zone as a part of their Zoning Code. The Landmark Overlay zone identifies the structures, sites, and areas that are to be protected, enhanced, or perpetuated for historical or architectural importance.

Following adoption of the proposed GPU, the City's zoning ordinance will be amended to ensure the zoning districts implement the designations identified within the proposed GPU and to ensure consistency with the policies described in the Land Use Element. Moreover, the proposed GPU would not conflict with the City's current zoning ordinance in a manner that would result in significant environmental impacts. As such, impacts in this regard would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to not conflict with SCAG's RTP/SCS goals and policies, as well as applicable provisions of the City's Zoning Code, future development activity, such as the representative projects, would not result in significant impacts related to consistency with land use plans. Compliance with all applicable regulations and requirements would ensure that land use impacts of representative projects related to consistency with applicable plans, policies, and regulations would be less than significant.

Mitigation Measures

Impacts related to consistency with land use plans were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to consistency with land use plans were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.8.2.4 CUMULATIVE IMPACTS

Impact Analysis

The proposed GPU would introduce one new overlay, the CD Mixed-Use Overlay. Cumulative considerations would include existing regional buildout pursuant to existing local zoning laws and

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regulations. There are currently no annexation proposals for any land within the SOI. Any future annexation proposals to extend the City's corporate boundaries would require review and approval by the Los Angeles Local Agency Formation Commission (LAFCO), which would also be subject to CEQA review.

Cumulative projects would be evaluated on a project-by-project basis, as they are implemented within the City of Rolling Hills Estates and other cities/communities. Each cumulative project would undergo a similar plan review process, to determine potential land use planning policy and regulation conflicts, including SCAG's RTP/SCS and the RHEMC at the time such development comes forth. Each cumulative project would be analyzed independently and within the context of their respective land use and regulatory settings. As part of their review process, each project would be required to demonstrate compliance with the provisions of the applicable land use designation(s) and zoning district(s). It is assumed that cumulative development would progress in accordance with the general plan and municipal code of the respective jurisdictions. Each cumulative project would be analyzed to ensure that the goals, objectives, and policies of the respective general plans, and regulations and guidelines of the respective municipal codes are consistently upheld. Therefore, the combined cumulative land use/planning impacts associated with the proposed GPU's incremental effects and those of the cumulative projects would be less than significant.

Mitigation Measures

Cumulative impacts related to land use and planning were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to land use and planning were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.9 NOISE

This section of the PEIR discusses the potential noise impacts associated with the implementation of the proposed General Plan Update (GPU). This section includes a discussion of the noise characteristics of the existing environment that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this Draft PEIR), this section of the PEIR evaluates the potential noise impacts that may result from the proposed GPU. **Appendix E** includes data to support the analysis in this section.

4.9.1 ENVIRONMENTAL SETTING

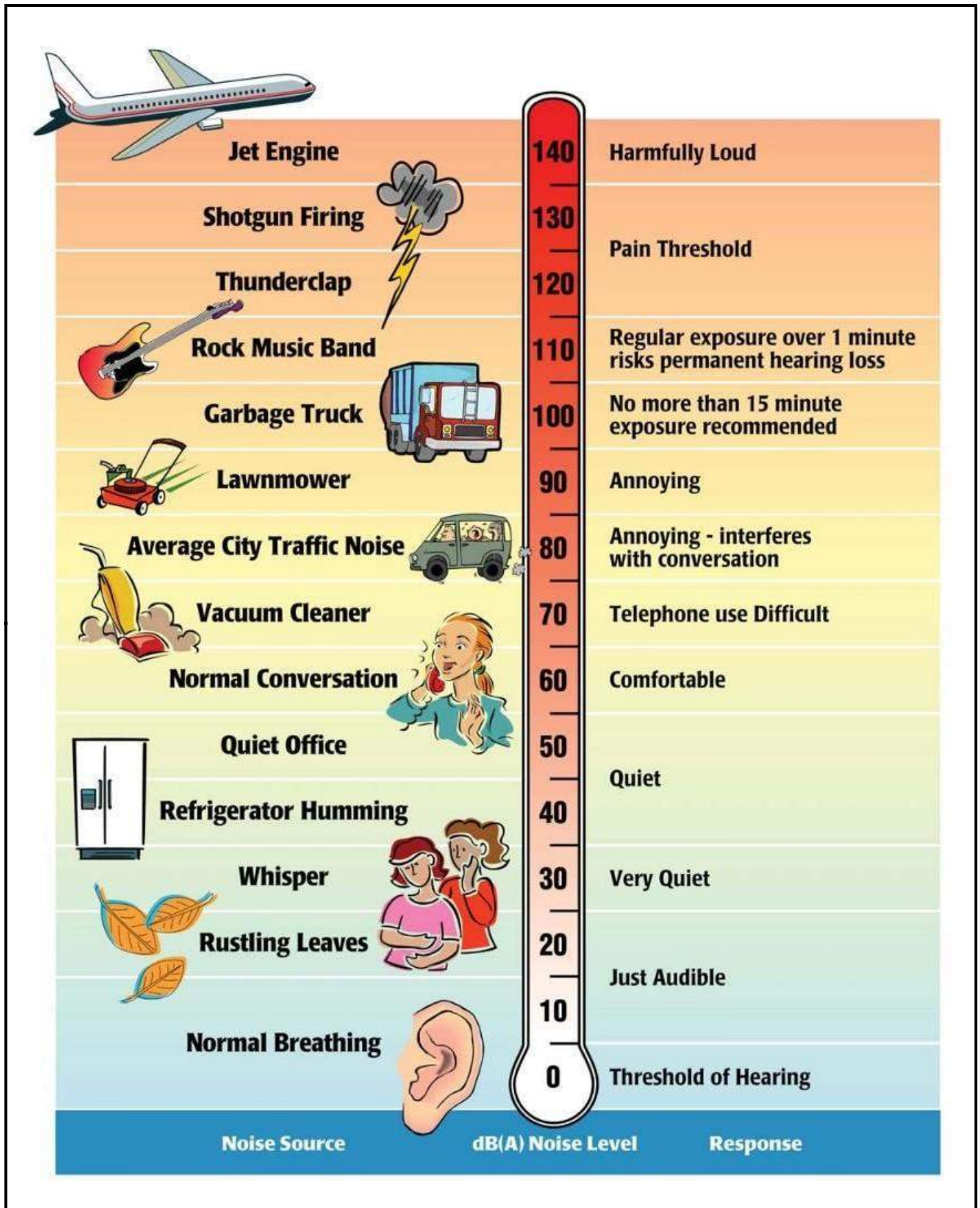
4.9.1.1 NOISE FUNDAMENTALS

Sound is described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and should be approximated by the A-weighted sound levels (expressed as dBA) and the way the human ear perceives noise. For this reason, the A-weighted sound level has become the standard tool of an environmental noise assessment.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are illustrated on **Figure 4.9-1**.



Source: USEPA, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004), March 1974.

FIGURE 4.9-1

Sound Levels and Human Response

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time;
- The influence of periodic individual loud events; and
- The community response to changes in the noise environment.

Numerous methods have been developed to measure sound over a period of time. The terms used to describe the various types of noise measurements are listed below in **Table 4.9-1**.

**Table 4.9-1
Noise Descriptors**

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measured sound to a reference pressure (20 micro pascals).
A-Weighted Decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Sound Level (L_{eq})	The sound level containing the same total energy as a time varying signal over a given time period. The L_{eq} is the value that expresses the time averaged total energy of a fluctuating sound level.
Maximum Sound Level (L_{max})	The highest individual sound level (dBA) occurring over a given time period.
Minimum Sound Level (L_{min})	The lowest individual sound level (dBA) occurring over a given time period.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 PM to 10:00 PM, and +10 dBA for the night, 10:00 PM to 7:00 AM
Day/Night Average (L_{dn})	The L_{dn} is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the L_{eq} . The L_{dn} is calculated by averaging the L_{eq} s for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 PM to 7:00 AM), by 10 dBA to account for the increased sensitivity of people to noises that occur at night.
Exceedance Level (L_n)	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (L_{01} , L_{10} , L_{50} , L_{90} , respectively) of the time during the measurement period.
Source: Cyril M. Harris, Handbook of Noise Control, dated 1979.	

4.9 NOISE

Human response to sound is highly individualized. Annoyance is the most common issue regarding community noise. The percentage of people claiming to be annoyed by noise generally increases with the environmental sound level. However, many factors also influence people's response to noise. The factors can include the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed."

When the noise level of an activity rises above 70 dBA, the chance of receiving a complaint is possible, and as the noise level rises, dissatisfaction among the public steadily increases. However, an individual's reaction to a particular noise depends on many factors, such as the source of the sound, its loudness relative to the background noise, and the time of day. The reaction to noise can also be highly subjective; the perceived effect of a particular noise can vary widely among individuals in a community.

The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on the community can be organized into six broad categories, which are described in detail below:

1. Noise-Induced Hearing Loss. Although it often causes discomfort and sometimes pain, noise-induced hearing loss usually takes years to develop. Noise-induced hearing loss can impair the quality of life through a reduction in the ability to hear important sounds and to communicate with family and friends. Hearing loss is one of the most obvious and easily quantified effects of excessive exposure to noise. While the loss may be temporary at first, it could become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly caused by the environment is difficult to quantify. Although the major cause of noise-induced hearing loss is occupational, substantial damage can be caused by non-occupational sources. According to the United States Public Health Service, nearly ten million of the estimated 21 million Americans with hearing impairments owe their losses to noise exposure.
2. Interference with Communication. Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt in-person communication and telephone communication, and the enjoyment of music and television in the home. It can also disrupt effective communication between teachers and pupils in schools and can cause fatigue and vocal strain in those who need to communicate in spite of the noise. Interference with communication has proved to be one of the most important components of noise-related annoyance.
3. Effects of Noise on Sleep. Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep. It can produce short-term adverse effects on mood changes and job performance, with the possibility of more serious effects on health if it continues over long periods.

4. Effects on Performance and Behavior. Recent research indicates that moderate noise levels can produce disruptive after-effects, commonly manifested as a reduced tolerance for frustration, increased anxiety, decreased incidence of “helping” behavior, and increased incidence of “hostile” behavior. Noise can cause adverse effects on task performance and behavior at work, and non-occupational and social settings. These effects are the subject of some controversy, since the presence and degree of effects depends on a variety of intervening variables. Most research in this area has focused mainly on occupational settings, where noise levels must be sufficiently high and the task sufficiently complex for effects on performance to occur.
5. Extra-Auditory Health Effects. Noise has been implicated in the development or exacerbation of a variety of health problems, ranging from hypertension to psychosis. As with other categories, quantifying these effects is difficult due to the number of variables that need to be considered in each situation. As a biological stressor, noise can influence the entire physiological system. Most effects seem to be transitory, but with continued exposure some effects have been shown to be chronic in laboratory animals.
6. Annoyance. Annoyance can be viewed as the expression of negative feelings resulting from interference with activities, as well as the disruption of one’s peace of mind and the enjoyment of one’s environment. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above. In a study conducted by the United States Department of Transportation, the effects of annoyance to the community were quantified. In areas where noise levels were consistently above 60 dBA CNEL, approximately nine percent of the community is highly annoyed. When levels exceed 65 dBA CNEL, that percentage rises to 15 percent. Although evidence for the various effects of noise have differing levels of certainty, it is clear that noise can affect human health. Most of the effects are, to a varying degree, stress related.

It is difficult to specify noise levels that are generally acceptable to everyone because what is annoying to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions. Regulatory requirements related to environmental noise are typically promulgated at the local level. However, federal and State agencies provide standards and guidelines to local jurisdictions.

4.9.1.2 VIBRATION FUNDAMENTALS

Sources of earth-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

4.9 NOISE

Ground vibration can be a concern in instances where buildings shake and substantial rumblings occur. However, it is unusual for vibration from typical urban sources, such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities, such as earth-moving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (inch-per-second) is used to evaluate construction-generated vibration for building damage and human complaints.

4.9.1.3 REGULATORY FRAMEWORK

FEDERAL

The Federal Noise Control Act of 1972 established programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, the U.S. Environmental Protection Agency (USEPA) administrators determined that subjective issues, such as noise would be better addressed at more local levels of government, thereby allowing more individualized control for specific issues by designated federal, State, and local government agencies. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to specific federal agencies, and State and local governments. However, noise control guidelines and regulations contained in the USEPA rulings in prior years remain in place.

The Federal Transit Administration (FTA) have published guidelines for the analysis of ground-borne noise and vibration relating to transportation and construction-induced vibration. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the United States, is referenced as vibration decibels (VdB). With respect to human response within residential uses (i.e., annoyance), FTA recommends a maximum acceptable vibration standard of 80 VdB.¹ For potential building damage, the FTA² identifies the following criteria:

- 0.5 inches per second (in/sec) peak particle velocity (PPV) for reinforced-concrete, steel or timber (no plaster)
- 0.3 in/sec PPV for engineered concrete and masonry (no plaster)
- 0.2 in/sec PPV for non-engineered timber and masonry buildings
- 0.12 in/sec PPV for buildings extremely susceptible to vibration damage

STATE

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulations governing noise levels generated by individual motor vehicles (i.e., the California Vehicle Code) and those governing occupational noise control (i.e., Occupational Safety and Health Administration) are not applicable to planning efforts nor are these areas typically subject to CEQA analysis. Thus, these regulatory guidelines are not included in this analysis. The following are State regulations deemed applicable to this Project.

¹ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

² Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

State Noise Guidelines and Standards

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for residential buildings (California Code of Regulations Title 24, Part 2, Chapter 12, Section 1207.11.2). Title 24 establishes standards for interior room noise attributable to outside noise sources. Title 24 also specifies that acoustical studies should be prepared whenever a residential building or structure is proposed to be located in areas with exterior noise levels 60 dB L_{dn} or greater. The acoustical analysis must show that the building has been designed to limit intruding noise to an interior level not exceeding 45 dB for any habitable room.

Section 1092 of Title 25, Chapter 1, Subchapter 1, Article 4, of the California Administrative Code includes noise insulation standards which detail specific requirements for new multi-family structures (hotels, motels, apartments, condominiums, and other attached dwellings) located within the 60 CNEL contour adjacent to roads, railroads, rapid transit lines, airports, or industrial areas. An acoustical analysis is required showing that these multi-family units have been designed to limit interior noise levels, with doors and windows closed, to 45 CNEL in any habitable room. Title 21 of the California Administration Code (Subchapter 6, Article 2, Section 5014) also specifies that noise levels in all habitable rooms shall not exceed 45 CNEL. A community's sensitivity to noise may be evaluated by starting with the general guidelines developed by the State of California, and then applying adjustment factors. These allow acceptability standards to be set which reflect the desires of the community and its assessment of the relative importance of noise pollution and are below the known levels of health impairment.

Governor's Office of Planning And Research

California Government Code Section 65302(f) mandates that the legislative body of each county, town, and city adopt a noise element as part of their comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The State of California General Plan Guidelines, published by the State Governor's Office of Planning and Research (OPR), provides guidance for the acceptability of specific land use types within areas of specific noise exposure. **Table 4.9-2** presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. OPR guidelines are advisory in nature. Local jurisdictions, including the City, have the responsibility to set specific noise standards based on local conditions.

As depicted in **Table 4.9-2**, the range of noise exposure levels overlap between the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable categories. OPR's State General Plan Guidelines note that noise planning policy needs to be rather flexible and dynamic to reflect not only technological advances in noise control, but also economic constraints governing application of noise-control technology and anticipated regional growth and demands of the community. In project specific analyses, each community must decide the level of noise exposure its residents are willing to tolerate within a limited range of values below the known levels of health impairment. Therefore, the City may use their discretion to determine which noise levels are considered acceptable or unacceptable, based on land use, project location, and other project factors.

4.9 NOISE

**Table 4.9-2
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: Office of Planning and Research, California, General Plan Guidelines, July 2017.

Vibration Standards

California Department of Transportation (Caltrans) has published guidelines for the analysis of ground-borne noise and vibration relating to transportation and construction-induced vibration. For potential building damage the Caltrans Vibration Guidance Manual³ identifies the following criteria:

- Extremely fragile historic buildings, ruins, ancient monuments: 0.12 in/sec PPV for transient sources and 0.08 in/sec PPV for continuous/frequent intermittent sources
- Fragile buildings: 0.2 in/sec PPV for transient sources and 0.1 in/sec PPV for continuous/frequent intermittent sources

³ California Department of Transportation, Transportation and Construction Vibration Guidance Manual, April 2020.

- Historic and some old buildings: 0.5 in/sec PPV for transient sources and 0.25 in/sec PPV for continuous/frequent intermittent sources
- Older residential structures: 0.5 in/sec PPV for transient sources and 0.3 in/sec PPV for continuous/frequent intermittent sources
- New residential structures: 1.0 in/sec PPV for transient sources and 0.5 in/sec PPV for continuous/frequent intermittent sources
- Modern industrial/commercial buildings: 2.0 in/sec PPV for transient sources and 0.5 in/sec PPV for continuous/frequent intermittent sources

LOCAL

City of Rolling Hills Estates General Plan (1992)

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of a Noise Element and other six sections or elements in accordance with State planning law, which contain an integrated and internally consistent set of goals, policies, and implementation measures.

The Noise Element of the Rolling Hills Estates General Plan established guidelines for controlling noise in the City. As mandated by the California Government Code Section 65302(f), the Noise Element follows the guidelines established by the Office of Noise Control of the State Department of Health Service.⁴ The Noise Element indicates noise levels from traffic along major roads and highways. Noise contours are used to illustrate noise levels in areas adjacent to major roadways. The noise contour maps identify existing noise levels in the City and noise levels anticipated from future traffic.

The Noise Element contains the following goals and policies related to noise levels and noise control:

Goal 1: Implement Acceptable noise levels guidelines included in the Noise Element for each land use category.

- Policy 1.1: Adopt the acceptable noise levels for land uses established by the California Department of Health and as adopted by the City of Rolling Hills Estates in the Noise Element.
- Policy 1.2: Limit the time and levels of noise from construction and maintenance equipment and activities, especially in residential areas.
- Policy 1.3: The City will constitute to implement the City's Noise Control Ordinance.
- Policy 1.4: Require all proposed or remodeled pool equipment to be enclosed in structures with sound dampening doors.
- Policy 1.5: The City will respond to noise complaints associated with household equipment in a timely manner.

⁴ California Office of Noise Control, Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976.

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- Policy 1.6: Respond in a timely manner on noise complaints.
- Policy 1.7: Ensure that schools, medical facilities and other noise sensitive land uses are located in areas where noise levels are within acceptable ranges as defined by the City's Noise Element.
- Policy 1.8: Continue to encourage good acoustical design in new construction.
- Policy 1.9: Residential development adjacent to major arterial roads shall be designed to reduce noise impacts from traffic.

Goal 2: Promote the control and reduction of traffic noise and stationary noise created on existing and proposed land uses.

- Policy 2.1: Work with surrounding jurisdictions to limit excessive noise due to aircraft operations, review established flight corridors, and review new development proposals that will involve aircraft operations.
- Policy 2.2: Control the movement of heavy construction vehicles through the City to minimize noise impacts and enforce the hours of operation.
- Policy 2.3: Preserve the natural ambient noise environment as much as possible.

Acceptable noise levels have been established for each of the land use districts provided for in the General Plan. The established levels are based on existing noise levels obtained through field monitoring, projected noise levels, and community expectations to maintain an environment that is free from all unnecessary, excessive, and annoying noise. **Table 4.9-3** indicates the acceptable noise level when measured at the property line for each category of land use.

**Table 4.9-3
City of Rolling Hills Estates Acceptable Noise Level**

Land Use	Sound Level Limits dBA L_{eq} – one-hour average	
	Day	Night
Residential	55	45
Non-Residential	65	55
Industrial-Research*	65	45
Industry Quarry*	75	45

Note: * These land use categories are being eliminated.
Source: The City of Rolling Hills Estates, City of Rolling Hills Estates General Plan 2020 – Noise Element, 1992.

Rolling Hills Estates Municipal Code (RHEMC)

The City's noise regulations are contained in RHEMC Chapter 8.32, Noise. RHEMC Sections 8.32.050 and 8.32.060 define the exterior and interior noise level limits for different designated noise zone and land uses, as shown in **Table 4.9-4**. The applicable ambient exterior noise level shall be added 5 dB for a cumulative period of more than twenty minutes in any hour, 10 dB for a cumulative period of more than ten minutes in any hour, or 15 dB for a cumulative period of more than one minute in any hour. The applicable ambient interior noise level shall be added 5 dB for

a cumulative period of more than five minutes in any hour, or 10 dB for a cumulative period of more than one minute in any hour.

**Table 4.9-4
City of Rolling Hills Estates Noise Standards**

Exterior/Interior	Designated Noise Zone Land Use	Sound Level Limits dBA L_{eq} – one-hour average	
		7:00 a.m. to 10:00 p.m. (day and evening)	10:00 p.m. to 7:00 a.m. (night)
Exterior	Residential and Agricultural	55	45
	Commercial Properties	65	55
	Industrial-Quarry Properties	75	45
Interior	Common Wall and freestanding dwellings	45	40

Source: City of Rolling Hills Estates, City of Rolling Hills Estates Code of Ordinance Section 8.32.050, 8.32.060.

RHEMC Section 8.32.070 states that for any source of sound which emits a pure tone or impulsive noise, the noise level as set forth in Sections 8.32.050 and 8.32.060 shall be reduced by five decibels.

RHEMC Section 8.32.080 defines the City’s methodology for taking noise measurements.

RHEMC Section 8.32.085 states that it is unlawful for any person to maliciously or willfully make or continue, or cause to be made or continued any loud, unnecessary or unusual noise which disturbs the peace or quiet of any person or neighborhood. This section also defines the criteria for determining whether a violation has occurred.

RHEMC Chapter 8.32 also specifies prohibited noise generating activities. Specifically, Section 8.32.090 prohibits activities that cause the noise level when measured on any other property to exceed the noise standard for that land use as set forth in Sections 8.32.050, 8.32.060, and 8.32.070, or cause a noise disturbance as determined by the criteria set forth in Section 8.32.085. Sections 8.32.100 through 8.32.130 regulates noise generated by different types of vehicles; Sections 8.32.140 and 8.32.150 regulates noise generated by non-emergency and emergency signaling devices; Section 8.32.160 regulates amplified sound; Section 8.32.170 regulates animals and fowl; Section 8.32.180 regulates domestic power tools and machinery; Section 8.32.190 regulates drums, and Section 8.32.200 regulates machinery, equipment, fans, air-conditioning, and swimming pool equipment.

RHEMC Section 8.32.210 and Section 8.32.215 define the permitted work hours and days for construction activities and leaf blower operation, which are shown in **Table 4.9-5**. In addition, Section 8.32.210 specifies that no queuing of trucks or arrival of construction materials and/or workers to a construction site shall be permitted outside the permitted construction hours and days as specified in **Table 4.9-5**, and no construction activity shall violate the noise standards set forth in Sections 8.32.050, 8.32.060, 8.32.070 or 8.32.085.

Vibration Standards

The City does not have regulatory standards for construction or operational vibration sources.

4.9 NOISE

Table 4.9-5
City of Rolling Hills Estates Permitted Work Hours and Days

Activities	Monday through Friday	Saturday
Construction	7:00 am – 5:00 pm	9:00 am – 5:00 pm
Leafy Blower Operation	8:00 am – 5:00 pm	9:00 am – 5:00 pm

Source: City of Rolling Hills Estates, City of Rolling Hills Estates Code of Ordinance Section 8.32.200, 8.32.215.

4.9.1.4 EXISTING CONDITIONS

MOTOR VEHICLE NOISE

Automobile, buses, and trucks dominate transportation noise in the City. Traffic moving along streets and freeways produces a sound level that remains relatively constant and is part of the area's minimum ambient noise level. Vehicular noise varies with the volume, speed, and type of traffic. Major transportation noise sources include traffic on roadways that traverse the City. These roadways include Hawthorne Boulevard, Crenshaw Boulevard, Palos Verdes Drive North, Palos Verdes Drive East, Silver Spur Road, and Highridge Road. Large trucks that travel on major arterials contribute to the noise environment in the City.

In order to assess the potential for mobile noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the City. The existing roadway noise levels in the City were projected using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108). The model uses a typical vehicle mix for urban/suburban areas in California and requires parameters, including traffic volumes, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The results are shown in **Table 4.9-6**. These noise levels assume that no shielding is provided between the traffic and the location where the noise contours are drawn. **Figure 4.9-2** illustrates the existing (Year 2021) noise contours from roadways in the City.

As shown in **Table 4.9-6**, traffic noise on these roadways range from approximately 51.8 to 66.7 dBA CNEL when measured 100 feet from the roadway centerline. The noise level range is typical for an urban environment.

STATIONARY NOISE SOURCES

Stationary noise sources within the City also generate noise that affect noise-sensitive uses located nearby. These stationary noise sources may include a wide range of recreational, commercial, and business activities.

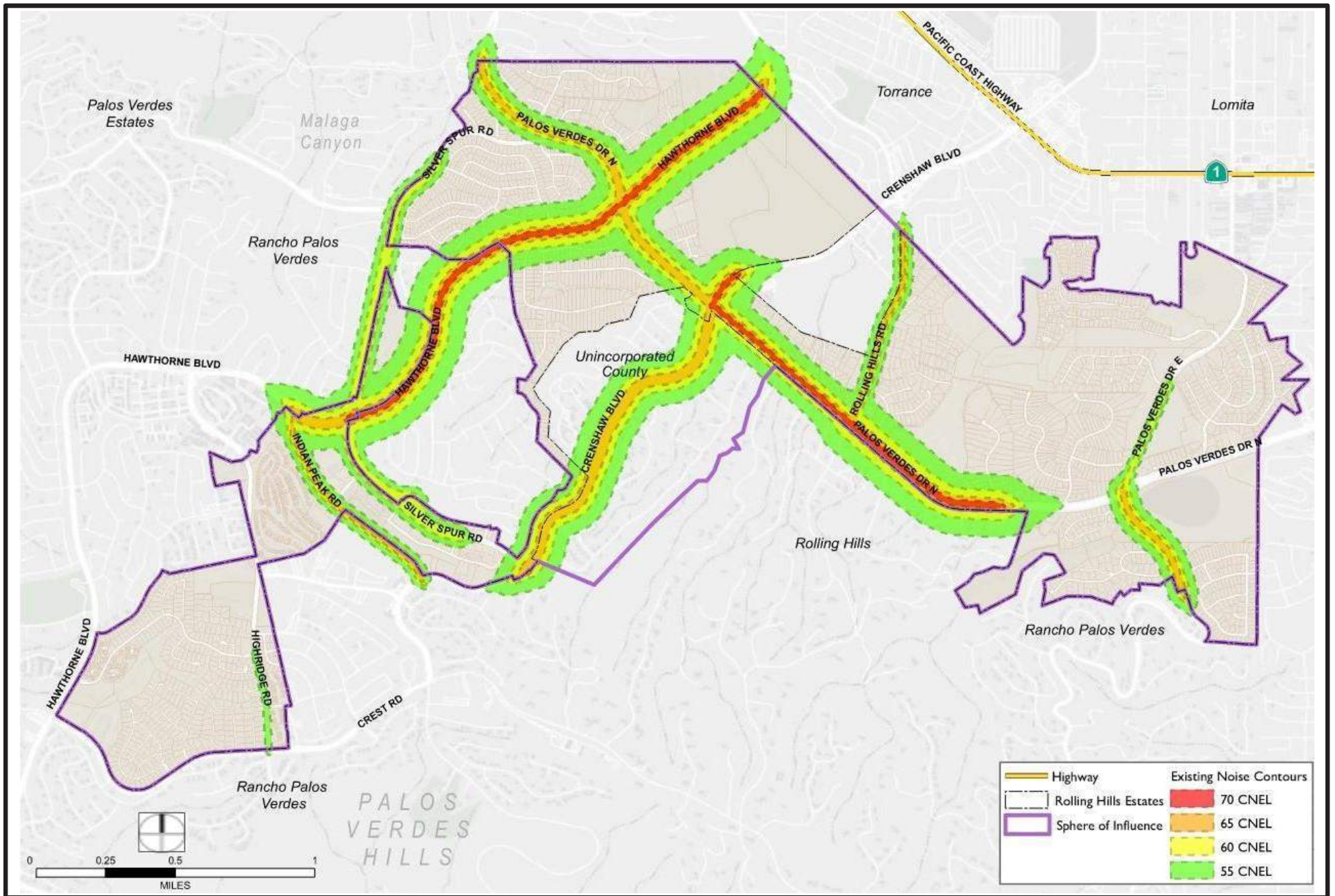
Construction

Construction noise is one of the most common stationary noise sources in the City. The use of pile drivers, drills, trucks, pavers, graders, and a variety of other equipment can result in short, sporadic elevated noise levels. Although construction noise impacts are generally short-term in nature, it can often disturb nearby sensitive uses.

**Table 4.9-6
Existing Traffic Noise Levels**

Roadway Segment	Existing					
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) ¹			
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	55 CNEL Noise Contour
Silver Spur Road south of Kingspine Road	13,431	59.2	-	-	89	192
Palos Verdes Drive North west of Hidden Valley Road	18,688	61.6	-	59	128	276
Hawthorne Blvd south of Rolling Hills Road	30,300	66.4	57	124	266	574
Hawthorne Blvd south of Palos Verdes Drive North	30,006	66.3	57	123	265	570
Palos Verdes Drive North west of Crenshaw Blvd	21,626	63.6	-	80	173	372
Crenshaw Blvd north of Palos Verdes Drive North	26,688	65.9	53	114	245	529
Palos Verdes Drive North east of Eastvale Road	26,660	64.5	43	92	198	428
Rolling Hills Road north of Palomino Lane	9,988	58.9	-	39	84	181
Palos Verdes Drive East south of Club View Lane	10,758	55.0	-	-	46	100
Palos Verdes Drive North west of Strawberry Lane	33,727	66.7	60	130	279	602
Palos Verdes Drive East south of Palos Verdes Drive North	14,482	61.8	-	61	132	284
Hawthorne Blvd between Indian Peak Road & Silver Spur Road	31,311	65.3	-	105	226	487
Indian Peak Road south of Hawthorne Blvd	7,382	58.9	-	39	84	182
Silver Spur Road north of Roxcove Drive	12,651	60.1	-	-	101	218
Crenshaw Blvd north of Silver Spur Road	30,873	65.3	-	104	224	483
Highridge Road south of Country Lane	3,450	51.8	-	-	-	61

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.
 "-" = contour is located within the roadway right-of-way.
 Note: Roadway noise levels and contours were calculated using the Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Source: Michael Baker International, 2021.



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data, 2017; Michael Baker International, 2021.

FIGURE 4.9-2
Existing Roadway Noise Contours

Commercial

The Peninsula Center Commercial District includes a concentration of retail commercial activities which generate substantial vehicular and pedestrian traffic along Silver Spur Road between Hawthorne Boulevard and Crenshaw Boulevard. The primary noise sources associated with these facilities are caused by delivery trucks, trash trucks, air compressors, generators, outdoor loudspeakers, and gas venting. Residential, institutional, and park uses are located adjacent to several commercial areas of the City. Commercial operations may cause annoyance to these nearby sensitive receptors.

SENSITIVE NOISE RECEPTORS

Sensitive populations are more susceptible to the effects of noise than are the general population. Land uses considered sensitive by the State of California include residences, schools, playgrounds, hospitals, rest homes, rehabilitation centers, long-term care, and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations are present.

Land uses less sensitive to noise are business, commercial, and professional developments. Noise receptors categorized as being least sensitive to noise include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, and transit terminals. These types of land use often generate high noise levels. Moderately sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, and outpatient clinics. Current land uses located within the City that are sensitive to intrusive noise include residential uses, schools, churches, and parks.

NOISE MEASUREMENTS

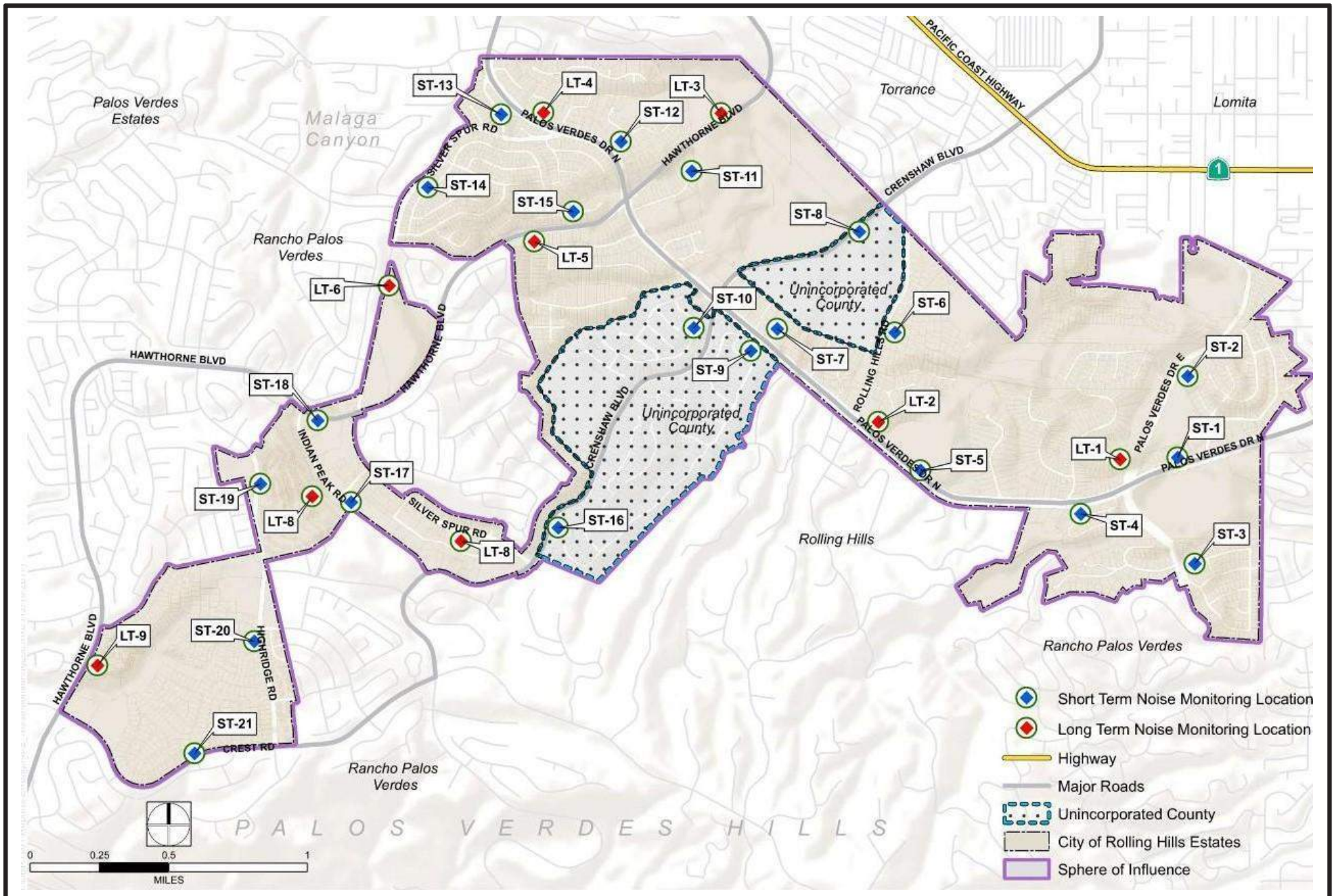
Long-term and short-term noise measurements were conducted to document the actual existing noise level at various locations throughout the City. The noise measurements represent a snapshot of the current noise environment in the City. Several criteria were used in the site selection process, including, but not limited to, the proximity of a measurement site to sensitive land uses, as well as its proximity to significant noise generators. After the site selection process was completed, a series of long-term 24-hour and short-term 15-minute noise measurements were conducted at the selected sites. The noise measurements were taken within the City at nine long-term locations and twenty-one short-term locations shown in **Figure 4.9-3**. The results of the field measurements are summarized in **Table 4.9-7**, **Table 4.9-8**, and **Appendix E**.

4.9.2 IMPACT ANALYSIS

4.9.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's noise impacts based on the thresholds of significance identified in Appendix G of the CEQA. Based on these criteria, a noise impact is considered significant if implementation of the proposed GPU would:

Threshold 4.9(a): *Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data, 2017; Dyett & Bhatia, 2017.

FIGURE 4.9-3
Noise Measurement Locations

**Table 4.9-7
Long-Term Noise Measurements**

Site No.	Start Date	Location	Daytime Noise Level Range Leq (dBA)	Evening Noise Level Range Leq (dBA)	Nighttime Noise Level Range Leq (dBA)	Daily Noise Level (dBA CNEL)
LT-1	12/12/2017	26 Sorrell Lane	48.7 - 53.4	50.1 - 50.5	40.8 - 51.2	55
LT-2	12/12/2017	1 Pony Lane	44.8 - 50.7	47.4 - 48.4	41.0 - 49.9	53
LT-3	12/12/2017	2585 Hawthorne Boulevard, Ernie Howlett Park	61.9 - 64.3	59.1 - 61.8	46.6 - 59.6	64
LT-4	12/12/2017	1 Masongate Drive	52.2 - 58.5	49.3 - 51.5	39.7 - 49.8	55
LT-5	12/13/2017	Silver Saddle Lane & Shady Vista Road	61.1 - 64.0	59.3 - 61.2	48.1 - 61.5	65
LT-6	12/13/2017	9 Via De La Vista	48.9 - 51.4	47.9 - 48.4	38.4 - 48.8	52
LT-7	12/13/2017	837 Silver Spur Road	56.6 - 61.1	53.9 - 55.5	48.0 - 55.2	60
LT-8	12/13/2017	49 Oaktree Road	44.1 - 55.6	44.7 - 45.0	42.6 - 49.2	53
LT-9	12/13/2017	8 Coraltree Lane	46.8 - 48.5	45.6 - 47.6	41.5 - 45.3	51

L_{eq} = equivalent sound level; dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level.
Source: Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

**Table 4.9-8
Existing Short-Term Noise Measurements**

Site No.	Start Date	Start Time	Duration	Location	Leq (dBA)
ST-1	12/12/2017	9:30 a.m.	15 minutes	5 Casaba Road. In front of the residence.	56.6
ST-2	12/12/2017	10:30 a.m.	15 minutes	21 Vista Real Drive. In front of the residence.	41.6
ST-3	12/12/2017	11:00 a.m.	15 minutes	2325 Carriage Drive. In front of the residence.	45.4
ST-4	12/12/2017	11:30 a.m.	15 minutes	15 Hitching Post Drive. In front of the residence.	50.8
ST-5	12/12/2017	12:00 p.m.	15 minutes	3011 Palos Verdes Drive North. In front of the residence.	58.2
ST-6	12/12/2017	12:25 p.m.	15 minutes	3 Singletree Lane. In front of the residence.	51.9
ST-7	12/12/2017	12:50 p.m.	15 minutes	6 Rawhide Lane. In front of the residence.	43.1
ST-8	12/12/2017	1:15 p.m.	15 minutes	3603 Hidden Lane. In front of the residence.	54.4
ST-9	12/12/2017	12:32 p.m.	15 minutes	26708 Eastvale Road. In front of the residence.	61.5
ST-10	12/12/2017	11:41 a.m.	15 minutes	4018 Rosseau Lane. In front of the residence.	48.1
ST-11	12/12/2017	9:34 a.m.	15 minutes	41 Moccasin Lane. In front of the residence.	48.1
ST-12	12/13/2017	10:33 a.m.	15 minutes	4 Hidden Valley Road. In front of the residence.	50.2
ST-13	12/13/2017	10:06 a.m.	15 minutes	4941 Rolling Meadows Road. In front of the residence.	42.7

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**Table 4.9-8
Existing Short-Term Noise Measurements**

Site No.	Start Date	Start Time	Duration	Location	Leq (dBA)
ST-14	12/13/2017	11:36 a.m.	15 minutes	26361 Dunwood Road. In front of the residence.	50.7
ST-15	12/13/2017	11:01 a.m.	15 minutes	4703 Rockbluff Drive. In front of the residence.	54.8
ST-16	12/13/2017	12:08 p.m.	15 minutes	4347 Canyon View Lane, between the residences at the cul-de-sac	46.3
ST-17	12/13/2017	12:38 p.m.	15 minutes	550 Deep Valley Drive, at the southwest corner of the parking structure top level.	59.7
ST-18	12/13/2017	12:59 p.m.	15 minutes	Near 27440 Hawthorne Boulevard, at the center of the north edge of the parking lot.	60.8
ST-19	12/13/2017	3:49 p.m.	15 minutes	9 Cottonwood Circle, In front of the residence.	52.8
ST-20	12/13/2017	2:42 p.m.	15 minutes	Northwest of Highridge Road and Country Lane, in a park associated with Rolling Hills Parks Estates.	51.6
ST-21	12/13/2017	3:23 p.m.	15 minutes	66 Misty Acres Road, west of the residence.	60.6

Leq = equivalent sound level; dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level
Source: Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

Threshold 4.9(b): *Result in the generation of excessive groundborne vibration or groundborne noise levels.*

Threshold 4.9(c): *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in the exposure of people residing or working in the project area to excessive noise levels.*

With regard to these threshold questions from Appendix G of the CEQA Guidelines, the Initial Study (included in **Appendix A** of this Draft PEIR) determined that implementation of the proposed GPU would not result in the exposure of people residing or working in the Planning Area to excessive noise levels from Zamperini Field, the nearest airport located approximately 0.5 mile north of the Planning Area. Therefore, the proposed GPU would have no impact related to Threshold 4.9(c). As such, no further analysis of this issue is necessary. Analysis of impacts related to Thresholds 4.9(a) and 4.9(b) is provided below.

A project is considered to have a significant noise impact where it causes an adopted State or City noise standard to be exceeded for the project site or for adjacent sensitive receptors. Therefore, it is important to consider the existing noise environment when considering impacts associated with the introduction of new noise sources in an area. In community noise assessments, it is “generally not significant” if noise-sensitive sites are not located within the project vicinity, or if permanent increases in community noise levels associated with implementation of the project would not exceed an increase of three dB at noise-sensitive locations in the project vicinity. A limitation in using a single value to evaluate an impact related to a noise level increase would be the failure to account for the preexisting ambient noise

environment to which a person has become accustomed. Studies assessing the percentage of people highly annoyed by changes in ambient noise levels indicate that when ambient noise levels are low, a greater change is needed to cause a response. As ambient noise levels increase, a lesser change in noise levels is required to elicit significant annoyance. The significance criteria listed in **Table 4.9-9** are based on published guidance from the Federal Interagency Committee on Noise (FICON), the California Department of Transportation (Caltrans), and OPR, and considered to correlate well with human response to permanent changes in ambient noise levels. Projects generating noise levels that exceed the criteria listed in **Table 4.9-9** would be considered to cause a substantial increase in ambient noise level, as specified in Threshold 4.9(a).

**Table 4.9-9
Significance of Changes in Cumulative Noise Exposure**

Ambient Noise Level Project (Ldn or CNEL)	Significant Impact Assumed to Occur if the Ambient Noise Level is Increased by:
< 60 dBA	5.0 dBA or more
> 60 dBA	3.0 dBA or more
Source: California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.	

4.9.2.2 METHODOLOGY

Construction noise impacts, operational stationary noise impacts, and construction and operational vibration impacts were analyzed qualitatively, since the specific locations, site plans, and construction details of individual projects associated with implementation of the proposed GPU have not yet been identified.

The RD-77-108 model was used to calculate the noise contours along major roadways across the City based on traffic volumes from the Traffic Data for Rolling Hills Estates General Plan 2040 Update (refer to Appendix F, Transportation Assessment, of this PEIR), average speeds represented by the posted speed limit, roadway geometry, and site environmental conditions. As a conservative analysis, shielding features, including topography and intervening buildings, were not considered in the model.

4.9.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.9(a): *Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Impact Analysis

Construction Noise Sources

Typical activities associated with construction are a highly noticeable temporary noise source. Noise from construction activities is generated by two primary sources: (1) the transport of workers and equipment to construction sites and (2) the noise related to active construction equipment. These noise sources can be a nuisance to local residents and businesses or unbearable to sensitive receptors (i.e., residences, hospitals, senior centers, schools, day care facilities, etc.).

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While adoption of the proposed GPU would not directly result in new development within the City, additional development within the Planning Area to build out the City per the proposed GPU is anticipated, which would generate noise during construction activities. Construction noise levels are dependent upon the specific locations, site plans, and construction details of individual projects, which have not yet been identified. Construction would be localized and would occur intermittently for varying periods of time. Because specific project-level information is not available at this time, it is not possible to quantify the construction noise impacts at specific sensitive receptors. Construction of individual developments associated with implementation of the proposed GPU could temporarily increase the ambient noise environment in the vicinity of each individual project. For example, construction of each of the representative projects is assumed to include grading, framing, paving, and concrete pouring and could also include demolition, excavation for subterranean levels, and hauling. Noise from these construction practices could include engine noises from heavy equipment, sawing, hammering, pounding, dropping of materials, banging and clanging of equipment, delivery activities, loading, truck hauling, etc. **Table 4.9-10** provides the anticipated noise levels at 50 feet from typical construction equipment.

**Table 4.9-10
Maximum Noise Levels Generated by Typical Construction Equipment**

Type of Equipment	Acoustical Use Factor ^a	L _{max} at 50 Feet (dBA)
Backhoe	40	78
Compressor	40	78
Concrete Mixer Truck	40	79
Concrete Saw	20	90
Crane	16	79
Dozer	40	82
Forklift	40	78
Generator	50	81
Grader	40	85
Loader	40	79
Paver	50	77
Roller	20	80
Tractor	40	84
Welder	40	74

^a. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.
Source: Federal Highway Administration, Roadway Construction Noise Model (FHWA-HEP-05-054), January 2006.

Pursuant to the RHEMC Section 8.32.210, construction of future projects would be limited to occur between the hours of 7:00 a.m. and 5:00 p.m. Mondays through Fridays, and between 9:00 a.m. and 5:00 p.m. on Saturdays. In addition, construction activities are prohibited from violating the noise standards set forth in RHEMC Sections 8.32.050, 8.32.060, 8.32.070 or 8.32.085. Development projects would be subject to environmental review, and specific construction noise attenuation techniques would be utilized to reduce noise generation during construction to ensure compliance with RHEMC requirements. Therefore, compliance with RHEMC Section 8.32.210 would reduce short-term construction noise impacts to less-than-significant levels.

Mobile Noise Sources

Existing and future noise levels have been calculated for various roadway segments within the City. **Table 4.9-6** outlines the City's existing roadway noise levels and **Figure 4.9-2** illustrates the existing noise contours. **Table 4.9-11** and **Table 4.9-12** outline the City's future roadway noise levels, and **Figure 4.9-4** and **Figure 4.9-5** illustrate the noise contours under the proposed GPU development conditions.

The following is a summary of the calculated traffic noise levels associated with development under the proposed GPU for both high range and low range buildout scenarios:

- Five of the roadway segments modeled (along Hawthorne Boulevard, Crenshaw Boulevard, Palos Verdes Drive North) would generate noise levels between 65 dBA CNEL and 70 dBA CNEL at 100 feet from the roadway centerline.
- Five modeled roadway segments (along Palos Verdes Drive North, Palos Verdes Drive East, and Silver Spur Road) would generate noise levels between 60 dBA CNEL and 65 dBA CNEL at 100 feet from the centerline.

It is noted that the computer noise model used to project the potential ambient noise levels with implementation of the proposed GPU does not consider the existing noise attenuating features, such as sound walls, buildings, landscaping, or topography. As such, the roadway noise contours may not reflect true noise conditions and may be conservative in such aspects. Intervening structures or other noise-attenuating obstacles between the roadway and sensitive receptors may reduce roadway noise levels at the receiving receptor. However, there would almost certainly be receptors that would experience roadway noise levels very similar to those indicated by the noise contours.

Table 4.9-11 and **Table 4.9-12** compare the "Existing" scenario to the "General Plan Year 2040" buildout scenarios and outline the anticipated noise level changes adjacent to specific roadways in the City as a direct result of implementation of the proposed GPU. It should be noted that as ambient noise levels increase, a smaller degree of change in noise levels is required to elicit significant annoyance (refer to the significance criteria listed in **Table 4.9-9**). Existing noise levels below 60 dBA would require an increase of 5 dBA or more to be significant, while existing noise levels that are 60 dBA or above would require an increase of 3 dBA or more to be significant.

With implementation of the proposed GPU, some residential uses would experience noise levels that would exceed the City's Noise and Land Use Criteria Compatibility Criteria (refer to **Table 4.9-2**) due to the increase in roadway noise. However, compared to existing conditions, future noise levels would not increase by 3 dBA or more under both the low range and high range buildout scenarios. Since a 3 dBA change in noise levels is generally not perceptible, noise levels that do not exceed 3 dBA are considered less than significant. As shown above in **Table 4.9-11** and **Table 4.9-12**, none of the Project-induced changes would exceed 1 dBA. Therefore, long-term mobile traffic noise impacts would be less than significant.

When considering the representative projects, there are no additional or different mobile source noise impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, the trip generation and traffic volumes of future development projects implemented under the proposed GPU, such as the representative projects, are included in the overall traffic volumes of the

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**Table 4.9-11
Year 2040 Low Range Scenario Traffic Noise Levels**

Roadway Segment	Year 2040 Low Range Scenario						Existing	Difference Between Existing and Year 2040
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) ¹				dBA @ 100 Feet from Roadway Centerline	
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	55 CNEL Noise Contour		
Silver Spur Road south of Kingspine Road	14,390	59.5	-	-	93	201	59.2	0.3
Palos Verdes Drive North west of Hidden Valley Road	20,022	61.9	-	62	134	289	61.6	0.3
Hawthorne Blvd south of Rolling Hills Road	32,462	66.7	60	129	279	601	66.4	0.3
Hawthorne Blvd south of Palos Verdes Drive North	32,148	66.6	60	129	277	597	66.3	0.3
Palos Verdes Drive North west of Crenshaw Blvd	23,170	63.9	39	84	181	389	63.6	0.3
Crenshaw Blvd north of Palos Verdes Drive North	28,593	66.1	55	119	257	554	65.9	0.2
Palos Verdes Drive North east of Eastvale Road	28,564	64.8	45	96	208	448	64.5	0.3
Rolling Hills Road north of Palomino Lane	10,701	59.2	-	41	88	189	58.9	0.3
Palos Verdes Drive East south of Club View Lane	11,527	55.3	-	-	49	105	55.0	0.3
Palos Verdes Drive North west of Strawberry Lane	36,135	67.0	63	136	293	630	66.7	0.3
Palos Verdes Drive East south of Palos Verdes Drive North	15,517	62.1	-	64	138	298	61.8	0.3
Hawthorne Blvd between Indian Peak Road & Silver Spur Road	33,546	65.6	51	110	237	510	65.3	0.3

**Table 4.9-11
Year 2040 Low Range Scenario Traffic Noise Levels**

Roadway Segment	Year 2040 Low Range Scenario						Existing	Difference Between Existing and Year 2040
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) ¹				dBA @ 100 Feet from Roadway Centerline	
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	55 CNEL Noise Contour		
Indian Peak Road south of Hawthorne Blvd	7,910	59.2	-	41	88	190	58.9	0.3
Silver Spur Road north of Roxcove Drive	13,554	60.4	-	-	106	228	60.1	0.3
Crenshaw Blvd north of Silver Spur Road	33,077	65.6	-	109	235	506	65.3	0.3
Highridge Road south of Country Lane	3,696	52.1	-	-	-	64	51.8	0.3

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.
 "-" = contour is located within the roadway right-of-way.
 Note: Roadway noise levels and contours were calculated using the Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Source: Michael Baker International, 2021.

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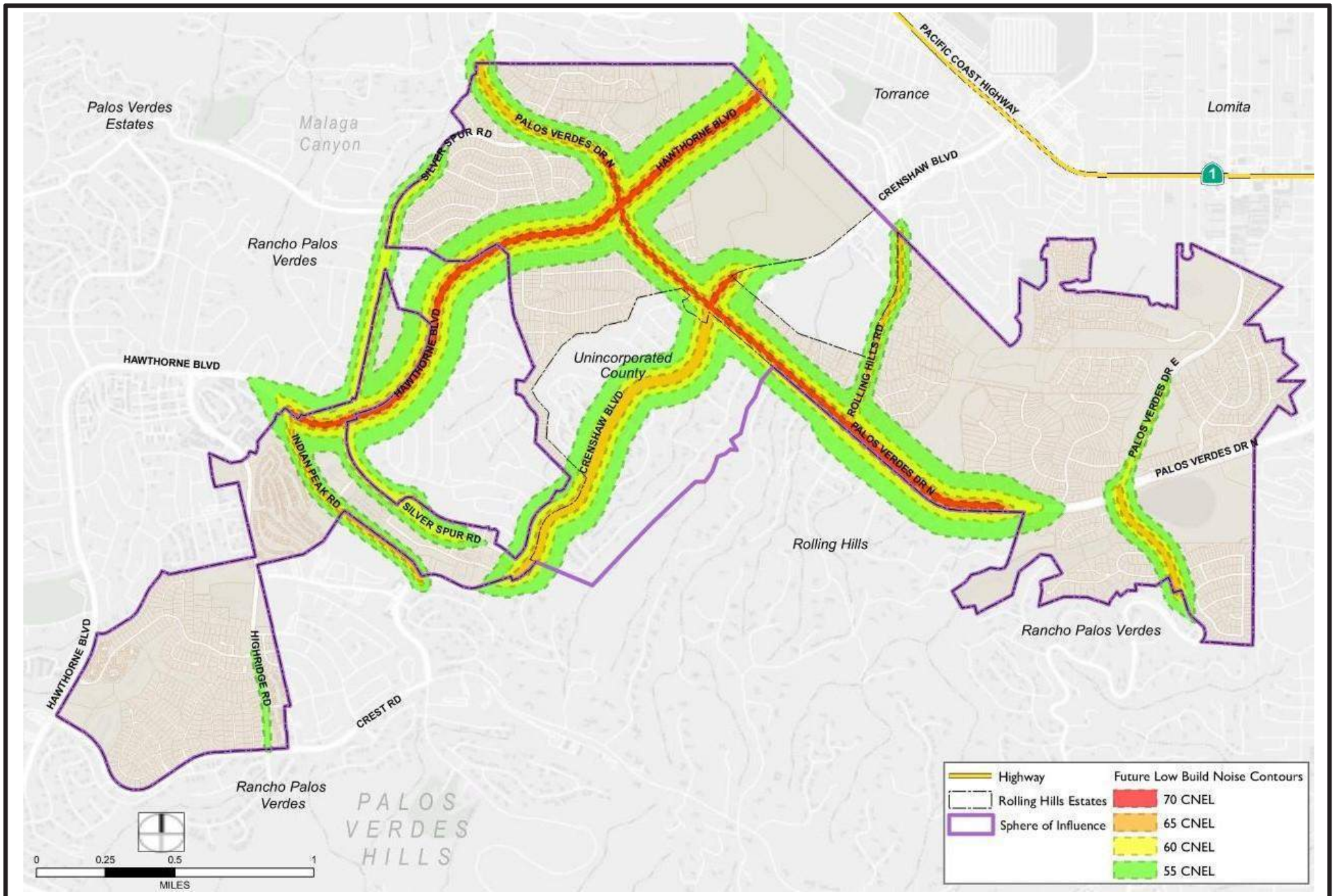
**Table 4.9-12
Year 2040 High Range Scenario Traffic Noise Levels**

Roadway Segment	Year 2040 High Range Scenario						Existing	Difference Between Existing and Year 2040
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) ¹				dBA @ 100 Feet from Roadway Centerline	
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	55 CNEL Noise Contour		
Silver Spur Road south of Kingspine Road	14,598	59.6	-	-	94	203	59.2	0.4
Palos Verdes Drive North west of Hidden Valley Road	20,313	62.0	-	63	135	292	61.6	0.4
Hawthorne Blvd south of Rolling Hills Road	32,934	66.7	61	131	282	607	66.4	0.4
Hawthorne Blvd south of Palos Verdes Drive North	32,613	66.7	60	130	280	603	66.3	0.4
Palos Verdes Drive North west of Crenshaw Blvd	23,506	63.9	39	85	182	393	63.6	0.4
Crenshaw Blvd north of Palos Verdes Drive North	29,008	66.2	56	120	260	559	65.9	0.4
Palos Verdes Drive North east of Eastvale Road	28,978	64.8	45	97	210	452	64.5	0.4
Rolling Hills Road north of Palomino Lane	10,857	59.2	-	41	89	191	58.9	0.4
Palos Verdes Drive East south of Club View Lane	11,694	55.4	-	-	49	106	55.0	0.4
Palos Verdes Drive North west of Strawberry Lane	36,659	67.1	64	137	295	636	66.7	0.4
Palos Verdes Drive East south of Palos Verdes Drive North	15,742	62.2	-	65	140	301	61.8	0.4
Hawthorne Blvd between Indian Peak Road & Silver Spur Road	34,033	65.7	51	111	239	515	65.3	0.4

**Table 4.9-12
Year 2040 High Range Scenario Traffic Noise Levels**

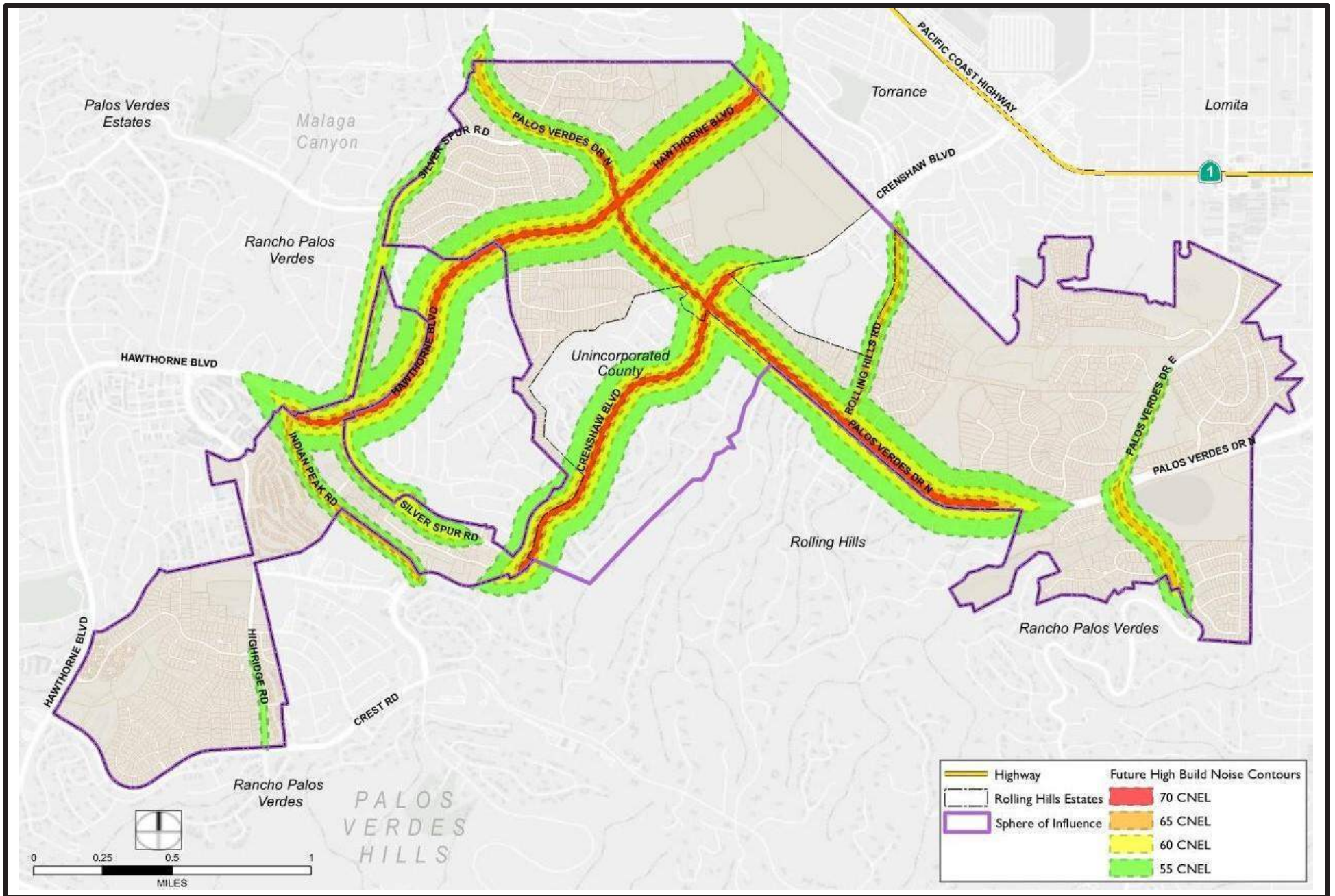
Roadway Segment	Year 2040 Low Range Scenario						Existing	Difference Between Existing and Year 2040
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet) ¹				dBA @ 100 Feet from Roadway Centerline	
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	55 CNEL Noise Contour		
Indian Peak Road south of Hawthorne Blvd	8,025	59.3	-	41	89	192	58.9	0.4
Silver Spur Road north of Roxcove Drive	13,751	60.4	-	-	107	230	60.1	0.4
Crenshaw Blvd north of Silver Spur Road	33,557	65.6	51	110	237	511	65.3	0.4
Highridge Road south of Country Lane	3,750	52.1	-	-	-	64	51.8	0.4

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.
 "-" = contour is located within the roadway right-of-way.
 Note: Roadway noise levels and contours were calculated using the Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Source: Michael Baker International, 2021.



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data, 2017; Michael Baker International, 2021.

FIGURE 4.9-4
General Plan Year 2040 Low Range Scenario Noise Contours



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data, 2017; Michael Baker International, 2021.

FIGURE 4.9-5

General Plan Year 2040 High Range Scenario Noise Contours

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proposed GPU. Thus, the roadway noise levels of the proposed GPU presented above are inclusive of the trips that would be generated by the representative projects. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to mobile source noise, the representative projects themselves would also result in less-than-significant impacts.

Stationary Noise Sources

Commercial land uses would be located near sensitive receptor areas. Such uses currently generate occasional stationary noise impacts. Primary noise sources associated with these facilities are due to customer trips, delivery trucks, machinery, air compressors, generators, outdoor loudspeakers, and gas vents. Residential and recreational uses would create stationary noise, such as children playing, amplified music, and mechanical equipment. Other significant stationary noise sources within the City include construction activity, street sweepers, and gas-powered leaf blowers.

Residential Uses

Residential uses make up more than 30 percent of the total land in the City. Future development of residential lots would create stationary noise typical of any new residential development. Noise that is typical of single-family residential areas includes children playing, pets, amplified music, pool and spa equipment operation, mechanical equipment, woodworking, car repair, and home repair. Noise from residential stationary sources would primarily occur during the “daytime” activity hours assuming noises decrease during nighttime hours (e.g., people go to sleep and/or close their windows). In addition, residential uses would be required to comply with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City’s exterior and interior noise standards when measured on property line. Therefore, impacts would be less than significant.

Two of the representative projects, the Small Site Project and Medium Site Project, include multi-family residential uses in either mixed-use buildings or apartment/multi-family buildings. Noise sources from such multi-family residential uses could include all of the noise sources noted in the previous paragraph, along with noise from any outdoor activity areas included in such projects (e.g., community/association pools, children’s play areas, rooftop decks, etc.). The potential noise impacts from such outdoor activity areas would be dependent on various factors, including the type, scale, and intensity of use of such facilities, the orientation of project in relation to the activity area, the proximity of sensitive receptors, and the background ambient noise level. Since, such factors cannot be known at this time, quantification of potential noise levels cannot be conducted without undue speculation. However, like all residential uses, future projects, such as the representative projects, would be required to comply with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City’s exterior and interior noise standards when measured on property line. The required compliance with the RHEMC would ensure that potential noise impacts from the representative projects would be less than significant.

Commercial Uses

As discussed under Section 4.9.1.4, Existing Conditions, noise sources associated with commercial uses are typically caused by delivery trucks, trash trucks, air compressors, generators, outdoor loudspeakers, and gas venting. In commercial and business areas, noise sources at loading areas may also include maneuvering and idling trucks, truck refrigeration units, forklifts,

banging and clanging of equipment (i.e., hand carts and roll-up doors), noise from public address systems, and voices of truck drivers and employees. Implementation of the proposed GPU would involve new commercial developments, such as retail, restaurants, offices, etc. Stationary noise generated from commercial developments would be analyzed on a project-by-project basis. Development projects would be subject to environmental review, and specific noise attenuation techniques would be implemented to ensure noise levels do not exceed RHEMC requirements. Compliance with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City's exterior and interior noise standards when measured on property line, would reduce these impacts to a less-than-significant level.

All three representative projects include commercial uses. The Small Site Project includes ground-floor commercial uses in a mixed-use building envisioned to primarily consist of retail and restaurant uses; the Medium Site Project considers both ground-floor commercial uses in a mixed-use building and stand-alone commercial buildings with commercial uses envisioned to primarily consist of retail and restaurant uses; and the third representative project is for a hotel with ancillary uses that could include restaurants, bars, and banquet/conference facilities. The description of potential noise impacts from commercial uses in the previous paragraph is inclusive of retail and restaurant uses. However, a hotel could include other noise sources, such as outdoor gathering areas, outdoor event spaces, rooftop bars, outdoor pools/pool decks, etc. The potential noise impacts from such noise sources would be dependent on various factors, including the type, scale, and intensity of use of such facilities, the orientation of project in relation to the activity area, the proximity of sensitive receptors, and the background ambient noise level. Since, such factors cannot be known at this time, quantification of potential noise levels cannot be conducted without undue speculation. However, as with all commercial uses, the future hotel projects would be required to comply with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City's exterior and interior noise standards when measured on property line. The required compliance with the RHEMC would ensure that potential noise impacts from the representative projects, including the Hotel Project, would be less than significant.

Mechanical Equipment

Typical mechanical equipment associated with stationary sources includes heating, ventilation, and air conditioning units (HVAC). Actual activity levels would vary from season to season and day to day, and noise level reference data for the HVAC units are only available for high activity levels more characteristic of conditions during daytime hours on a warm summer day. Typical HVAC units would operate in unoccupied mode throughout the entire nighttime period, using a temperature threshold for cooling that is unlikely to be triggered during those hours. HVAC related noise levels would be substantially lower during the nighttime hours than during the loudest daytime hour. As discussed above, temporal variations in noise emissions from the HVAC units are expected to be complex and cannot be accurately distilled into a single diurnal pattern. It is reasonable to expect that, for at least a single daytime hour during warmer times of the year, all or nearly all of the HVAC units could be operating simultaneously and nearly continuously. New development may include HVAC units, thus adjacent sensitive uses may experience noise levels from such equipment. However, compliance with RHEMC Section 8.32.200, which prohibits HVAC units generating noise levels exceeding the City's exterior and interior noise standards, would reduce these impacts to less-than-significant levels.

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Parking Areas

Implementation of the proposed GPU involves new developments, which would include new parking areas. Traffic associated with parking lots is not of sufficient volume to exceed community noise standards that are based on a time averaged scale, such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, an engine starting up, and car passing by may be an annoyance to adjacent sensitive receptors. Conversations in parking areas may also be an annoyance to adjacent sensitive receptors. Compliance with RHEMC Section 8.32.090, which prohibits any source of sound at any location exceeding the City's exterior and interior noise standards when measured on property line, would reduce these impacts to less-than-significant levels.

Landscape Maintenance

Implementation of the proposed GPU would introduce new landscaping that would require periodic maintenance. Noise generated by maintenance equipment, such as gasoline-powered lawnmowers, leaf-blowers, or hedge trimmers, could be a nuisance to nearby sensitive receptors. Maintenance activities would be conducted during daytime hours for brief periods of time and would increase ambient noise levels. Compliance with RHEMC Section 8.32.215, which limits operation of leaf blowers to between 8 a.m. and 5 p.m. Monday through Friday and between 9 a.m. and 5 p.m. on Saturday, would reduce these impacts to less-than-significant levels.

In conclusion, all mobile and stationary source impacts would be reduced to less-than-significant levels by complying with the City's Noise Ordinance. In addition, proposed GPU Noise Element goals and policies also aim to maintain acceptable noise levels for each land use category in the City, and promote the control and reduction of noise created by transportation and technologies. Therefore, impacts would be less than significant.

Mitigation Measures

Impacts related to noise were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to noise were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.9(b): Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis

The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. 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 25 feet from the vast majority of construction vibration sources. This distance can vary substantially depending on the soil composition and underground geological layer between the vibration source and the receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. Construction activities that

may result under the proposed GPU have the potential to generate low levels of ground-borne vibration. **Table 4.9-13** identifies various vibration velocity levels for types of construction equipment that would operate within the City during construction.

Table 4.9-13
Typical Vibration Levels for Construction Equipment

Equipment	Approximate ground velocity in decibels at 25 feet (VdB)	Approximate ground velocity in decibels at 50 feet (VdB)
Pile Driver (impact)	104	98
Large Bulldozer	87	81
Loaded Trucks	86	80
Jackhammer	79	73
Small Bulldozer	58	52

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

Similar to noise, ground-borne vibration would attenuate at a rate of approximately six VdB per doubling of distance. The ground-borne vibration generated during construction activities would primarily impact existing sensitive uses that are located adjacent to or within the immediate vicinity of specific projects. Based upon the information provided in **Table 4.9-13**, vibration levels could reach up to 87 VdB for typical construction activities (and up to 104 VdB if pile driving activities were to occur) at sensitive uses located within 25 feet of construction. For sensitive uses that are located at or within 25 feet of potential project construction sites, sensitive receptors at these locations may experience vibration levels during construction activities that exceed the FTA vibration impact threshold of 80 VdB for human annoyance. However, pursuant to **Mitigation Measure MM-NOI-1**, should certain construction activities take place within 25 feet of an occupied structure, a project-specific vibration impact analysis shall be conducted. In addition, **Mitigation Measure MM-NOI-2** would prohibit pile driving within 50 feet of historic structures and instead utilize alternative installation methods; require a preconstruction survey of all designated historic buildings within 50 feet of proposed construction activities; and require vibration monitoring prior to and during pile driving operations occurring within 100 feet of historic structures. Therefore, implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2** would reduce short-term vibration impacts to a less-than-significant level.

Implementation of the proposed GPU would not involve land uses that include or require equipment, facilities, or activities that would result in perceptible groundborne vibration. Heavy duty trucks would travel through roadways across the City. However, according to the FTA, it is unusual for vibration from sources, such as buses and trucks, to be perceptible, even in locations close to major roads.⁵ As such, it can be reasonably inferred that operations associated with development projects under the proposed GPU would not create perceptible vibration impacts to the nearest sensitive receptors. Therefore, vibration impacts related to building damage and human annoyance during operation would be less-than-significant impact.

⁵ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

4.9 NOISE

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, the estimated construction vibration levels generated by the representative projects has already been accounted for in the analysis above. Implementation of **Mitigation Measure MM-NOI-1** and **MM-NOI-2** would reduce construction vibration impacts for representative projects to a less-than-significant level and operational vibration impacts would be less than significant without mitigation.

Mitigation Measures

MM-NOI-1 Projects with construction activities that use equipment with high vibration levels, including, but not limited to, pile drivers, vibratory rollers, large bulldozers, and loaded trucks, within 25 feet of an occupied sensitive use (i.e., historical buildings, residential, senior care facilities, hospitals, and schools/day care centers) shall be required to prepare a project-specific vibration impact analysis to identify the potential project-specific construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project's construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.

MM-NOI-2 Projects within 100 feet of a historic structure(s) shall implement the following measures to reduce the potential for architectural/structural damage resulting from elevated groundborne noise and vibration levels:

- Pile driving within 50 feet of any historic structure(s) shall utilize alternative installation methods, such as pile cushioning, jetting, predrilling, cast-in-place systems, and resonance-free vibratory pile drivers.
- As accessible, a preconstruction survey of all eligible for listing or listed historic buildings under the National Register of Historic Places, California Register of Historic Resources, and/or local historic database(s) within 50 feet of proposed construction activities shall be conducted. Fixtures and finishes within 50 feet of construction activities susceptible to damage shall be documented photographically and in writing. The preconstruction survey shall determine conditions that exist before construction begins for use in evaluating any damage caused by construction activities. Construction vibration monitoring shall be conducted at the edges of these historic properties and construction activities shall be reduced, as needed, to ensure no damage occurs.
- Vibration monitoring shall be conducted prior to and during pile driving operations occurring within 100 feet of the historic structure(s). Contractors shall limit construction vibration levels during pile driving and impact activities in the vicinity of the historic structure(s) in accordance with the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual, dated April 2020, or subsequent updates of this Manual.

Level of Significance After Mitigation

With implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2**, short-term construction vibration impacts would be reduced to a less-than-significant level.

4.9.2.4 CUMULATIVE IMPACTS

Impact Analysis

Short-term Construction Noise

The City of Rolling Hills Estates is almost fully developed, leaving little room for significant new development. Based on historical development patterns and reasonable assumptions of development, it is anticipated that new development would occur with only a limited number of parcels being developed at the maximum density or intensity. Further, it is speculative to determine at this time where or when new development or redevelopment would occur within the City. Thus, it is unlikely the City would experience multiple concurrent construction projects in proximity to each other. Short-term construction noise is a localized activity and would affect only land uses that are adjacent to, or in the immediate vicinity of, a specific project site. Each construction project would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible. Thus, the potential cumulative impacts of short-term construction noise are considered less than significant.

Long-term Operational Noise

Cumulative impacts are based upon assumptions made within **Appendix F** of this PEIR and Section 4.16, Transportation, of this PEIR, to address noise impacts within the City. Cumulative stationary noise sources would generally be less than significant with compliance with the City's Noise Ordinance. However, as traffic noise tends to be the main source of noise within the City, the analysis below considers whether the increase in traffic noise would be noticeable and significant per the applicable criteria.

Mobile Source

The mobile source noise analysis discussed under Threshold (a) above is inherently cumulative as the proposed GPU is a long-term planning document for the City as a whole. As indicated in **Table 4.9-11** and **Table 4.9-12**, development assumed under the proposed GPU would not generate a significant audible noise level increase along any of the roadway segments. Thus, implementation of the GPU would result in a less-than-significant cumulative noise impact.

Stationary Sources

Noise caused by stationary sources would not substantially increase with implementation of the proposed GPU as the City is generally built out. Through implementation of the proposed GPU, it is anticipated that there would be few new stationary sources as compared to existing conditions. Given the types of potential new stationary noise sources (e.g., loading areas, HVAC and other mechanical equipment, outdoor activity areas, etc.), noise produced by such noise sources would be limited to the localized area surrounding the source. It is unlikely that multiple new stationary noise sources would be located in close enough proximity to one another to cause cumulative noise impacts. Moreover, all new stationary noise sources would be required to comply with the provisions and noise standards contained in the Noise Ordinance. Therefore, a less-than-significant impact would occur with regard to cumulative stationary noise exposure.

4.9 NOISE

Short-term and Long-term Vibration

As discussed above, operational activities under the implementation of proposed GPU would not generate substantial groundborne vibration and construction activities associated with developments under the GPU would cause less-than-significant vibration impacts with implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2**. Groundborne vibration generated from cumulative development projects would be required to implement any required mitigation measures on a project-by-project basis, as applicable, pursuant to CEQA provisions. Moreover, vibration generation is limited to areas within the immediate vicinity of the source (e.g., primarily within 25 feet of most construction activities); thus, vibration impacts are almost exclusively project-level impacts rather than cumulative. Therefore, implementation of the proposed GPU would result in a less-than-significant cumulative vibration impact.

Mitigation Measures

Refer to **Mitigation Measures MM-NOI-1** and **MM-NOI-2**.

Level of Significance After Mitigation

With implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2**, cumulative short-term construction vibration impacts would be reduced to a less-than-significant level.

4.10 POPULATION AND HOUSING

The section of the PEIR provides a discussion of the potential impacts to population and housing associated with the implementation of the proposed GPU. This section discusses the population, housing, and employment trends in Los Angeles County (County) and the City of Rolling Hills Estates (City) based on data from the U.S. Census and the California Department of Finance (DOF). Impacts to population and housing are addressed in terms of potential effects involving a substantial direct or indirect increase in population growth, and displacement of existing people or housing in the City.

4.10.1 ENVIRONMENTAL SETTING

4.10.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations that apply to the proposed GPU regarding population and housing.

STATE

Housing Element Law (California Government Code Section 65583)

California Government Code Section 65583 requires local governments to prepare a housing element to address the existing and projected housing needs of all economic segments of the community. The housing element, one of seven state-mandated elements required to be included in every general plan, must contain (1) an assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs; (2) a statement of goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing; and (3) scheduled programs for the preservation, improvement, and development of housing.

Housing Crisis Act of 2019 (Senate Bill 330)

Housing Crisis Act of 2019, commonly known as Senate Bill (SB) 330, was signed into law on October 9, 2019 by Governor Gavin Newsom to respond to the California housing crisis. Effective January 1, 2020, SB 330 modifies existing legislation such as the Permit Streamlining Act and the Housing Accountability Act and aims to speed up housing development by eliminating some of the most common entitlement impediments to the creation of new housing. Under SB 330, the definition of “housing Development” now includes residential projects of two or more units; mixed-use projects with two-thirds of the floor area designated for residential use; and transitional, supportive, and emergency housing projects. Local governments are required to complete their review and approval of housing developments within certain time period and are restricted from applying new standards, policies, and laws to a development after a project’s preliminary application is deemed complete. SB 330 also prohibits local governments from imposing a moratorium or similar restriction on a housing development, including mixed-use developments,

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except to specifically protect against imminent threats to public health and safety. The provisions of SB 330 are temporary and set expire on January 1, 2025.

REGIONAL

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for the region comprised of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties and is responsible for developing plans and policies to address the region's population, housing, and employment growth. Specifically, SCAG is responsible for preparing the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and Regional Housing Needs Assessment (RHNA), in coordination with other state and local agencies.

Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS, also known as Connect SoCal, which presents the long-term transportation vision for the region through the year 2045 that balances future mobility and housing needs with economic, environmental and public health goals. The 2020-2045 RTP/SCS contains population, household, and employment projections at the regional, county, city, town and neighborhood levels that are used by local governments in the region for long-range planning purposes.

Regional Housing Needs Assessment

The RHNA, mandated by State law as part of the periodic process of updating local housing elements of the general plan, quantifies the housing needs by income group (very low income, low income, moderate income, and above moderate-income) for each jurisdiction within the SCAG region. Local jurisdictions are required to incorporate the most recent RHNA targets into their general plans. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so regional growth can enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs. The most recent RHNA allocation, the 6th Cycle RHNA Allocation Plan, was approved by the California Department of Housing and Community Development on March 22, 2021 and it covers the planning period October 2021 through October 2029.¹

LOCAL

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan (General Plan), adopted in 1992 with the Housing Element having been updated most recently in 2014, is a comprehensive, long-range plan designed to guide development within the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven

¹ Southern California Association of Governments, 6th Cycle Final RHNA Allocation Plan, Adopted March 4, 2021 and Modified July 1, 2021.

4.10 POPULATION AND HOUSING

sections or elements in accordance with state planning law. The elements, along with their goals and policies, that are related to the growth and/or displacement of population and housing within the City are presented below:

Housing Element

Goal 1: Preserve the City's housing stock, quality of life and rural character.

Policy 1.1 Ensure that new housing is compatible in character and style with existing development, and consistent with established architectural, landscape and development conformity standards established by the City.

Policy 1.3 Encourage the conservation and rehabilitation of existing units in compliance with existing zoning and environmental standards.

Goal 2: Promote new housing opportunities to meet the needs of existing and future residents while preserving the City's rural character.

Policy 2.1 Encourage sound and logical residential growth while providing for the City's fair share of the region's need for affordable housing.

Policy 2.2 Ensure that new development is sensitive to the natural terrain, and that the environmental impacts of new growth are mitigated to the greatest extent feasible.

Policy 2.3 Remove governmental constraints to the development of housing for lower-income households and persons with special needs.

Land Use Element

Goal 2: Growth in the City shall be limited and the objective of future planning shall be directed towards preserving low density and the rural character of the City.

Policy 2.1 Ensure that the character and design of new residential development is consistent with existing development located nearby.

Policy 2.2 Limit development in areas where existing roads, infrastructure, schools, and public services will be adversely impacted.

Policy 2.3 Encourage the maintenance and preservation of existing housing units to prevent the deterioration of these units.

Policy 2.4 New residential development, if any, shall be buffered from heavy traffic on major roadways whenever and wherever possible.

Rolling Hills Estates Municipal Code (RHEMC)

Title 17 of the Rolling Hills Estates Municipal Code (RHEMC) contains the comprehensive zoning regulations and provisions that specify the maximum allowable development for uses within each

4.10 POPULATION AND HOUSING

of the City's zones, including the types of permitted uses and densities. Established use districts for the City are specified in RHEMC Chapter 17.04.010 and include the following:

- Single-family Residential-Limited Agricultural – 1-acre minimum lot area (R-A-E)
- Single-family Residential-Limited Agricultural – 20,000 square feet minimum lot area (R-A-20)
- Single-family Residential-Limited Agricultural – 15,000 square feet minimum lot area (R-A-15)
- Single-family Residential-Limited Agricultural – 10,000 square feet minimum lot area (R-A-10)
- Residential Planned Development (R-P-D)
- Agricultural (A)
- Commercial Recreation (C-R)
- Commercial Office (C-O)
- Restricted Commercial/Commercial Limited (C-L)
- Commercial General (C-G)
- Institutional (I)
- Scientific Research and Development (S-R & D)
- Quarry (Q)
- Horse Overlay (H)
- Landmark (L)

Other housing-related regulations in Title 17 include RHEMC Chapter 17.37, which establishes the City's Mixed-Use Overlay District that would provide a broad range of housing opportunities to all ages and income groups in the City, and includes standards and guidelines for the development of mixed-use projects; RHEMC Chapter 17.56, which recognizes the importance of accessory dwelling units (ADUs) as a valuable form of affordable housing in California and establishes regulations and standards for the development of ADUs in the City; and RHEMC Chapter 17.76, which establishes density bonus provisions for housing developments that include affordable housing units.

4.10.1.2 EXISTING CONDITIONS

POPULATION

Table 4.10-1 shows population data collected by the U.S. Bureau in 2010 and 2020, as well as DOF's population estimates for the County and the City. Based on the 2010 and 2020 Census data, the County's population increased approximately 2 percent, from 9,818,605 persons in 2010 to 10,014,009 persons in 2020. DOF estimated a 3.2 percent increase, from 9,818,605 persons in 2010 to 10,135,614 persons in 2020. In comparison, the City experienced a 7.2 percent population increase between 2010 and 2020 according to the U.S. Census data, which reported 8,067 persons in 2010 and 8,280 persons in 2020. However, DOF estimates shows a population gain of less than one percent (19 persons) between 2010 and 2020. According to the DOF, the City's population increased from 8,067 persons in 2010 to only 8,086 persons in 2020. Data from the 2020 Census has not been fully released, which may partially explain the discrepancy between the U.S. Census data and DOF estimates. The population estimates provided by DOF incorporate only the 2010 Census counts, along with data from state and local government agencies with adjustments and corrections applied.

4.10 POPULATION AND HOUSING

**Table 4.10-1
Population Data for County and City**

	U.S. Census Data ^a				DOF Estimates ^b			
	2010	2020	Gain/ Loss	% Change	2010	2020	Gain/ Loss	% Change
Los Angeles County	9,818,605	10,014,009	195,404	2.0%	9,818,605	10,135,614	317,009	3.2%
Rolling Hills Estates	8,067	8,280	554	7.2%	8,067	8,086	19	0.2%

^a U.S. Census Bureau, 2010 and 2020 Decennial Census DEC Redistricting Data (PL 94-171), Table P1.
^b California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State—January 1, 2011-2021, May 2021.
Source: Michael Baker International, 2021.

HOUSING

County and City housing data from the U.S. Bureau and DOF for the years 2010 and 2020 are presented in **Table 4.10-2**. As shown in **Table 4.10-2**, the County had a total of 3,445,076 dwelling units based on U.S. Census data and 3,443,087 dwelling units according to DOF estimates in 2010. The vacancy rate for the County in 2010 was approximately 5.9%. In 2020, the County's housing inventory increased by approximately 4.3 percent to 3,420,628 dwelling units as reported in the 2020 Census and 3,360,402 based on DOF estimates. The vacancy rate in 2020 was approximately 4.8 percent according to the 2020 Census or 6.4 percent according to DOF estimates. Both the U.S. Census and DOF estimates reported a total of 3,100 dwelling units and a vacancy rate of 4.4 percent for the City in 2010. Between 2010 and 2020, the City's housing inventory increased by 120 units, or approximately 3.9 percent, to a total of 3,220 dwelling units according to U.S. Census data. However, DOF estimated an increase of only 29 dwelling units, which is less than one percent, for a total of 3,120 dwelling units in the City in 2020. As explained above, the discrepancy between the U.S. Census and DOF estimates may be due to the fact that the 2020 U.S. Census data has not been fully released and DOF estimates only take into account the 2010 Census count.

Based on **Table 4.10-2**, the housing inventory increase for the County was greater than the increase for the City between 2010 and 2020. Vacancy rates for the City were generally lower than the County's between 2010 and 2020.

Table 4.10-3 presents the City's share of the regional housing need as allocated by SCAG based on factors such as recent growth trends, income distribution, and capacity for future growth. The City must identify adequate land with appropriate zoning and development standards to accommodate its allocation of the regional housing need. According to the 6th Cycle RHNA, which covers the planning period October 2021 through October 2029, the City's share of regional future housing needs 191 dwelling units. The City's RHNA allocation requires 43 percent of the units to be the very low-income group, 22 percent to be in the low income group, 20 percent to be in the moderate income group, and 15 percent to be in the above moderate income group.

4.10 POPULATION AND HOUSING

**Table 4.10-2
Housing Data for County and City**

Data Source	2010 Housing			2020 Housing			Housing Gain/Loss	
	Total Units	Vacancy		Total Units	Vacancy		Total	% Change
		Occupied	Rate		Occupied	Rate		
Los Angeles County								
U.S. Census ^a	3,445,076	3,241,204	5.9%	3,591,981	3,420,628	4.8%	146,905	4.3%
DOF Estimates ^b	3,443,087	3,239,280	5.9%	3,590,574	3,360,402	6.4%	147,487	4.3%
Rolling Hills Estates								
U.S. Census ^a	3,100	2,965	4.4%	3,220	3,030	5.9%	120	3.9%
DOF Estimates ^b	3,100	2,965	4.4%	3,129	2,956	5.5%	29	0.9%

^a U.S. Census Bureau, 2010 and 2020 Decennial Census DEC Redistricting Data (PL 94-171), Table H1.
^b California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State—January 1, 2011-2021, May 2021.
Source: Michael Baker International, 2021.

**Table 4.10-3
6th Cycle RHNA Allocation for the City**

Income Group	# of Units	% of Units
Very-Low Income (<50% of AMI)	82	43%
Low Income (50-80% of AMI)	42	22 %
Moderate Income (80-120% of AMI)	38	20%
Above Moderate Income (>120% of AMI)	29	15%
Total	191	100%

AMI = Area Median Income
Source: Southern California Association of Governments, 6th Cycle Final RHNA Allocation Plan, Adopted March 4, 2021 and Modified July 1, 2021

EMPLOYMENT

Employment data for the County and City provided by the California Employment Development Department (EDD) is presented in **Table 4.10-4** below. The EDD's 2010 and 2020 annual averages for labor force and unemployment was used since the 2020 Census data for employment have not been released. As shown in **Table 4.10-4**, the County had a labor force of 4,940,700 employees and an unemployment rate of 12.6 percent in 2010. Between 2010 and 2020, the County's labor force decreased by 0.4 percent to a total of 4,921,500 employees. Unemployment in the County increased only 0.2 percent by 2020 to 12.8 percent. In 2010, the City had a labor force of 3,400 employees and an unemployment rate of 6.2 percent. Between 2010 and 2020, the City experienced a labor force decrease and the unemployment rate increased. The City's labor force in 2020 declined to 3,300 employees, a 2.9 percent decrease, and the unemployment rate rose to 10.6%. However, the City's unemployment rate remained below the County's unemployment rate.

**Table 4.10-4
Employment Data for County and City**

Jurisdiction	2010 Employment			2020 Employment			Change in Labor Force	
	Labor Force	Unemployment		Labor Force	Unemployment		Total	% Change
		Total	Rate		Total	Rate		
Los Angeles County ^a	4,940,700	622,000	12.6%	4,921,500	629,800	12.8%	-19,200	-0.4%
Rolling Hills Estates ^b	3,400	200	6.2%	3,300	400	10.6%	-100	-2.9%

^a California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, Los Angeles County Annual Average for 2010 and 2020.
<https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>

^b California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, Rolling Hills Estates Annual Average 2010 and 2020.
<https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>

Source: Michael Baker International, 2021.

4.10.2 IMPACT ANALYSIS

4.10.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's environmental impacts related to population and housing based on the thresholds of significance identified in Appendix G of the CEQA. Based on these criteria, a population and housing impact is considered significant if implementation of the proposed GPU would:

Threshold 4.10(a): *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).*

Threshold 4.10(b): *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.*

4.10.2.2 METHODOLOGY

The analysis of potential impacts related to population and housing is based on the available population, housing, and employment data provided by the DOF and EDD. The baseline for this analysis is the year 2021. The estimated population, housing, and employment increases that could occur at buildout of the proposed GPU is added to the DOF's population and housing estimates for 2021 and EDD's labor force data for 2021. The analysis includes both the low range and high range of the proposed GPU buildout. The totals for both scenarios are compared to SCAG's population, housing, and employment forecasts for the City and evaluated to determine if substantial unplanned population growth or displacement of a substantial number of people would occur.

4.10 POPULATION AND HOUSING

4.10.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.10(a): *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Impact Analysis

As shown in **Table 4.10-5** the City's current 2021 population, housing, and employment estimates are 8,098 persons, 3,157 housing units, and 3,400 employees, respectively, according to the DOF and EDD. The proposed GPU's low range buildout scenario for 2040 corresponds to a population increase of 1,688 persons and 878 dwelling units but a labor force decline of 690 employees. This equates to a 20.8 percent population increase, a 27.8 percent increase in housing inventory, and a 20.3 percent decrease in employment. The high range buildout scenario corresponds to an increase in the City's population by 4,219 persons and housing inventory by 2,158 dwelling units; however, employment would decrease by 343 employees. The high range scenario would result in a 52.1 percent increase in population, a 68.4 percent increase in housing inventory, and a 10.1 percent decrease in employment. The proposed GPU's 2040 buildout scenarios would exceed SCAG's population forecast for the City under both the low and high range scenarios as shown in **Table 4.10-6**.

**Table 4.10-5
Proposed GPU Buildout Scenarios**

	2021 Baseline	GPU Buildout (Low Range)			GPU Buildout (High Range)		
		Gain/ Loss ³	Total	% Change	Gain/ Loss ³	Total	% Change
Population ¹	8,098	1,688	9,786	20.8%	4,219	12,317	52.1%
Housing ¹	3,157	878	4,035	27.8%	2,158	5,315	68.4%
Employment ²	3,400	-690	2,710	-20.3%	-343	3,057	-10.1%

¹ California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State—January 1, 2011-2021, May 2021.

² California Employment Development Department, Labor Force and Unemployment Rate for Cities and Census Designated Places, Rolling Hills Estates Annual Average 2010 and 2020, <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>.

³ Gains/loss of population, housing, and employment are derived from the calculations provided in **Appendix B** of this Draft PEIR.

Source: Michael Baker International, 2021.

SCAG forecasts for the City show only a 4.9 percent increase in population, a 10.3 percent increase in housing/households, and a 7.0 percent increase in employment during the 30-year period between 2016 and 2045. Although buildout of the proposed GPU would accommodate greater population and housing than SCAG's forecast for the City, this is not considered substantial unplanned population growth. Rather the proposed GPU would provide the capacity and flexibility to accommodate anticipated growth. As previously discussed above, the City is required to accommodate its share of SCAG's RHNA allocation. To that end, the proposed GPU includes a CD Mixed-Use Overlay to allow future housing development on parcels zoned

4.10 POPULATION AND HOUSING

Commercial General at an increased density from the existing Overlay. The proposed CD Mixed-Use Overlay ensures the City's ability to accommodate its RHNA allocation. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth. Similarly, the proposed GPU is not intended to encourage substantial unplanned population growth. The proposed GPU buildout scenario's exceedance of SCAG forecasts demonstrates that the City has more than adequate capacity to absorb any growth anticipated by SCAG and provide a variety of sites and options for future development. Furthermore, the proposed GPU contains goals and policies to accommodate anticipated population and housing growth.

**Table 4.10-6
SCAG Forecasts for the City and Region**

	City			Region		
	2016	2045	% Change	2016	2045	% Change
Population	8,100	8,500	4.9%	18,832,000	22,504,000	19.5%
Households	2,900	3,200	10.3%	6,012,000	7,633,000	27.0%
Employment	7,100	7,600	7.0%	8,389,000	10,049,000	19.8%

Source: Southern California Association of Governments, CONNECT SoCal - Technical Report: Demographics and Growth Forecast, Table 14 Jurisdiction-Level Growth Forecast, Adopted September 3, 2020; Michael Baker International, 2021.

With regard to employment, the proposed GPU anticipates future declines based on the current vacancies in existing commercial buildings and the expected development trends reported in market studies. In addition, it should be noted that SCAG's forecast for employment in the City for 2016 and 2045 may not be a meaningful comparison since the numbers are significantly greater than the data provided by EDD for 2021, which are based on the Census data. However, in the event that employment projections in the City increase in the future, the proposed GPU would be able to accommodate the increase with the City's existing commercial vacancies and the acreage within the General Commercial, Commercial Office, and Neighborhood Commercial designations, which would all continue to allow for additional commercial development.

Based on the above, the proposed GPU would not induce substantial unplanned population growth in an area, either directly through new housing or indirectly by increasing employment. Therefore, impacts would be less than significant and mitigation measures are not required.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, new development generated by the representative projects has already been accounted for in the estimated population, housing, and employment changes in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to population and housing, the representative projects themselves would not cause any potentially significant population and housing impacts. Accordingly, the representative projects would result in less-than-significant population and housing impacts.

4.10 POPULATION AND HOUSING

Mitigation Measures

Impacts related to population and housing were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to population and housing were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.10(b): *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Impact Analysis

As discussed above under **Threshold 4.10(a)**, the proposed GPU would accommodate an increase in the City's population and housing inventory at buildout under both the low and high range scenarios. Although not anticipated, it is conceivable that certain projects building out the proposed GPU, such as the representative projects, could displace persons or housing if such projects recycle properties that currently contain residential units. However, the proposed GPU would accommodate anticipated future growth, including the City's share of SCAG's RHNA allocation. Thus, any displacement of existing people or housing that could occur during buildout of the proposed GPU could be replaced on land within the Planning Area that would allow for residential uses under the proposed GPU land use designations. To that end, both the low range and high range buildout scenarios for the proposed GPU anticipate an increase in housing in the Planning Area. Therefore, impacts related to the displacement of substantial numbers of existing people or housing such that the construction of replacement housing would be necessary elsewhere would be less than significant and mitigation measures are not required.

Mitigation Measures

Impacts related to the displacement of people and housing were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to the displacement of people and housing were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.10.2.4 CUMULATIVE IMPACTS

Impact Analysis

The cumulative context for population, housing, and employment growth is the SCAG region. As discussed above, implementation of the proposed GPU is anticipated result in an increase in population and housing but a decrease in employment. **Table 4.10-6** above presents the SCAG

4.10 POPULATION AND HOUSING

forecasts for the region, which show an anticipated total growth of 19.5 percent in population, 27 percent in housing/households, and 19.8 percent in employment between 2016 and 2045. Although buildout of the proposed GPU could accommodate greater population and housing than SCAG's forecast for the City, as discussed above, this exceedance is not substantial unplanned population growth and demonstrates that the City has adequate capacity to absorb anticipated growth. The proposed GPU is not intended to promote unplanned growth. Rather, the GPU would accommodate and provide guidance for future planned growth in order to ensure that the City's vision for the future is achieved. Furthermore, the proposed GPU contains goals and policies to manage the anticipate growth under both the low and high range scenarios. Employment in the Planning Area under the proposed GPU is anticipated to decline and would not contribute to the region's employment growth. Based on the above, the proposed GPU's contribution to population and housing growth in the region is not cumulatively considerable and impacts are less than significant.

With regard to displacement, while it is conceivable that certain projects building out the proposed GPU could displace persons or housing if such projects recycle properties that currently contain residential units, any necessary housing replacement could occur on land within the Planning Area that would allow for residential uses under the proposed GPU land use designations. Thus, the proposed GPU's cumulative impact related to displacement would also be less than significant.

Mitigation Measures

Cumulative impacts related to population and housing were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to population and housing were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.10 POPULATION AND HOUSING

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4.11 PUBLIC SERVICES—FIRE PROTECTION

This section of the PEIR provides a discussion of the potential impacts to fire protection services associated with the implementation of the proposed GPU. This section includes a description of the existing fire protection services for the Planning Area that would be potentially altered by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential fire protection service impacts that may result from the proposed GPU. Impacts to fire protection services are addressed in terms of potential effects involving increased demands for fire protection services (e.g., fire department personnel and equipment) and increased response times.

4.11.1 ENVIRONMENTAL SETTING

4.11.1.1 REGULATORY FRAMEWORK

FEDERAL

The federal Occupational Safety and Health Administration (OSHA) outlines fire-related requirements under Part 1926 of Title 29 of the Code of Federal Regulations (29 CFR) for construction sites. General requirements are specified under Fire Protection and Prevention in Subpart F, including maintaining fire suppression equipment specific to construction on-site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site firefighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

STATE

California Vehicle Code (Section 21806)

California Vehicle Code (CVC) Section 21806 establishes the right-of-way of emergency vehicles responding to an emergency call and/or situation. The CVC directs drivers in California to yield to approaching emergency vehicles sounding a siren and using at least one visible red light. Drivers must comply by slowing down and driving to the right-side edge or curb of the road or highway and keeping clear of any intersection. Drivers must stop and remain stopped along the edge or curb until the emergency vehicle(s) have passed. This includes drivers in an exclusive or preferential use lane, which drivers must exit immediately upon determining that exiting the lane can be accomplished with reasonable care and safety. All pedestrians upon the road or highway shall proceed to the nearest curb or place of safety and remain there until all emergency vehicles have passed.

California Constitution Article XIII (Section 35)

Section 35 of the Article XIII of the California Constitution at subdivision (a)(2) provides: "The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of the Article XIII of the California Constitution was adopted by California voters in 1993 under Proposition 172, which directs the proceeds of a 0.50-percent sales tax to be expended

4.11 PUBLIC SERVICES—FIRE PROTECTION

exclusively for local public safety services, such as fire protection and emergency medical services. California Government Code Sections 30051-30056 provide the rules of implementing Proposition 172, including California Government Code Section 30056, which provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services and that it is reasonable to conclude that the City will comply with that provision to ensure that public safety services are provided. In addition, the court concluded that “assuming the city continues to perform its obligations, there is no basis to conclude that the project will cause a substantial adverse effect on human beings” and the need for additional public safety services, including fire protection and emergency medical services, is not an environmental impact that CEQA requires project proponent to mitigate.¹

California Code of Regulations

Title 8 (Sections 1270 and 6773)

In accordance with the California Code of Regulations, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

Title 19 (Section 2401 et seq.)

In 2009, the State of California passed legislation creating the California Governor's Office of Emergency Services (Cal OES) and authorized it to prepare a Standard Emergency Management System (SEMS) program pursuant to 19 CCR Section 2401 *et seq.*, which set forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the State's preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead State agency for emergency management in the State. It also serves as the lead agency for mobilizing the State's resources and obtaining federal resources. Cal OES coordinates the State response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the State through the Statewide mutual aid system. California Emergency Management Agency (Cal EMA) maintains oversight of the State's mutual aid system.

¹ *City of Hayward v. Board of Trustee of the California State University* (2015) 424 Cal. App. 4th 833, 847.

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Title 24 (Part 9 – California Fire Code)

Title 24 of the California Code of Regulations (CCR) sets forth complete regulations and general construction building standards within the California Building Code (CBC), including administrative, fire and life safety, and field inspection provisions. The building standards in the CBC apply to all locations in California, except where more stringent standards have been adopted by state agencies and local governing bodies. 24 CCR Part 9 consists of the California Fire Code (CFC), which consists of an enforceable set of regulations for the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises. The CFC includes fire-safety-related building standards that address fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazard safety, hazardous materials storage and use, provisions to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding areas.

California Health and Safety Code (Section 13000 et seq.)

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 8.12 – Abatement of Substandard Building and Property

RHEMC Chapter 8.12 establishes the abatement of substandard buildings and properties that have the potential of endangering the life, limb, health, safety, and welfare of the public or occupants. Buildings that have remained unkempt or unfinished with no activity for an unreasonable time (less than two years) may be deemed a substandard building. Conditions include, but are not limited to, hazardous and unsanitary premises, such as accumulation of vegetation, junk, dead organic matter, stagnant water, or hazardous materials, that may induce fire, health, or safety hazards.

Chapter 8.16 – Fire Code

RHEMC Chapter 8.16 adopts the Los Angeles County Fire Code, codified as Title 32 of the Los Angeles County Code. The purpose of Title 32 of the Los Angeles County Code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosive materials or dangerous conditions in new and existing buildings, structures and premises, and to provide a reasonable level of safety to fire-fighters and emergency responders during emergency operations.

Multi-Jurisdictional Hazard Mitigation Plan (2020 - Update Pending)

The Multi-Jurisdictional Hazard Mitigation Plan (HMP) was prepared in response to the Disaster Mitigation Act of 2000 (DMA 2000), which requires State and local governments to prepare mitigation plans to their mitigation processes and identify hazards, assess potential losses,

4.11 PUBLIC SERVICES—FIRE PROTECTION

mitigation needs, goals, and strategies. The HMP between the City of Rolling Hills Estates and the City of Rancho Palos Verdes complies with DMA 2000 and complies with California Assembly Bill 2140, which requires that a city and county general plan contain specified elements, including a safety element for the protection of the community from any unreasonable risks, including seismically-induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides, subsidence, liquefaction, and other seismic, geologic, and fire hazards. The HMP is a Federal Emergency Management Agency-(FEMA) approved plan that continues to provide eligibility for Hazard Mitigation Grant Program (HMGP) funding for the cities of Rolling Hills Estates and Rancho Palos Verdes.²

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to emergency preparedness and hazard prevention to protect the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The Rolling Hills Estates General Plan Public Safety Element is a State-mandated element and fulfills the requirements of California Government Code Section 65302(g). The Public Safety Element contains the goals and policies regulating public safety issues of concern in the City. These goals and policies provide the basis for public safety plans and measures, identify standards and programs to protect public safety and outline adequate facilities and services to meet the emergency needs of the City. The Public Safety Element provides an inventory of both natural and manmade hazards, including earthquakes, floodplains, landslides, geologic hazards, urban and wildfire, and hazardous materials/wastes. The Public Safety Elements outlines strategies to eliminate, counter, and/or minimize the impacts of potential natural or manmade hazards.

The Public Safety Element goals and policies that are related to fire protection and emergency medical services are as follows:

Goal 1: To the fullest extent possible, the City will work with the County to ensure that critical structures remain safe and functional in the event of a disaster.

Policy 1.3: Work with the County to ensure that all fire equipment remains operable and adequate to respond to a major disaster.

Goal 2: Require the City's Planning and Engineering Departments to review future development projects in the city.

Policy 2.3: Develop stringent site design and maintenance standards for areas with high fire hazard or soil erosion potential.

Policy 2.6: Encourage residents to plant groundcover to reduce the brush fire hazard in areas adjacent to canyons, and to maintain native drought tolerant slope cover and provide appropriate irrigation to maintain plant cover and prevention erosion.

² Cities of Rancho of Rancho Palos Verdes and Rolling Hills Estates, Multi-Jurisdictional Hazard Mitigation Plan, FEMA approved November 24, 2020.

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Goal 3: Plan and provide for the occurrence of disasters and emergencies.

Policy 3.1: Develop and coordinate medical assistance procedures in the event of a major disaster.

Policy 3.9: Establish and maintain a Multi-Hazard Functional Plan, mutual aid agreement with neighboring jurisdictions, and coordinate with the American Red Cross and Los Angeles County Fire, Sheriff, and Public Social Services to develop specific plans for responding to emergencies.

4.11.1.2 EXISTING CONDITIONS

LOS ANGELES COUNTY FIRE DEPARTMENT

The Planning Area is within the jurisdiction of and is part of the Consolidated Fire Protection District of Los Angeles County (i.e., Los Angeles County Fire Department [LACoFD]), which provides fire protection and emergency medical services to the City and all unincorporated areas in Los Angeles County, including those within the Planning Area. In addition, LACoFD also provides fire prevention inspections, brush inspections, and conducts fire safety programs for schools. LACoFD Battalion 14 operates five fire stations in the Palos Verdes Peninsula, including Fire Station 106 (Battalion 14 Headquarters) at 27413 Indian Peak Road within the Planning Area. **Table 4.11-1** identifies all five fire stations in the Palos Verdes Peninsula.

**Table 4.11-1
Los Angeles County Fire Stations in the Palos Verdes Peninsula**

Fire Station No. and Location	Driving Distance/ Direction from the Planning Area
Fire Station 106 27413 Indian Peak Rd, Rolling Hills Estates	Within the Planning Area
Fire Station 56 12 Crest Rd, Rolling Hills	Approximately 1.5 miles southwest of the Peninsula Center and west of the southernmost portion of the Planning Area near Highridge Rd and Crest Rd
Fire Station 2 340 Palos Verdes Dr W, Palos Verdes Estates	Approximately 1.5 miles northwest of the northwesternmost portion of the Planning Area near Palos Verdes Dr N and Via Campesina
Fire Station 83 83 Miraleste Plaza, Rancho Palos Verdes	Approximately 2.5 miles south of the southeasternmost portion of the Planning Area near Palos Verdes Dr E and the Planning Area boundary
Fire Station 53 6124 Palos Verdes Dr S, Rancho Palos Verdes	Approximately 4 miles south of the southwesternmost portion of the Planning Area near Hawthorn Bl and Crest Rd
Source: Los Angeles County Fire Department, Fire Station Locator, https://locator.lacounty.gov/fire , accessed June 25, 2021.	

According to the Los Angeles County Fire District Facilities Master Plan (FMP), Fire Station 2, which is over 60 years old, is in poor condition and in need of replacement due to issues related to functionality, age, condition, and projected future 2040 capacity. In addition, the FMP projected 2040 stressed units at Fire Station 106. The new station to replace the existing Fire Station 2 with additional firefighting and paramedic unit is anticipated to also relieve the anticipated future demands at Fire

4.11 PUBLIC SERVICES—FIRE PROTECTION

Station 106.³ No other fire stations within the Peninsula were identified as having any demand, capacity, or functionality issues.

PALOS VERDES PENINSULA COMMUNITY EMERGENCY RESPONSE TEAM (PVPCERT)

The Peninsula Emergency Response Team was developed in the aftermath of the Northridge earthquake, demonstrating the further importance of civilian volunteers. As a result, the Los Angeles County Sheriff's Department (LASD), in cooperation with the cities on the Palos Verdes Peninsula, developed PVPCERT with the intent of giving volunteers a higher level of basic skills in firefighting, search and rescue, disaster medicine, and preparedness.⁴ The PVPCERT is comprised of community members who are trained to provide an effective first response to disasters, such as wildfires and earthquakes. The PVPCERT is a government and community resource that prepares members through courses and special training in disaster preparedness. PVPCERT serves the Planning Area, as well as the cities of Rancho Palos Verdes, Palos Verdes Estates, Rolling Hills.

4.11.2 IMPACT ANALYSIS

4.11.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on fire protection services based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on fire protection services is considered significant if implementation of the proposed GPU would:

Threshold 4.11(a): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

4.11.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would result in substantial adverse physical impacts associated with the potential need for expansion of existing fire stations or construction of new facilities. This need for additional facilities is determined by considering the adequacy of existing fire protection and emergency medical services and impacts of future development under the proposed GPU on demand for fire protection and emergency medical services.

Fire protection and emergency medical service needs relate to the size of the population and geographic area served, the number and types of calls for service, and the characteristics of future development projects under the proposed GPU, and surrounding community. Consideration of these factors will assist in estimating the demand for these services. LACoFD generally evaluates the demand for fire prevention and protection services on a project-by-project basis, including

³ Los Angeles County Fire District, CEQ Asset Management Branch Master Planning Unit, Los Angeles County Fire District Facilities Master Plan, October 2020.

⁴ Palos Verdes Peninsula Community Emergency Response Team (PVPCERT), <http://www.pvpcert.org/>, accessed June 16, 2021.

4.11 PUBLIC SERVICES—FIRE PROTECTION

review of a project's emergency features, to determine if the project would require additional equipment, personnel, new facilities, or alterations to existing facilities.

The need for, or deficiency in, adequate fire protection and emergency medical services in and of itself is not a CEQA impact but a social or economic impact.⁵ An EIR must assess whether a project causes a need for additional fire protection and emergency medical services to maintain acceptable service ratios, response times, or other performance objectives. However, the ultimate determination of whether there is a significant impact to the environment related to fire protection and emergency medical services from a project is whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

In the event that additional fire protection and emergency medical services are needed to maintain acceptable service ratios and adequately meet the demands within the Planning Area, the City makes the following assumptions based on existing zoning standards and based on historical development of fire and emergency facilities, that in the event LACoFD determines that expanded or new emergency facilities are warranted, such facilities (1) would occur where allowed under the designated land use, (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1 acre in size, and (3) could qualify for a categorical exemption, Negative Declaration, or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332. Furthermore, if the number of incidents in a given area increases, it is LACoFD's responsibility to assign new staff and equipment, as necessary, to maintain adequate levels of service. In conformance with the California Constitution Article XIII, Section 35(a)(2) and the *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal. App. 4th 833, 847 ruling, the LACoFD is meeting its constitutional obligation to provide adequate public safety services, including fire protection and emergency medical services.

4.11.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.11(a): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?

Impact Analysis

Implementation of the proposed GPU would result in additional demand on existing fire and emergency medical services as future development projects are implemented, resulting in increases in population.

Future development projected in the proposed GPU may result in the need for additional LACoFD resources (i.e., additional staffing, equipment, expanded/new facilities). As discussed above, LACoFD has identified the need to replace Fire Station 2 to address the structural and functional

⁵ *City of Hayward v. Board of Trustee of the California State University* (2015) 424 Cal. App. 4th 833, 847.

4.11 PUBLIC SERVICES—FIRE PROTECTION

deficiency of the existing station and future (2040) demand in the northwestern portion of the Peninsula, as well as to relieve some of the anticipated future demand on Fire Station 106, which is located within the Planning Area.

However, future development is assumed to occur over several years through 2040; as such, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the Planning Area. In addition, any future development under the proposed GPU would be required to comply with the provisions of the California Fire and Building Codes, California Health and Safety Code, RHEMC, and applicable national standards related to fire protection and prevention, as well as all applicable fire code requirements for construction, access, water mains, fire flows, and hydrants. Individual project development plans would be reviewed by the City and LACoFD to determine specific fire requirements (e.g., fire flow capacities, emergency access, fuel modification plans) applicable to the specific development and to ensure compliance with these requirements.

The proposed policies included in the update to the Safety Element are similar to the existing policies identified above. More specifically, the City will continue to cooperate with contracted agencies (e.g., LACoFD and California Water Service [Cal Water]) to (1) ensure adequate availability of fire suppression equipment, including fire engines, to support planned development in the City and the Planning Area; (2) ensure that fire hydrants for existing and new development are installed in accordance with code and are adequately maintained; (3) ensure that present and future water supply needs for firefighting purposes are adequately met; and (4) ensure that infrastructure upgrades needed to maintain the integrity of water supply for firefighting purposes are implemented.

Furthermore, LACoFD would continue to regularly monitor fire department resources to ensure that adequate facilities, staffing, and equipment are available to serve existing and future development and population increases. As development occurs, a proportional increase in property tax, charges for LACoFD services, and other funding sources would increase and offset impacts of new development on LACoFD's existing resources in the Planning Area. Therefore, impacts to fire protection and emergency medical services and facilities would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on fire protection and emergency medical services and facilities, the representative projects themselves would not cause any potentially significant impacts on fire protection and emergency medical services and facilities. In addition, as discussed above, individual development projects, such as the representative projects, would be required to comply with the provisions of all applicable building and safety codes related to fire protection and prevention, as well as all applicable fire code requirements for construction, access, water mains, fire flows, and hydrants. Similarly, individual project development plans, such as those for the representative projects, would be reviewed by the City and LACoFD to determine specific fire requirements (e.g., fire flow capacities, emergency access, fuel modification plans) applicable to the specific development and to ensure compliance with these requirements. Accordingly, the representative projects would result in a less-than-significant impact on fire protection and emergency medical services and facilities.

Mitigation Measures

Impacts related to fire protection and emergency medical services and facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to fire protection and emergency medical services and facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.11.2.4 CUMULATIVE IMPACTS

Impact Analysis

Future development under the proposed GPU would result in additional demand on existing fire services and equipment provided by LACoFD. However, as discussed above, any new development in the Palos Verdes Peninsula would be required to comply with all applicable California Fire Code requirements for construction, access, water mains, fire flows, and hydrants. Individual projects would be reviewed by each jurisdictional city in the Palos Verdes Peninsula and LACoFD to determine the specific fire requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, compliance with regulatory requirements would maximize fire protection and encourage fire prevention, which, in turn, would reduce impacts to LACoFD resources.

The City, in consultation with LACoFD, would continue to consider impacts to fire services and facilities as part of the long-term planning process. LACoFD funding for fire services and facilities would continue to be paid by property taxes, intergovernmental funds, and charges for services. As such, the incremental effect of the proposed GPU on fire protection and emergency medical services within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to fire protection and emergency medical services resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.

Mitigation Measures

Cumulative impacts to fire protection and emergency medical services and facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to fire protection and emergency medical services and facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.11 PUBLIC SERVICES—FIRE PROTECTION

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4.12 PUBLIC SERVICES—POLICE PROTECTION

This section of the PEIR provides a discussion of the potential impacts to police protection and law enforcement services associated with the implementation of the proposed GPU. This section includes a description of the police protection and law enforcement services for the Planning Area that would be potentially affected by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential police protection service impacts that may result from the proposed GPU. Impacts to police protection and law enforcement services are addressed in terms of potential effects involving increased demands for police protection and law enforcement services (e.g., increased police patrols within the Planning Area) and response times.

4.12.1 ENVIRONMENTAL SETTING

4.12.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations that apply to the proposed GPU regarding police protection and law enforcement services.

STATE

California Penal Code

The California Penal Code establishes the basis for the application of criminal law within the State and sets forth the authority, rules of conduct, and training for peace officers. Under State law, all sworn municipal and county officers are State peace officers.

California Vehicle Code (Section 21806)

California Vehicle Code (CVC) Section 21806 establishes the right-of-way of emergency vehicles responding to an emergency call and/or situation. The CVC directs drivers in California to yield to approaching emergency vehicles sounding a siren and using at least one visible red light. Drivers must comply by slowing down and driving to the right-side edge or curb of the road or highway and keeping clear of any intersection. Drivers must stop and remain stopped along the edge or curb until the emergency vehicle(s) have passed. This includes drivers in an exclusive or preferential use lane, which drivers must exit immediately upon determining that exiting the lane can be accomplished with reasonable care and safety. All pedestrians on the road or highway shall proceed to the nearest curb or place of safety and remain there until all emergency vehicles have passed.

California Constitution Article XIII, (Section 35)

Section 35 of the Article XIII of the California Constitution at subdivision (a)(2) provides: "The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of the Article XIII of the California Constitution was adopted by California voters in 1993 under

4.12 PUBLIC SERVICES—POLICE PROTECTION

Proposition 172, which directs the proceeds of a 0.50-percent sales tax to be expended exclusively for local public safety services, such as police protection services. California Government Code Sections 30051-30056 provide the rules of implementing Proposition 172, including California Government Code Section 30056, which provides that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on police protection, as well as other public safety services. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services and that it is reasonable to conclude that the City will comply with that provision to ensure that public safety services are provided.¹ In addition, the court concluded that the need for additional public safety services is not an environmental impact that CEQA requires project proponent to mitigate.²

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 8.32 Noise – Section 8.32.030 – Exemptions

RHEMC Section 8.32.030 exempts the use of warning devices necessary for the protection of public safety, such as police and fire and ambulance sirens, including the testing of such devices.

Chapter 8.12 Abatement of Substandard Building and Property – Section 8.12.010 – Findings

RHEMC Chapter 8.12 establishes that the uses and abuses of property, such as conditions that have created a nuisance, or conditions which may endanger the health, safety and welfare of the public, reasonably relate to the proper exercise of police power as authorized under Sections 65800 *et seq.*, Section 38660, Sections 38771 *et seq.*, and Sections 39501 *et seq.*, of the California Government Code, and by Article 11, Section 7 of the California Constitution.

Chapter 9.06 Loitering by Criminal Street Gangs – Section 9.06.020 – Powers of Law Enforcement Officers Not Limited

RHEMC Section 9.06.020 establishes the power and right of a law enforcement officers to make any investigation, detention, or arrest as such law enforcement officer would be permitted for violations discussed under RHEMC Chapter 9.06.

Chapter 10.04 General Provisions and Definitions – Section 10.04.060 – Directing Traffic-Police and Fire Department Officials' Authority

RHEMC 10.04.060 authorizes officers of the police department and such officers as are assigned by the chief of police are authorized to direct all traffic by voice, hand, audible or other signal in conformance with traffic laws, except that in the event of a fire or other emergency or to expedite traffic or to safeguard pedestrians, officers of the police department or members of the fire department may direct traffic as conditions may require.

¹ *City of Hayward v. Board of Trustee of the California State University* (2015) 424 Cal. App. 4th 833, 847.

² *City of Hayward v. Board of Trustee of the California State University* (2015) 424 Cal. App. 4th 833, 843.

4.12 PUBLIC SERVICES—POLICE PROTECTION

Chapter 10.08 Traffic Control Signs and Devices – Section 10.08.030 – Obedience Required

RHEMC Section 10.08.030 directs operators of any vehicle or train to obey the instructions of any official traffic control device placed by a police officer or other authorized person subject to the exceptions granted the operator of an authorized emergency vehicle when responding to emergency calls.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to emergency preparedness and hazard prevention to protect the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The Rolling Hills Estates General Plan Public Safety Element is a State-mandated element and fulfills the requirements of California Government Code Section 65302(g). The Public Safety Element contains the goals and policies regulating public safety issues of concern in the City. These goals and policies provide the basis for public safety plans and measures, identify standards and programs to protect public safety and outline adequate facilities and services to meet the emergency needs of the City. The Public Safety Element outlines strategies to eliminate, counter, and/or minimize the impacts of potential natural or manmade hazards.

The Public Safety Element goals and policies that are related to police protection and law enforcement are as follows:

Goal 1: To the fullest extent possible, the City will work with the County to ensure that critical structures remain safe and functional in the event of a disaster.

Policy 1.4: Cooperate with the Los Angeles County Sheriff's Department to ensure that law enforcement services are ready and available to serve the City in the event of a major disaster.

Goal 3: Plan and provide for the occurrence of disasters and emergencies.

Policy 3.9: Establish and maintain a Multi-Hazard Functional Plan, mutual aid agreement with neighboring jurisdictions, and coordinate with the American Red Cross and Los Angeles County Fire, Sheriff, and Public Social Services to develop specific plans for responding to emergencies.

Goal 5: Reduce local crime, to the greatest extent possible.

Policy 5.1: Work with and support the Sheriff's Department in crime prevention and law enforcement efforts, to make sure there are adequate resources to meet the needs of the community.

Policy 5.2: Cooperate with neighboring cities, Los Angeles County, California State and U.S. Federal Agencies in crime prevention and law enforcement.

Policy 5.3: Evaluate the incidence of crime and develop measures needed to deter crime or apprehend the criminals.

4.12 PUBLIC SERVICES—POLICE PROTECTION

4.12.1.2 EXISTING CONDITIONS

LOS ANGELES COUNTY SHERIFF’S DEPARTMENT

Law enforcement services to the Planning Area are provided by the Los Angeles County Sheriff’s Department (LASD). LASD is the nation’s largest sheriff’s department and second largest policing agency. LASD’s nearly 18,000 personnel include approximately 10,000 sworn sheriff’s deputies and 8,000 professional staff (civilians).³ LASD is the policing agency for 130 unincorporated communities within over 4,000 square miles of the Los Angeles County, as well as for 42 of 88 cities in the County, 10 community colleges, and Metrolink and the Los Angeles County Metropolitan Transportation Authority (Metro) trains and buses.⁴

The nearest LASD station to the Planning Area is the Lomita Station located at 26123 Narbonne Avenue in the City of Lomita, immediately adjacent to the City of Rolling Hills Estates border. The Lomita Station serves all of Rolling Hills Estates, Rolling Hills, and Rancho Palos Verdes, and portions of Lomita and unincorporated Los Angeles County.

LASD has established optimal service response times of 10 minutes or less for emergency response incidents, such as a crime in progress that is a life or death emergency; 20 minutes or less for priority response incidents, such as a crime in progress that is not a life or death emergency; and 60 minutes or less for routine response incidents, such as a crime that has already occurred and is not a life or death emergency. Specific to the Lomita Station, LASD has established optimal service response times of 7 minutes or less for emergency response incidents and the same 20 minutes and 60 minutes or less for priority response incidents, and routine response incidents, respectively. In 2017, the Lomita Station’s response times to incidents in the City were faster than the LASD-wide standards, as well as the Lomita Station’s standards, at 4.7 minutes, 7.7 minutes, and 20.0 minutes, respectively.⁵ Accordingly, LASD did not identify a need for a new facility or expanded services.⁶

NEIGHBORHOOD WATCH PROGRAM

The Rolling Hills Estates Neighborhood Watch is a community-law enforcement partnership and crime prevention program that provides “extra eyes and ears” in the community.⁷ The program promotes collaboration between law enforcement and citizens to protect the City of Rolling Hills Estates by watching out for community members and reporting suspicious behaviors to the LASD.

The LASD Lomita Station provides members of the Rolling Hills Estates Neighborhood Watch Program crime prevention tips and disaster preparedness information and a weekly crime report of the City.

³ Los Angeles County Sheriff’s Department, About us, <https://www.linkedin.com/company/los-angeles-county-sheriff%27s-department>, accessed August 19, 2021.

⁴ Los Angeles County Sheriff’s Department, About us, <https://www.linkedin.com/company/los-angeles-county-sheriff%27s-department>, accessed August 19, 2021.

⁵ Dyett & Bhatia, Rolling Hills Estates General Plan Existing Conditions Report, January 2018.

⁶ Dyett & Bhatia, Rolling Hills Estates General Plan Existing Conditions Report, January 2018.

⁷ City of Rolling Hills Estates, Crime Prevention: Neighborhood Watch, <https://www.ci.rolling-hills-estates.ca.us/departments/public-safety/neighborhood-watch>, accessed August 19, 2021.

4.12.2 IMPACT ANALYSIS

4.12.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on police protection services based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on police protection and law enforcement services is considered significant if implementation of the proposed GPU would:

Threshold 4.12(a): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for police protection and law enforcement services.

4.12.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would result in substantial adverse physical impacts associated with the potential need for expansion of existing police stations or construction of new facilities. This need for additional facilities is determined by considering the adequacy of existing police protection and law enforcement services and impacts of future development under the proposed GPU on demand for police protection and law enforcement services.

LASD and the City generally evaluate the demand for police protection and law enforcement services on a project-by-project basis, including review of a project's public safety features, to determine if the project would require additional personnel or new facilities or alterations to existing facilities.

The need for, or deficiency in, adequate police protection and law enforcement services in and of itself is not a CEQA impact but a social or economic impact.⁸ An EIR must assess whether a project causes a need for additional police protection services to maintain acceptable service ratios, response times, or other performance objectives. However, the ultimate determination of whether there is a significant impact to the environment related to police protection and law enforcement services from a project is whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

If the number of incidents in a given area increases, it is LASD's responsibility to assign new staff, as necessary, to maintain adequate levels of service. In conformance with the California Constitution Article XIII, Section 35(a)(2) and the *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal.App. 4th 833, 847 ruling, LASD and the City are meeting their constitutional obligation to provide adequate public safety services, including police protection and law enforcement services.

⁸ *City of Hayward v. Board of Trustee of the California State University* (2015) 424 Cal. App. 4th 833, 847.

4.12 PUBLIC SERVICES—POLICE PROTECTION

4.12.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.12(a): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?

Impact Analysis

Implementation of the proposed GPU would result in additional demand on existing police protection and law enforcement services provided by LASD as future development projects are implemented, resulting in increases in population.

Future development projected in the proposed GPU may result in the need for additional LASD resources (i.e., additional staffing and expanded/new facilities). However, future development is assumed to occur over multiple years through 2040; as such, any increase in demand for police protection and law enforcement services would occur gradually as additional development and associated population growth is added to the Planning Area. In addition, any future development under the proposed GPU would be required to comply with the provisions of the RHEMC related to public safety. Individual project development plans would be reviewed by the City and LASD to determine specific design requirements related to emergency access, lighting, and public safety that are applicable to the specific development and to ensure compliance with these requirements.

The proposed policies included in the update to the Safety Element are similar to the existing policies identified above. More specifically, the City will continue to maintain the safety of the community and promote partnerships between its residents and law enforcement by (1) working with the contracted law enforcement agency in crime prevention and law enforcement efforts to ensure adequate resources to meet the needs of the community; (2) collaborating with neighboring jurisdictions, County, State, and federal agencies in crime prevention and law enforcement; (3) promoting after-school programs, citizen volunteer programs, and neighborhood watch programs to help maintain a safe environment; and (4) encouraging Crime Prevention Through Environmental Design (CPTED) principles for new development projects, major renovations, and public projects.

Furthermore, LASD would continue to regularly monitor police protection and law enforcement resources to ensure that adequate facilities and staffing are available to serve existing and future development and population increases. As development occurs, a proportional increase in property tax, charges for LASD services, and other funding sources would increase and offset the demands of new development on LASD's existing resources in the Planning Area. No need for new or physically altered facilities to provide adequate police protection and law enforcement services has been identified. Therefore, impacts to police protection and law enforcement services would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on

4.12 PUBLIC SERVICES—POLICE PROTECTION

police protection and law enforcement services, the representative projects themselves would not cause any potentially significant impacts on police protection and law enforcement services. In addition, as discussed above, individual development projects, such as the representative projects, would be required to comply with the provisions of the RHEMC related to public safety. Similarly, individual project development plans, such as those for the representative projects, would be reviewed by the City and LASD to determine specific design requirements related to emergency access, lighting, and public safety that are applicable to the specific development and to ensure compliance with these requirements. Accordingly, the representative projects would result in a less-than-significant impact on police protection and law enforcement services.

Mitigation Measures

Impacts related to police protection and law enforcement services were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to police protection and law enforcement services were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.12.2.4 CUMULATIVE IMPACTS

Impact Analysis

Future development under the proposed GPU would result in additional demand on existing police protection and law enforcement services provided by LASD. However, as discussed above, any new development in the Lomita Station service area would be required to comply with all applicable requirements related to public safety. Individual projects would be reviewed by each jurisdictional city and LASD to determine the specific design requirements related to emergency access, lighting, and public safety that are applicable to the specific development and to ensure compliance with these requirements. Overall, compliance with regulatory requirements would maximize public safety, which, in turn, would reduce demands on LASD resources.

The City, in consultation with LASD, would continue to consider demands for police protection and law enforcement services as part of the long-term planning process. LASD funding for police protection and law enforcement services would continue to be paid by property taxes, intergovernmental funds, and charges for services. As such, the incremental effect of the proposed GPU on police protection and law enforcement services within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to police protection and law enforcement services resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.

Mitigation Measures

Cumulative impacts to police protection and law enforcement services were determined to be less than significant. Therefore, no mitigation measures are required.

4.12 PUBLIC SERVICES—POLICE PROTECTION

Level of Significance After Mitigation

Cumulative impacts to police protection and law enforcement services were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.13 PUBLIC SERVICES—SCHOOLS

This section of the PEIR provides a discussion of the potential impacts to public school facilities in the Palos Verdes Peninsula Unified School District (PVPUSD) associated with the implementation of the proposed GPU. This section includes a description of the existing schools serving the Planning Area that may be potentially be affected by the proposed GPU's implementation.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes potential impacts to schools that may result from the proposed GPU, specifically whether the proposed GPU would result in substantial adverse physical impacts created by the provision of new, or physically altered school facilities required in order to maintain acceptable performance objectives.

4.13.1 ENVIRONMENTAL SETTING

4.13.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU related to schools.

STATE

Assembly Bill 2926

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill (AB) 2926 in 1986. AB 2926 allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

Senate Bill 50

Senate Bill (SB) 50 and Proposition 1A, both of which passed in 1998, provided a comprehensive school facilities financing and reform program, in part by authorizing a \$9.2-billion school facilities bond issue, school construction cost containment provisions, and an eight-year suspension of the Mira, Hart, and Murrieta court cases, which allowed local governments to deny new development on the basis of inadequate schools. Specifically, the bond funds were to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs. Furthermore, the Mira, Hart, and Murrieta cases ruled that cities and counties under their legislative authority could impose additional fees for school construction to mitigate the effect of new construction.

The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstates the school facility fee cap for legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart, and Murrieta court cases. SB 50 states

4.13 PUBLIC SERVICES—SCHOOLS

that these fees are the exclusive means of considering, as well as mitigating, school impacts caused by new development. Accordingly, these fees limit the scope of impact review in an EIR, the mitigation that can be imposed, and the findings a lead agency must make in justifying its approval of a Project pursuant to Government Code Sections 65995-65996. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be “full and complete school facilities mitigation.” These provisions remain in place as long as subsequent State bonds are approved and available.

SB 50 also established three levels of Developer Fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. These levels are as follow:

- Level 1 fees are the base statutory fees, which can be adjusted for inflation every two years. These fees are the maximum that can be legally imposed upon new construction projects by a school district unless the district qualifies for a higher level of funding.
- Level 2 fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. To implement Level 2 fees, the governing board of the school district must adopt a school facilities needs analysis (SFNA) and meet other prerequisites in accordance with Government Code Section 65995.6. The SFNA determines the need for new school facilities attributable to growth from new residential development. It documents that the district has met prerequisite eligibility tests and calculates the fee per square foot of new development. If the school district is eligible for State new construction funding, the State will match the Level 2 fees if funds are available. According to the Office of Public School Construction, although they are currently not being released for funding school facilities, State funds for new school construction are available from existing bond measures.
- Level 3 fees come into effect if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies.

The school fee amounts provided for in Government Code Sections 65995, 65995.5, and 65995.7 would constitute full and complete mitigation for school facilities.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts, and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

Proposition 1A

The passage of Proposition 1A in 1998 created the School Facility Program (SFP), in order to streamline the process districts go through to obtain State funding. Pursuant to the SFP, funding for new construction and modernization is provided by the State in the form of per-pupil grants. Generally, projects also require local matching funds. The SFP also implemented numerous reforms intended to streamline the application process, simplify the State facilities program, and create a more transparent and equitable funding mechanism.

LOCAL

Measure K

In 2000, Measure K was approved by voters for the PVPUSD to sell up to \$48 million in bonds to improve safety and educational facilities within the PVPUSD. These improvements included repairing, rehabilitating and renovating aging schools with necessary roof repairs, fire alarm upgrades, sewer and plumbing replacement, electrical upgrades, compliance with the Americans with Disabilities Act (ADA), and other necessary safety improvements for compliance with regulatory agencies.¹

Measures R and S

In 2005 voters approved Measure R (Core Academic Facility Repair and Construction Bond of 2005) and Measure S (Co-curricular Facility Repair and Construction Bond of 2005) for the PVPUSD to sell up to \$40 million (\$30 million—Measure R and \$10 million—Measure S) in general obligation bonds to improve safety and educational facilities within the PVPUSD. These improvements included construction, reconstruction, rehabilitation, replacement, modernization and renovation of school facilities in accordance with the PVPUSD's Bond Project Lists. Measure R improvements included specific school projects that involved water, gas, sewer and plumbing projects; fire, safety, health and access related improvements; electrical upgrades; renovations and acquisitions; constructing new and renovating existing classrooms; and replacing deteriorating portables with permanent classrooms or refurbishing existing portables. Measure S improvements included specific school projects that involved renovating and equipping play fields; replacing fencing; improving ingress and egress for emergency access; repairing bleachers at intermediate and high schools; renovating, repairing, and equipping paved surfaces and play areas; upgrading sound systems; replacing gym floors; expanding, equipping, and furnishing student lunch areas; replacing aging backstops and fencing on play fields; constructing a practice gym facility; and repairing the pool systems at the Palos Verdes Peninsula High School.²

Measure M

In 2011, Measure M was approved by voters to impose a parcel tax of \$374 per parcel beginning in 2013 (the same year that two existing parcel taxes that add up to \$374 per parcel were set to expire) with no expiration date. Measure M provides funds that can only be used in specific budget categories that preserve and continue high quality education in the PVPUSD and to fund the following specific programs and services:³

- Attract and retain the most qualified and experienced teachers and school employees;
- Provide advanced academic programs in math, science and technology;
- Keep textbooks and instructional materials up-to-date;

¹ Palos Verdes Peninsula Unified School District, Citizens' Oversight Committee—Measure K, Report of Committee Activities, Findings and Recommendations, May 27, 2004.

² Palos Verdes Peninsula Unified School District, Facilities Information and Reports, https://www.pvpusd.net/apps/pages/index.jsp?uREC_ID=361563&type=d&pREC_ID=1806497, accessed June 23, 2021.

³ Palos Verdes Peninsula Unified School District, Citizens' Oversight Committee for Measure M, Annual Report to the Board of Education, June 2020.

4.13 PUBLIC SERVICES—SCHOOLS

- Keep classroom technology up-to-date;
- Keep neighborhood school facilities and grounds clean and well maintained;
- Provide advanced educational programs that help local students get into the best colleges and prepare for successful careers;
- Maintain manageable class sizes; and
- Continue funding for art, music and physical education programs.

4.13.1.2 EXISTING CONDITIONS

The PVPUSD serves the student residents of the Planning Area, as well as the other three Peninsula cities and other unincorporated areas of the Palos Verdes Peninsula. Student enrollment is approximately 11,000 students. PVPUSD operates two preschools, 10 elementary schools (K-5), four intermediate schools (6-8), two high schools (9-12), and one continuation school. More specifically, the attendance boundaries for the following schools are within the Planning Area:

Elementary Schools

- Dapplegray Elementary School
- Rancho Vista Elementary School
- Silver Spur Elementary School
- Soledado Elementary School (specifically serving students within the Commercial District)
- Vista Grande Elementary School

Intermediate Schools

- Miraleste Intermediate School
- Palos Verdes Intermediate School
- Ridgecrest Intermediate School (specifically serving students within the Commercial District)

High Schools⁴

- Palos Verdes High School
- Palos Verdes Peninsula High School

Information regarding enrollment for Grades K-12 schools is identified in **Table 4.13-1**.

⁴ Students residing within the PVPUSD boundaries may choose to attend either high school.

**Table 4.13-1
Palos Verdes Peninsula Unified School District Schools and Enrollment Data**

School	Student Enrollment (by School Year)			Historical Maximum Enrollment ^a
	2017/2018	2018/2019	2019/2020	
Elementary Schools (Grades K-5)				
Cornerstone at Pedregal	409	394	418	
Dapplegray	639	659	645	
Lunada Bay	369	360	378	
Mira Catalina	370	362	372	
Montemalaga	476	443	445	
Point Vicente	332	323	315	
Rancho Vista	426	418	411	
Silver Spur	540	531	526	
Soleado	467	448	430	
Vista Grande	451	428	403	
Total Enrollment for Elementary Schools	4,479	4,366	4,343	
Intermediate Schools (Grades 6-8)				
Distance Learning Academy for Grades 6-8	NA	NA	NA	
Miraleste	917	915	908	
Palos Verdes	855	881	837	
Ridgecrest	910	939	929	
Total Enrollment for Intermediate Schools	2,682	2,735	2,674	
High Schools (Grades 9-12)				
Palos Verdes	1,778	1,682	1,574	
Palos Verdes Peninsula	2,348	2,329	2,304	
Total Enrollment for High Schools	4,126	4,011	3,878	
Total Enrollment within PVPUSD^b	11,287	11,112	10,895	
Notes: NA = Not Available Schools serving the Planning Area				
^a Enrollment data for school year 2005/06 for Grades K-5, for school year 2004/05 for Grades 6-8, and for school year 2012-13 for Grades 9-12 based on information from the CDE as identified in the PVPUSD enrollment analysis.				
^b Excludes the number of students enrolled in preschools, Distance Learning Academy, and continuation school.				
Source: Palos Verdes Peninsula Unified School District, School Plan 2020-21 for each of the schools within PVPUSD, approved by the Local Board on December 9, 2020; Cooperative Strategies, Palos Verdes Peninsula Unified School District Enrollment Analysis, January 9, 2017.				

4.13.2 IMPACT ANALYSIS

4.13.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on school facilities based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on school facilities is considered significant if implementation of the proposed GPU would:

4.13 PUBLIC SERVICES—SCHOOLS

Threshold 4.13(a): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for school facilities.

4.13.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would result in substantial adverse physical impacts associated with the potential need for expansion of existing school facilities or construction of new facilities. This need for additional facilities is determined by considering the adequacy of existing school facilities, impacts of future development under the proposed GPU on demand for school facilities, and applicable regulations and policies that would influence future provision of school facilities and allow for mitigation of potential environmental impacts.

The discussion of impacts to school facilities addresses impacts for the Planning Area. Public school service needs are dependent on the size of the service population and the geographic area served. This analysis estimates the number of students that would be generated by reasonably anticipated development under the proposed GPU using PVPUSD student generation rates identified for multifamily attached units in the PVPUSD enrollment analysis conducted in January 2017, and assesses whether existing PVPUSD school facilities expected to serve the Planning Area would have sufficient available capacity to accommodate the student population. If there would not be sufficient available capacity, the EIR will consider whether new school facilities will be needed and whether the construction of the school facilities will result in a significant impact.

However, Government Code Section 65996 also significantly limits the application of CEQA to school facilities impact issues. The fees set forth in Government Code Section 65996 constitute the exclusive means of both “considering” and “mitigating” school facilities impacts of projects.

4.13.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.13(a): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for school facilities?

Impact Analysis

Buildout of the proposed GPU could result in the development of additional residential uses, comprising of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area. School districts typically use student generation factors to determine the potential number of students that would be generated by the amount of residential development in order to accurately anticipate the needs

for new/expanded facilities.⁵ **Table 4.13-2** identifies the student generation factor used and the number of potential students that would be generated from development anticipated by the proposed GPU at full buildout in 2040. As shown in **Table 4.13-2**, buildout of the proposed GPU would have the potential to increase student generation within the PVPUSD, ranging from 234 to 573 K-12 students. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually as additional development occurs in the Planning Area. Regardless, the estimated increase in students within the PVPUSD, when compared to student enrollment in the last three school years prior to the COVID-19 pandemic (as shown in **Table 4.13-2**), would remain less than the historical maximum enrollment experienced by the PVPUSD in the last two decades.

**Table 4.13-2
Estimated Student Generation**

Grade Level	Student Generation Factor Per Unit ^a	Proposed Net Increase in Dwelling Units (Low/High)	Total Students Generated
Elementary School (K-5)	0.0976	878/2,158	86/211
Intermediate School ((6-8)	0.0538	878/2,158	48/117
High School (9-12)	0.1135	878/2,158	100/245
Totals			234/573
<i>Note:</i>			
^a <i>The proposed GPU assumed additional housing would comprise of multifamily attached units and accessory dwelling units (also assumed to use the same student generation factor as multifamily attached units), and, as such, the student generation factors for multifamily attached units identified in the PVPUSD Enrollment Analysis are used in estimating student generation by the proposed GPU.</i>			
Source: Cooperative Strategies, Palos Verdes Peninsula Unified School District Enrollment Analysis, January 9, 2017.			

In addition, school districts assess development impact fees against residential and commercial/ industrial development to mitigate impacts resulting from the increase in demand for school-related services. Pursuant to SB 50, payment of fees to the PVPUSD is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for school facilities. Therefore, individual development projects in accordance with the proposed GPU would be required to pay the statutory fees to allow the PVPUSD to adequately serve its student population and reduce potential impacts to PVPUSD to a less-than-significant level.

In addition, the proposed update to the Land Use Element includes a policy related to school services to ensure that planning for schools and institutional uses reflect the future growth of the Planning Area. Overall, increased cooperation and coordination between the City and the PVPUSD would ensure high-quality school and community facilities throughout the Planning Area

⁵ ADUs are assumed to use the same student generation factor as multifamily attached units, and, as such, the student generation factors for multifamily attached units identified in the PVPUSD Enrollment Analysis are used in estimating student generation by the proposed GPU.

4.13 PUBLIC SERVICES—SCHOOLS

and would not result in significant impacts to school facilities. As such, the proposed GPU would result in a less-than-significant impact on school services and facilities.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, students generated by the representative projects have already been accounted for in the estimated increase in students within the PVPUSD from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on school services and facilities, the representative projects themselves would not cause any potentially significant impacts on school services and facilities. In addition, as discussed above, individual development projects, such as the representative projects, would be required to pay the statutory fees to allow the PVPUSD to adequately serve its student population and ensure potential impacts to PVPUSD would remain less than significant. Accordingly, the representative projects would result in a less-than-significant impact on school services and facilities.

Mitigation Measures

Impacts related to schools were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to schools were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.13.2.4 CUMULATIVE IMPACTS

Impact Analysis

Implementation of the proposed GPU, along with other future development projects in the Palos Verdes Peninsula, would potentially generate new students within the PVPUSD. Based on the analysis above, PVPUSD would be able to accommodate future growth projected by the proposed GPU and would have excess capacity beyond projected growth when compared to historical maximum student enrollment over the last two decades. Additionally, individual development projects would be required to pay the appropriate PVPUSD developer fees based on the type and size of development proposed. Pursuant to SB 50, payment of fees to PVPUSD is considered full mitigation for project impacts associated with the need to provide new or altered school facilities to serve new students generated by future development. Therefore, individual project applicants would be required to pay the statutory fees to allow additional school facilities to be constructed, if necessary. As such, the incremental effect of the proposed GPU on school facilities within the PVPUSD would not be cumulatively considerable, and cumulative impacts to schools resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.

Mitigation Measures

Cumulative impacts to schools were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to schools were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.13 PUBLIC SERVICES—SCHOOLS

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4.14 PUBLIC SERVICES—PARKS AND RECREATION

This section of the PEIR provides a discussion of the potential impacts to parks and recreation associated with the implementation of the proposed GPU. This section includes a description of the existing parks and other recreational facilities in the Planning Area.

Pursuant to the environmental scoping process conducted during the initial phase of the CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential impacts to parks and recreation that may result from adoption and implementation of the proposed GPU.

4.14.1 ENVIRONMENTAL SETTING

4.14.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU related to parks, open spaces, and recreation.

STATE

Quimby Act

California Government Code Section 66477, also known as the Quimby Act, was enacted by the California legislature in 1965. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land or the payment of fees for park and/or recreational facilities in lieu thereof, or both, by developers of residential subdivisions as a condition to the approval of a tentative tract map or parcel map. The Quimby Act permits the City to require parkland dedications not to exceed three acres of parkland per 1,000 persons residing within a subdivision, and/or in-lieu of fee payments for residential development.

Mitigation Fee Act

The California Mitigation Fee Act, Government Code Sections 66000 et seq., allows cities to establish fees which would be imposed upon development projects for the purpose of mitigating the impact that the development projects have upon the City's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, the City must follow four primary requirements: (1) make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; (2) segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; (3) for fees that have been in the possession of the City for five years or more and for which the dollars have not been spent or committed to a project, the City must make findings each fiscal year describing the continuing need for the money; and (4) refund any fees with interest for developer deposits for which the findings noted above cannot be made.

Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971, Public Resources Code (PRC) Chapter 2.5, Sections 5400 through

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5409, which state that cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

California Code of Regulations

Title 7 (Sections 65560)

In accordance with California Code of Regulations (CCR), Title 7, Section 65560, every city and county in the State is required to prepare, adopt, and submit to the Secretary of the Resources Agency a “local open-space plan for the comprehensive and long-range preservation and conservation of open-space land within its jurisdiction.” The following open space categories are identified for preservation:

- Open space for public health and safety, including, but not limited to, areas that require special management or regulation due to hazardous or special conditions.
- Open space for the preservation of natural resources, including, but not limited to, natural vegetation, fish and wildlife, and water resources.
- Open space for resource management and production, including, but not limited to, agricultural and mineral resources, forests, rangeland, and areas required for the recharge of groundwater basins.
- Open space for outdoor recreation, including, but not limited to, parks and recreational facilities, areas that serve as links between major recreation and open space reservations (such as trails, easements, and scenic roadways), and areas of outstanding scenic and cultural value.
- Open space for the protection of Native American sites, including, but not limited to, places, features, and objects of historical, cultural, or sacred significance, such as Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property (further defined in PRC Sections 5097.9 and 5097.993).

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 12.24 – Park Use Regulations

RHEMC Chapter 12.24 establishes the rules and regulations of public conduct, other than employees, contractors, or agents of the City, in or upon public parks located within the City. This includes prohibiting certain activities or items in public parks, such as alcohol; hitting golf balls; the use of inflatable bounce units, balloons, and piñatas; damaging trees, shrubs, plants; and removing or destroying any growth or ground cover within any public park. This chapter restricts pets and equine activities within public parks and prohibits commercial solicitation and sales, the disposal of solid waste, disturbance of the peace, and the use of firearms and fireworks in public parks. In addition, this chapter outlines the rules and procedures associated with park permits, including requirements, restrictions, permit issuance/denial, appeals, applicant liability, and suspension/revocation, etc.

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Chapter 16.08 – Park and Recreational Facilities

RHEMC Chapter 16.08 establishes the City's regulations regarding park and recreational facilities. More specifically, RHEMC Section 16.08.010 establishes that the public interest, convenience, health, welfare, and safety require that five acres of property for each 1,000 persons residing within the City be devoted to park and recreational purposes and that the required five acres shall be supplied by the requirements of RHEMC Chapter 16.08 and the recreational program of the City.

RHEMC Section 16.08.20 establishes that every subdivider who subdivides land shall dedicate contiguous portion(s) of such land, pay a fee, or do both, for the purpose of providing park and recreational facilities to serve future residents of such subdivision.

RHEMC Section 16.08.030 establishes that population density for the purposes of Park and Recreational Facilities will be determined in accordance with the 2000 U.S. Census for the City, wherein single-family detached dwelling units equal 2.91 persons per household; single-family attached dwelling units equal 2.10 persons per household; and multiple-family dwelling units equal 1.84 persons per household.

RHEMC Sections 16.08.040 through 16.08.090 establish the process for determining the amount of land dedication for Park and Recreational Facilities and the fee amount in lieu of land dedication.

Chapter 17.15 – Open Space Recreation District

RHEMC Chapter 17.15 regulates the use and development of open spaces within the City, and protects such open spaces. The open space recreation district includes an inventory of both public and private open space consistent with the General Plan's Open Space Element. The open space recreation district is devoted to the preservation of natural resources and outdoor recreation. Parks, open space areas, scenic corridors and habitats of wildlife species make up the open space recreation district and fulfill the requirements of California Government Code Sections 65560 through 65570. More specifically, RHEMC Section 17.15.010 is intended to protect and preserve these open spaces from urban development and to ensure that these natural resources are protected from destruction.

RHEMC Chapter 17.15 establishes regulations of open space use, permits, property development standards, and plan of design, and prohibits certain uses. Permitted uses in the open space recreation district include public parks, reservoirs and associated uses, trails, public and private open lands or vacant undeveloped land, equestrian use, and caretaker units on properties greater than four acres subject to the property development standards in RHEMC Sections 17.06.060 through 17.06.490.

Chapter 17.18 – Residential Planned Development (RPD) District

RHEMC Chapter 17.18 provides the permitted uses, property development standards, and limitations of construction on sloped areas, and outlines prohibited uses within the RPD district. The RPD district is intended for cluster housing under appropriate conditions and to provide for development which shall be open space and recreation oriented. It is recognized that owners of cluster housing units in the residential planned development will ordinarily not have available to themselves private open space areas and, therefore, must depend on the proper development of common open space areas. It is, therefore, one of the purposes of this district to ensure any RPD the adequacy of available, usable common open space areas and the development and maintenance of such areas. RHEMC Section 17.18.040 outlines property development standards that include open space requirements for aesthetic purposes and land designations for use and

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enjoyment of all occupants of the development. In addition, this section outlines exclusions and conditions of approval to assure continued retention and maintenance of open spaces.

Chapter 17.22 – Commercial Recreation (C-R) District

The purpose of RHEMC Chapter 17.22 is intended to provide areas in which the recreational needs of the City's residents can be served. The intent is to provide areas which, because of their size and proximity to surrounding land uses, can be developed with commercial or recreational facilities which will be convenient for residents and which, because of good design and the limiting of activities, will not unreasonably interfere with adjoining land uses. As such, RHEMC Chapter 17.22 provides the rules and regulations associated with permit uses, development standards, prohibited uses, and restriction on games of skill and science in the C-R district.

Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment

The Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, adopted by the Los Angeles County Board of Supervisors in July 2016, documents existing parks and recreation facilities in the cities and unincorporated communities of Los Angeles County and uses the data to determine the scope, scale, and location of park needs in Los Angeles County.¹ The Parks & Recreation Needs Assessment also provides a framework for considering parks as key infrastructure; uses a new series of metrics to determine park needs; supports a need-based allocation of funding for parks and recreation; and emphasizes community priorities and deferred maintenance projects.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, which was adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for the physical development of the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The Rolling Hills Estates General Plan Open Space and Recreation Element is a State-mandated element and fulfills the requirements of California Government Code Sections 65560 through 65570. The Open Space and Recreation Element contains the goals and policies regulating parks and other recreational facilities of concern in the City. These goals and policies provide the basis for the preservation of open space for the enjoyment of outdoor recreation, the protection of public safety, and the preservation of important natural resources. The Open Space and Recreation Element provides an inventory of both public and private open space and plans for the continued protection of these areas. The Open Space and Recreation Element outlines strategies to designate open space areas, establishes the rules and regulations to protect existing parks and other recreational facilities, and provides protection of parks and other public recreation areas from development pressures. The Open Space and Recreation Element goals and policies that are related to open space areas, parks, and recreational facilities are as follows:

¹ Los Angeles County Department of Parks and Recreation, Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, May 9, 2016, adopted by the Los Angeles County Board of Supervisors on July 5, 2016.

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Goal 1: Maintain existing natural open spaces, parks, and recreational facilities.

- Policy 1.1: Preserve natural open space areas and design future recreational facilities to protect the local natural environment for present and future generations.
- Policy 1.2: Maintain the rural and lower density character of Rolling Hills Estates which is defined by the presence of wide-open spaces and low-density development.
- Policy 1.3: Preserve and enhance the natural environmental and cultural heritage of the Peninsula and of the City of Rolling Hills Estates.
- Policy 1.4: Cooperate with neighboring cities, the County, and the State in the planning for recreational and open space programs to preserve and enhance the Peninsula's natural environment and cultural heritage.
- Policy 1.5: All efforts should be made to preserve existing open space areas and other undeveloped land where appropriate.

Goal 2: Provide for the recreational needs of residents of the City.

- Policy 2.1: Promote a cooperative, neighborly, and cultural community by encouraging recreational programs which stimulate, educate, and enrich the lives of residents.
- Policy 2.2: Cooperate in sharing a Peninsula-wide system of parks and recreational facilities.
- Policy 2.3: Many of the open space and park areas are currently designated for very low-density residential uses. They should be redesignated to reflect their actual use and to ensure future open space, recreational, or park use.
- Policy 2.5: Encourage the use of vacant school sites for recreational use.
- Policy 2.6: Encourage local citizens groups to participate in planning, development, and maintenance of recreational facilities.
- Policy 2.7: Preserve and promote the equestrian and hiking trail network within the City of Rolling Hills Estates.
- Policy 2.9: Review and amend as appropriate ordinance relating to equestrian facilities within residential areas. The ordinances must take into consideration storage facilities for feed, bedding, equipment, manure removal, emergency water storage, safe interior height and minimum stall and corral size per horse.

Goal 3: Develop additional parks and recreational facilities and preserve open space areas under private ownership.

- Policy 3.2: Seek County, State, and/or Federal funds or the possibility of sharing funds with other agencies and organizations to acquire additional parkland or develop additional facilities.

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- Policy 3.3: Develop plans for financing the acquisition of open space areas should they be placed on the market by current property owners.
- Policy 3.4: Review and revise ordinances (such as the Quimby Ordinance) to require builders and developers to provide lands and/or funds for acquisition and development of land for recreational use.
- Policy 3.5: Maintain or increase current ratio of parkland to population. The current ratio of parkland to City residents must be maintained or increased and not be less than the current ratio of 6.7 acres of parkland for every 1,000 residents.
- Policy 3.6: As stated in the Transportation Element (Policy 3.1), encourage the development of connections between existing trails where feasible.
- Policy 3.7: Proposed subdivisions developments, new construction, and additions should be reviewed for compliance with the City’s trail plan, and the improvement programs outlined in the Open Space and Recreation Element.
- Policy 3.8: The City will work with property owners, community organizations and other agencies so that existing multi-use trails are maintained where appropriate.

4.14.1.2 EXISTING CONDITIONS

The City of Rolling Hills Estates provides its residents a number of opportunities for recreational and sporting activities. Below is a description of parks, open space, and recreational facilities in the Planning Area.

The City owns and maintains eight parks, as listed in **Table 4.14-1** and located in **Figure 4.14-1**. Out of the seven parks, there two community parks, five neighborhood parks, and one mini park. According to the current (1992) General Plan, mini parks are typically located near high-density development and are usually under one acre in size. Neighborhood parks range from about three to five acres and provide for active and passive recreational uses. Community parks are at least ten acres in size and provide athletic fields and equestrian amenities. In contrast to programmed recreational opportunities provided in parks, open space refers to unimproved land or water devoted for the preservation of natural resources, outdoor recreation, public health, and safety concerns. As listed in **Table 4.14-2**, there are also several private and Los Angeles County-owned parks and open spaces in the Planning Area, totaling approximately 303 acres.

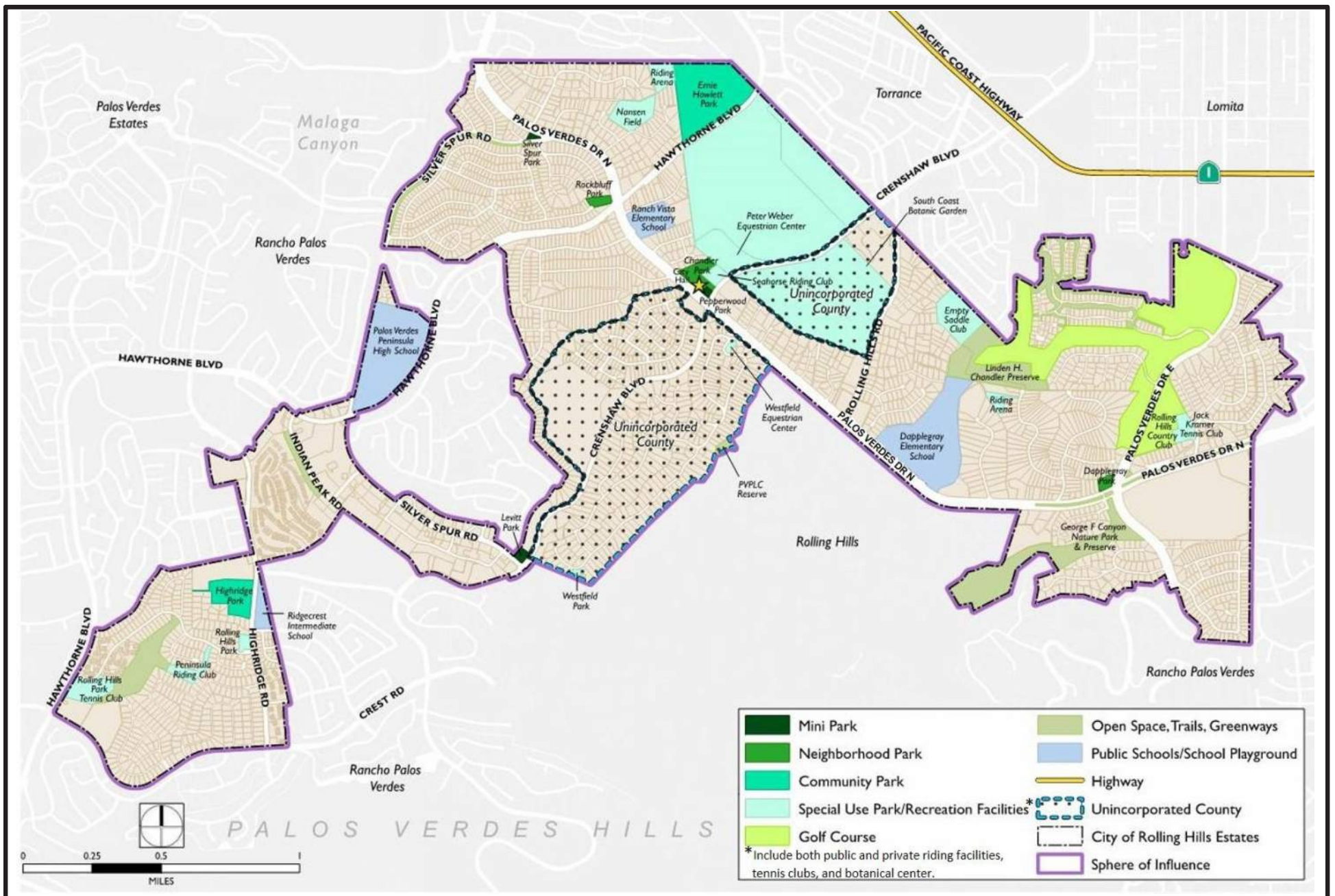
Public parks and facilities are funded by a combination of the City’s general fund, special funds, and private foundations and grants. Funded by a Los Angeles County Regional Park and Open Space Grant, Ernie Howlett Park was renovated in 2018 to add exercise stations and improve pathways. City parks, open spaces, trails, and recreational facilities are maintained by a combined effort of the City’s Maintenance Division and contractual services, including landscaping, janitorial, and electric services. Currently, funding is sufficient to maintain the City’s parks, recreational, open space, and trail services for the foreseeable future.

The City owns two recreational facilities, including the Peter Weber Equestrian Center (PWEC) and the George F. Canyon Nature Center. The City has joint use agreements with PWEC Enterprises Inc. and the Palos Verdes Peninsula Land Conservancy to operate and manage and PWEC and the George F. Canyon Nature Center, respectively.

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**Table 4.14-1
City-Owned Parks, Open Space, and Recreational Facilities in the Planning Area**

Name	Category	Amenities	Acres
Parks			
Ernie Howlett Park	Community	Four handball courts; multi-purpose athletic fields; basketball court; sand volleyball court; picnic tables; barbecue pits; playground equipment; running track; bicycle path; eight tennis courts with a patio, refreshment center, and grandstand; and equestrian center with three riding rings, a dressage area, grandstand, and multi-use trail	34.4
Highridge Park	Community	Two regulation-sized soccer fields, youth softball/baseball field, barbecue pits, restrooms, picnic tables, playground equipment, running track, multi-use trail	10.7
Chandler Park	Neighborhood	Equestrian ring, open space for kite-flying, frisbee throwing, baseball, or picnic	3.5
Dapplegray Park	Neighborhood	Bridle trails, riding ring, lunging ring, dressage area	1.5
Rockbluff Park	Neighborhood	Playground equipment and benches	1.7
Pepperwood Park	Mini	Lunging ring, trails, landscaped area	0.5
Silver Spur Park	Neighborhood	Open grass field	1.0
Levitt Park	Neighborhood	Open field	1.1
<i>Subtotal</i>			<i>54.4</i>
Open Space, Trails, and Greenways			
Linden H. Chandler Preserve	Open Space, Trails, and Greenways	Open space, trails for horseback riding and hiking	26.6
George F. Canyon Nature Center and Stein/Hale Nature Trail	Open Space, Trails, and Greenways/Recreational Facility	Open space, nature center, trails	33.3
Other open space and greenways throughout the City	Open Space, Trails, and Greenways	Open space, undevelopable land, greenways, trails	43.6
<i>Subtotal</i>			<i>103.5</i>
Recreational Facilities			
Peter Weber Equestrian Center	Special Use Park/Recreational Facility	150 horse boarding units, offices, three riding arenas, two lunging rings, training courses, petting zoo	171.8
Sources: City of Rolling Hills Estates, Open Space and Recreation Element Update, 2021.			



Source: Los Angeles County GIS Data, 2017; Dyett & Bhatia, 2018.

FIGURE 4.14-1
Parks and Recreational Facilities in the Planning Area

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**Table 4.14-2
Other Parks and Recreational Facilities in the Planning Area**

Name	Amenities	Agency	Acres
<i>Rolling Hills Estates</i>			
Dapplegray Lane Property Owners Riding Area	Equestrian	Private	2.3
Empty Saddle Club	Equestrian	Private	12.2
Peninsula Riding Club	Equestrian	Private	3.9
Riding Area west of Ernie Howlett Park	Equestrian	Private	4.6
Seahorse Riding Club	Equestrian	Private	2.4
Rolling Hills Country Club	Golf course	Private	118.2
South Coast Park (former Palos Verdes Landfill)	Open space, equestrian	Los Angeles County	172.1
Palos Verdes Peninsula Land Conservancy Reserve	Open space	Palos Verdes Peninsula Land Conservancy	1.2
Rolling Hills Park	Open field, sports field	Private	1.4
Nansen Field	Park, community center	Private	8.6
Jack Kramer Tennis Club	Tennis courts	Private	4.0
Rolling Hills Park Tennis Club	Tennis courts	Private	7.4
<i>Subtotal</i>			338.3
<i>Sphere of Influence</i>			
South Coast Botanic Garden	Botanic garden	Los Angeles County	81.8
Westfield Equestrian Center	Equestrian	Private	0.7
Westfield Park	Tennis court	Private	0.5
<i>Subtotal</i>			83.0
Total			421.3
Source: Dyett and Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.			

In addition, the City also has a joint use agreement with the Palos Verdes Peninsula Unified School District (PVPUSD), which allows City residents to use the Palos Verdes Peninsula High School swimming pool during the summer.

The Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment in 2017 evaluated the amenity, quality, and condition of the City’s five community and neighborhood parks and one recreational facility: Chandler Park, Dapplegray Park, Ernie Howlett Park, Highridge Park, Rockbluff Park, and George F. Canyon Nature Center. The parks and amenities were ranked on a scale of “good,” “fair,” or “poor” based on their conditions. All amenities in all six parks and the recreational facility were classified as “good” in the analysis.²

² Los Angeles County Department of Parks and Recreation, Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, May 9, 2016, adopted by the Los Angeles County Board of Supervisors on July 5, 2016.

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Furthermore, the City has over 25 miles of bridle trails. Most trails are about 10 feet wide and lined with white three-railed fences. The trail network provides equestrians access to most parts of the community. Equestrian trails link riding clubs, parks, and private residences. Most equestrian trails run behind private residences and properties, though some trails line major roadways.

Analyzing a community's access to parks and recreation can help understand existing conditions and identify areas of the City that are underserved by existing parks and recreation facilities. The City provides approximately 54.4 acres of parkland and 103 acres of open space, for a total of approximately 157 acres of parkland and open space. With a population of 8,280 in 2020,³ the City currently has a ratio of approximately 6.6 acres of parkland per 1,000 residents, which exceeds the City's requirement of 5 acres of park and recreational facilities per 1,000 residents as established in RHEMC Chapter 16.08. In comparison, municipalities throughout Los Angeles County, on average, provide 3.3 acres of parkland per 1,000 residents.⁴ When compared to cities throughout Los Angeles County as a whole, Rolling Hills Estates provides approximately twice as much parkland per resident.

4.14.2 IMPACT ANALYSIS

4.14.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on parks and recreational facilities based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on parks and recreational facilities is considered significant if implementation of the proposed GPU would:

Threshold 4.14(a): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for parks.

Threshold 4.14(b): Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Threshold 4.14(c): Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.14.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would result in substantial adverse physical impacts associated with the potential need for expansion of existing parks and recreational facilities or construction of new facilities. This need for additional

³ United States Census Bureau, Quick Facts: Rolling Hills Estates, California, <https://www.census.gov/quickfacts/fact/table/rollinghillsestatescitycalifornia,US/PST045219>, accessed, August 24, 2021.

⁴ Los Angeles County Department of Parks and Recreation, Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, May 9, 2016, adopted by the Los Angeles County Board of Supervisors on July 5, 2016.

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facilities is determined by considering the adequacy of existing parks and recreational facilities, estimating the number of new residents that would be generated by implementation of the proposed GPU, and assessing whether (1) existing and planned public parks and recreational facilities would be sufficient to adequately serve the additional residents of the Planning Area; (2) new facilities would need to be constructed, the construction of which would cause significant environmental impacts; or (3) future development under the proposed GPU would result in substantial physical deterioration or accelerated deterioration of parks and recreational facilities.

4.14.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.14(a): *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for parks?*

Threshold 4.14(b): *Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Impact Analysis

Buildout of the proposed GPU could result in the development of additional residential uses, comprising of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area, which correspond to approximately 1,688 to 4,219 new residents, respectively, in the Planning Area. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in demand for parks and recreational facilities would occur gradually as additional development occurs in the Planning Area.

The addition of new residents would reduce the City's parkland to residents ratio to 5.5 acres of parkland per 1,000 residents under the low-range scenario (i.e., 878 units) and 4.4 acres of parkland per 1,000 residents under the high-range scenario (i.e., 2,158 units), not considering commercial recreational facilities, private recreational facilities, or recreational facilities outside of City limits. Buildout of the proposed GPU under the high-range scenario would result in the City's target of 5 acres per 1,000 residents to be unmet. However, when compared to other cities throughout Los Angeles County (i.e., providing an average of 3.3 acres of parkland per 1,000 residents), the City would still provide more parkland per resident; and parks and recreational uses represent about 24 percent of land in the Planning Area, when considering City-managed parks, open spaces, and horse arenas, as well as private properties not managed by the City, including the Rolling Hills Country Club, the South Coast Botanic Garden (in the SOI), and parks in the SOI. In addition, the City has planned three new mini parks for development between mid-2021 and end of 2023. Furthermore, the Commercial District Vision Plan, as described in the update to the Land Use Element, envisions plaza spaces/gathering areas to be incorporated in future development in the Commercial District. The Brick Walk property along Deep Valley Drive is also envisioned to be developed with significant green space due to development limitations posed as a result of the geological configuration of this property.

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In addition, developers of future development projects under the proposed GPU would be required to pay park fees or dedicate land in accordance with RHEMC requirements. Payment of fees would partially offset the deterioration of existing parks and recreation facilities by allocating these fees to the development of new or rehabilitation of existing neighborhood or community park or recreational facilities.

The proposed GPU also promotes the provision of community open space, such as plaza spaces and enhanced sidewalk space, by offering density bonuses for projects with substantial community benefit. In addition, the proposed goals and policies included in the update to the Open Space and Recreation Element are similar to the existing policies identified above. More specifically, the City will continue to (1) provide for the recreational needs of its residents by exploring opportunities in commercial areas to create public open spaces that foster placemaking and (2) strive to maintain existing natural open spaces, parks, and recreational facilities. Overall, continued cooperation and coordination between the City and developers of future development projects under the proposed GPU would ensure adequate provision and/or maintenance of parks and recreational facilities throughout the Planning Area and would not result in significant impacts to parks and recreational facilities. As such, the proposed GPU would result in a less-than-significant impact on parks and recreational facilities.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, new residents generated by the representative projects have already been accounted for in the estimated population increase in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on parks and recreational facilities, the representative projects themselves would not cause any potentially significant impacts on parks and recreational facilities. In addition, as discussed above, individual development projects, such as the representative projects, would be required to pay the required park fees or provide land dedication to allow the City to adequately provide and/or maintain its parks and recreational facilities to serve its residents and ensure potential impacts to parks and recreational facilities would remain less than significant. Accordingly, the representative projects would result in a less-than-significant impact on parks and recreational facilities.

Mitigation Measures

Impacts related to parks and recreational facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to parks and recreational facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.14(c): Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis

The proposed GPU does not involve any modifications to existing Open Space Land Use Designations. While not directly included in the proposed GPU, the proposed GPU would allow

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for and encourage development of community open spaces as part of future development projects, such as plazas and community gathering spaces, which would further contribute to the City's existing recreational amenities and open space. For example, when considering the representative projects, each one would potentially involve the provision of a variety of community open space and recreational amenities but not public recreational facilities. The scale of such community open spaces and recreational amenities to be included in the representative projects and other projects implementing the proposed GPU is expected to be commensurate with the scale of the development project and the size of the site. The potential physical effects of such facilities include impacts from construction (e.g., noise generation, air pollutant emissions, vegetation removal, ground disturbance, etc.) and impacts from operation (e.g., noise from outdoor activity and human congregation, light and glare from illumination, demand for public services, etc.). However, the potential impacts from community open spaces and recreational amenities included in future development projects implementing the proposed GPU would be a subset of the impacts of the overall buildout of the proposed GPU. There would be no additional, different, or more intense environmental impacts beyond those described in this PEIR resulting from the overall buildout of the proposed GPU. Therefore, while the proposed GPU would allow for and encourage development of community open spaces and recreational amenities as part of future development projects, such as the representative projects, adoption and implementation of the proposed GPU would not result in adverse physical effects on the environment not otherwise evaluated in this PEIR. Impacts in this regard are less than significant.

Mitigation Measures

Impacts related to recreational facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to recreational facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.14.2.4 CUMULATIVE IMPACTS

Impact Analysis

Future development projects under the proposed GPU would result in additional demands on existing parks and recreation facilities. As discussed, future individual development projects would be reviewed to determine their potential impact to parks and recreational facilities. Impacts to existing parks and recreational facilities would be offset following compliance with the goals and policies included in the update to the Open Space and Recreation Element, as well as compliance with RHEMC requirements regarding payment of park fees or land dedication for park space to allow for new parks and recreational facilities to be constructed, if necessary, or the rehabilitation and maintenance of existing parks and recreational facilities. As such, the incremental effect of the proposed GPU on parks and recreational facilities within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to parks and recreational facilities resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.

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Mitigation Measures

Cumulative impacts to parks and recreational facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to parks and recreational facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.15 PUBLIC SERVICES—LIBRARIES

The section of the PEIR provides a discussion of the potential impacts to libraries associated with the implementation of the proposed GPU. This section includes a description of the existing libraries for the Planning Area that would be potentially affected by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of the CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential impacts to libraries that may result from the proposed GPU. Impacts to libraries are addressed in terms of potential effects involving increased demand on libraries and library services and programs within the Planning Area.

4.15.1 ENVIRONMENTAL SETTING

4.15.1.1 REGULATORY FRAMEWORK

FEDERAL

There are no federal regulations or planning programs that apply to the proposed GPU regarding libraries.

STATE

California Education Code Chapter 4 codifies the California Library Services Act. More specifically, the general provisions of the act are presented in California Education Code Sections 18700 through 18703, which ensure that all Californians have free and convenient access to all library resources and services, including the opportunity to obtain from their public libraries needed materials and informational services by facilitating access to the resources of all libraries in the State.

LOCAL

The purpose of Rolling Hills Estates Municipal Code (RHEMC) Chapter 17.74 is to implement the goals and objectives of the City's general plan and to mitigate the impacts caused by new development within the City through the imposition of public facilities fees necessary to finance public facilities and to assure that each new development pays its fair share for these facilities. More specifically, RHEMC Section 17.74.030 establishes applicability of fees for applicants of new developments within the City. Such application must pay public facilities fees, including fees for libraries within residential zones. The amount of applicable fees is set by resolution of the City Council and the City may establish an automatic annual fee adjustment using an appropriate cost index.

4.15.1.2 EXISTING CONDITIONS

The Palos Verdes Library District (PVLD) is an independent special district, which was formed in April 1928 under the provision of Sections 19600-19734 of the California Education Code, and encompasses the entire approximate 28 square miles of the Palos Verdes Peninsula. PVLD

4.15 PUBLIC SERVICES—LIBRARIES

provides library services to all four cities on the Palos Verdes Peninsula, including the City of Rolling Hills Estates, as well as a small portion of unincorporated area in Los Angeles County.¹

Peninsula Center Library, which is the main library at 701 Silver Spur Road within the Planning Area, opened in 1967 and expanded in 1995. PVLVD also has two branch libraries, Malaga Cove Library in the City of Palos Verdes Estates, which opened in 1930, and Miraleste Library in the City of Rancho Palos Verdes Miraleste Library, which opened in 1970.²

The PVLVD is primarily funded through property taxes, with supplemental revenue in the form of gifts and grants.³ The Peninsula Friends of the Library, a non-profit corporation and the sole fundraising organization of the PVLVD, is an all-volunteer membership organization founded in 1961 to enhance the services and programs of Peninsula libraries and provides approximately five percent of PVLVD's budget.⁴

4.15.2 IMPACT ANALYSIS

4.15.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on library facilities based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on library facilities is considered significant if implementation of the proposed GPU would:

Threshold 4.15(a): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for library facilities.

4.15.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would result in substantial adverse physical impacts associated with the potential need for expansion of existing library facilities or construction of new facilities. The methodology for determining the significance of impacts on library facilities compares existing conditions to the expected future use of libraries under the proposed GPU. The analysis focuses on PVLVD's capacity and impacts.

4.15.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.15(a): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable

¹ Palos Verdes Library District, Trustee Policies and Procedures Manual, Section 1020.0 Historical Information and Description of Palos Verdes Library District, adopted May 1984 and reviewed February 2020.

² Palos Verdes Library District, Trustee Policies and Procedures Manual, Section 1020.0 Historical Information and Description of Palos Verdes Library District, adopted May 1984 and reviewed February 2020.

³ Palos Verdes Library District, Approved Budget for Fiscal Years 2021/2022 & Projected 2022/2023, no date.

⁴ Peninsula Friends of the Library, Who We Are, <https://www.pvlvdfriends.org/who-we-are/>, accessed September 8, 2021.

service ratios, response times or other performance objectives for library facilities?

Impact Analysis

Buildout of the proposed GPU is anticipated to result in the development of additional residential uses, comprising primarily of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area, which correspond to approximately 1,688 to 4,219 new residents, respectively, in the Planning Area. However, future development is assumed to occur over approximately two decades through 2040; as such, any increase in demand for library facilities would occur gradually as additional development and associated population growth is added to the Planning Area.

As development occurs, a proportional increase in property tax, charges for library services, and other funding sources, such as those provided by the Peninsula Friends of the Library, would offset impacts of new development on PVLD services in the Planning Area. In addition, new residential units are expected to be equipped to receive individual internet service to provide information and research capabilities, which studies have shown to reduce demand on physical library locations.⁵ Furthermore, PVLD has been increasing its online services (i.e., eLibrary), including a variety of eBooks, eMagazines, LinkedIn Learning, and study materials, that are available to users through PVLD's online resources.⁶ These online sources would further reduce impacts on PVLD services by future development under the proposed GPU. Therefore, buildout of the proposed GPU would not be anticipated to result in substantial increase in demand that would necessitate new or physically altered library facilities, the construction of which would cause significant environmental impacts. As such, the proposed GPU's impact on library facilities would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on library facilities, the representative projects themselves would not cause any potentially significant impacts on library facilities. In addition, as discussed above, individual development projects, such as the representative projects, are expected to be equipped to receive individual internet service to offset some of the impacts of new development on PVLD services in the Planning Area. Accordingly, the representative projects would result in a less-than-significant impact on library facilities.

Mitigation Measures

Impacts related to library facilities were determined to be less than significant. Therefore, no mitigation measures are required.

⁵ Carol Tenopir, *Use and Users of Electronic Library Resources*, August 2003; Denis A. Troll, *How and Why Are Libraries Changing?*, January 2001.

⁶ Palos Verdes Library District, *eLibrary*, <https://www.pvld.org/eLibrary>, accessed September 8, 2021.

4.15 PUBLIC SERVICES—LIBRARIES

Level of Significance After Mitigation

Impacts related to library facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.15.2.4 CUMULATIVE IMPACTS

Impact Analysis

Implementation of the proposed GPU, along with other future development projects in the Palos Verdes Peninsula, would potentially generate new residents within the PVLD service area, which would result in additional demand on existing library facilities provided by the PVLD. However, as discussed above, PVLD funding for library services would continue to be provided through property taxes, which would incrementally increase as new development occurs; charges for library services; and other funding sources. As such, the incremental effect of the proposed GPU on library facilities within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts to library facilities resulting from the implementation of the proposed GPU and other future development projects within the Palos Verdes Peninsula would be considered less than significant.

Mitigation Measures

Cumulative impacts to library facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to library facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.16 TRANSPORTATION

This section of the PEIR evaluates the potential effects of implementing the proposed GPU on transportation in the Planning Area. This section presents the existing transportation conditions in the Planning Area, including the roadway network and safe street design; automobile, pedestrian, and bicycle circulation; and transit facilities. The analysis in this section is primarily based on the Rolling Hills Estates 2040 General Plan Transportation Assessment (TA), dated October 2021, and prepared by Fehr & Peers. The TA is provided in its entirety in **Appendix F** of this PEIR.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential transportation impacts that may result from the proposed GPU, which are addressed in terms of the proposed GPU's consistency with the City's transportation-related plans, programs, ordinances, and policies; Project vehicle miles traveled (VMT) metrics compared to the existing Citywide baseline; potential geometric hazards related to circulation in the Planning Area; and emergency access.

4.16.1 ENVIRONMENTAL SETTING

4.16.1.1 REGULATORY FRAMEWORK

FEDERAL

Titles I, II, III, and V of the Americans with Disabilities Act (ADA) have been codified in Title 42 of the United States Code (USC), beginning at Section 12101. Title III prohibits discrimination based on disability in "places of public accommodation" (businesses and non-profit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Appendix A through Part 36 (Standards for Accessible Design), establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

STATE

Complete Streets Act of 2008 (Assembly Bill 1358)

Assembly Bill 1358 (AB 1358), the Complete Streets Act of 2008, was developed in response to and in support of other legislation aimed at reducing vehicle emissions through reduced trip length and frequency combined with changes in land use policies. Specifically, AB 1358 directs that, "commencing January 1, 2011, that the legislative body of a city or county, upon any substantive revision of the circulation element of a general plan, modify the circulation element to plan for a balanced, multi-modal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan."

4.16 TRANSPORTATION

The Complete Streets Act is supported by California Department of Transportation (Caltrans) Deputy Directive DD-64-R1, which memorializes the importance of pedestrian and bicycle facilities to the State's transportation system and outlines responsibilities for Caltrans employees to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of complete streets throughout the State.

Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed Senate Bill 743 (SB 743) into law, which resulted in the requirement for analysis of VMT to identify transportation impacts in a project's environmental impact study. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (CEQA) and the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service (LOS). These revisions include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Additionally, parking impacts are no longer considered significant impacts on the environment. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." In November 2018, the California Natural Resources Agency (CNRA) finalized the updates to the CEQA Guidelines, including the addition of Section 15064.3 for determining the significance of transportation impacts, and the updated guidelines became effective on December 28, 2018.

OPR has prepared a Technical Advisory on Evaluating Transportation Impacts in CEQA, which contains OPR's technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR offered a generalized recommendation of a 15 percent reduction below existing VMT as a threshold of CEQA significance for residential and office projects and no net increase in total VMT as a threshold of CEQA significance for retail projects.

California Government Code Sections 65088 through 65089.10 (Congestion Management)

In June 1990, Proposition 111 was passed and codified in California Government Code Sections 65088 through 65089.10, which made additional funding available for transportation projects through a nine-cent increase in the State gas tax and mandated that each county with 50,000 or more residents develop a Congestion Management Program (CMP). The purpose of the CMP was to address the impacts of local growth on the regional transportation system. The CMP was created to link local land use decisions with their impacts on regional transportation and air quality as well as to develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel. The framework for the CMP is linked to the idea that congestion can be mitigated by continuing to add capacity to roadways since the primary metric that drives the program is LOS. Recent State laws and rulemaking, all move away from LOS directly or indirectly. Therefore, the CMP contradicts key State policies.

The Los Angeles County Metropolitan Transportation Authority (Metro) was designated as the Congestion Management Agency responsible for administering the County's CMP. In June 2018, the Metro Board of Directors acted to initiate the process to opt-out of the State-mandated program and directed Metro to consult with local jurisdictions to consider and prepare the necessary resolutions for jurisdictions to exempt themselves from the program. Pursuant to California Government Code Section 65088.3, jurisdictions within a county may opt-out of the CMP requirement without penalty, if a majority of local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt-out of the program. In August 2019, Metro announced that the majority had been reached and that the County of Los Angeles had opted to be exempt from the CMP. As such, the provisions of the CMP no longer apply to any of the County's 88 local jurisdictions, as well as the County of Los Angeles itself. Accordingly, a CMP analysis is no longer required in CEQA documents for projects in Los Angeles County, including the City of Rolling Hills Estates and the Planning Area.

REGIONAL

In April 2016, the Southern California Association of Governments' (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016-2040 RTP/SCS closely integrates land use and transportation so that the region can grow smartly and sustainably.

The 2016-2040 RTP/SCS identifies several themes that resonate throughout the document including integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increasing capacity through improved systems management; providing people more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth, and opportunity; promoting the link among public health, environmental protection, and economic opportunity; and building a plan based on the principle of social equity and environmental justice.

In September 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS. As with the 2016-2020 RTP/SCS, the purpose of the 2020-2045 RTP/SCS is to meet the mobility needs of the six-county SCAG region over the 25-year planning horizon through a roadmap identifying ways to expand transportation options, improve air quality, and bolster the region's long-term economic viability. The goals and policies of the 2020-2045 RTP/SCS are similar to those of the 2016-2040 RTP/SCS.

LOCAL

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to emergency preparedness and hazard prevention to protect the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

4.16 TRANSPORTATION

The Rolling Hills Estates General Plan Transportation Element is a State-mandated element and fulfills the requirements of California Government Code Section 65302(b). The Transportation Element contains goals and policies that emphasize the need for providing an efficient circulation system and a plan for improving the existing roadway network to handle traffic increases due to both regional and local growth. The Transportation Element also includes a circulation plan, which provides for a comprehensive circulation system designed to accommodate the projected transportation needs of the City at buildout of the land use plan.

The Transportation Element goals and policies that are related to the City's circulation and transportation needs are as follows:

Goal 1: Provide for safe driving conditions on all City streets.

- Policy 1.1: Provide comprehensive and ongoing evaluation of potentially dangerous streets and intersections within the City.
- Policy 1.2: Encourage the involvement of the Traffic and Safety Committee in assessing traffic safety concerns. Encourage the involvement and interaction of Homeowners Associations with the Traffic Safety Committee in an effort to augment its information base as it relates to traffic safety concerns.
- Policy 1.4: The widening of streets, installation of additional traffic signals, removal of trees, and other roadway improvements should be compatible with the rural character of the City.

Goal 2: Promote efficient traffic flow on City streets without compromising the lower density character of Rolling Hills Estates.

- Policy 2.1: Restrict the construction of additional travel lanes within the City so as not to adversely affect the established rural residential character of the area.
- Policy 2.2: Discourage primary and secondary access on arterial streets for properties without frontage along these roadways.
- Policy 2.3: Discourage secondary access on major arterials for properties having frontage on these streets, except where alternatives are not available.
- Policy 2.5: Discourage the installation of additional traffic signals except where it is determined that such improvements are required for public safety needs or to mitigate serious congestion or roadway hazards.
- Policy 2.7: Review major development in other Palos Verdes Peninsula cities, evaluate the potential traffic impacts, and encourage appropriate mitigation measures.

Goal 3: Provide safe and comprehensive trail systems for equestrian, bicycle, and pedestrian use and promote the development of connections between existing trail systems where feasible.

- Policy 3.1: Any new development will be encouraged to provide connections between trails, where appropriate.
- Policy 3.3: Minimize the interface of bridle trails and City streets where feasible.
- Policy 3.4: Restrict motorized vehicles/bicycles from using designated equestrian trails except in case of emergency, trail maintenance, or to service the property.

Policy 3.7: Encourage cooperation among Peninsula jurisdictions to establish comprehensive multi-use trail network for equestrian, bicycle, and pedestrian use and encourage development of additional on-street bike paths to enable the development of a Peninsula-wide loop system.

Policy 3.8: Encourage the expansion of pedestrian paths in residential and commercial areas and incorporate pedestrian activity on all off-street bike paths.

Goal 4: Promote greater use of public transit as an alternative means of transportation.

Policy 4.1: Encourage and promote greater use of public transportation, including car pools, van pools, and bus services.

Policy 4.2: Encourage large employment centers to provide increased van pool service to Peninsula residents.

Policy 4.4: Promote the development of a comprehensive bus service system, including fixed-route programs to various points of interest, such as commercial centers, schools, and recreation areas.

Policy 4.5: Participate in and encourage Peninsula-wide cooperation among the various jurisdictions to provide comprehensive programs to address the public transportation needs of the region.

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 10.56 of the RHEMC includes requirements for transportation demand management (TDM) and trip reduction for all nonresidential development. Pursuant to this ordinance:

- Nonresidential development of 25,000 square feet or more must provide a bulletin board, display case, or kiosk displaying transportation information.
- In addition to the requirement above for development greater than 25,000 square feet, nonresidential development of 50,000 square feet or more must reserve at least ten percent of employee parking for carpools/vanpools as close as practical to the employee entrances; include preferential parking spaces that are the proper size and accessible to vanpool vehicles; and include bicycle racks or other secure bicycle parking.
- In addition to the requirements above for development greater than 25,000 square feet and 50,000 square feet, nonresidential development of 100,000 square feet or more must provide a vanpool/carpool boarding zone; direct and safe pedestrian routes from the external pedestrian circulation system to each building; bus stop improvements where deemed necessary; and safe and convenient access from the external circulation system to bicycle parking facilities on-site.

4.16.1.2 EXISTING CONDITIONS

PROJECT LOCATION

The Planning Area is located in the Palos Verdes Peninsula and is primarily accessed by Palos Verdes Drive North to the north, Hawthorne Boulevard to the west, Palos Verdes Drive South to the south, and Crenshaw Boulevard to the east. Silver Spur Road is the main access roadway for

4.16 TRANSPORTATION

the Commercial District. Regional access to/from the Planning Area is provided via the Pacific Coast Highway (Highway 1) to the north and Interstate 110 (I-110) to the east.

ROADWAY CLASSIFICATION

The transportation system in the Planning Area can be defined by three roadway classifications: major arterials, secondary arterials, and local streets, and are as follows:

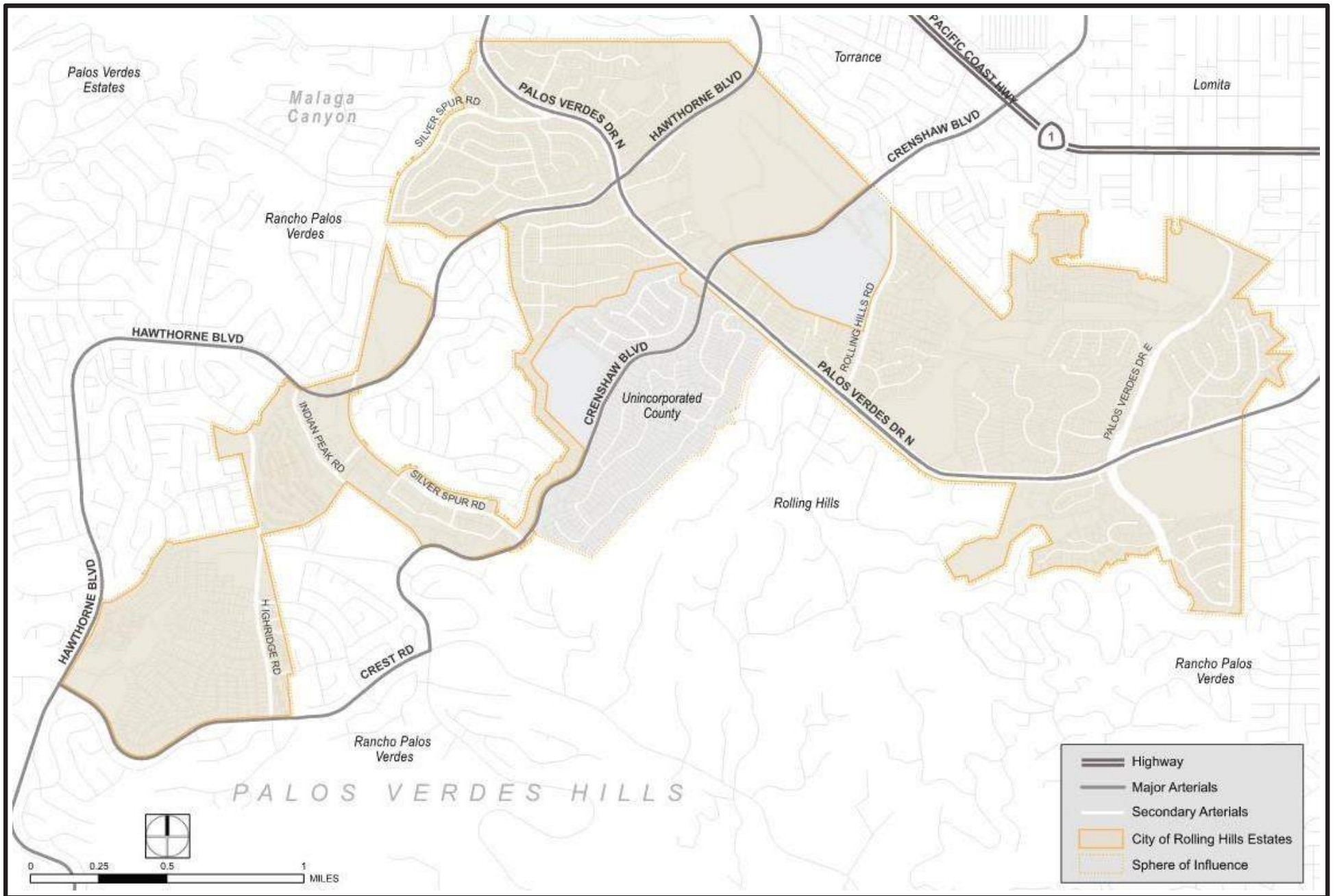
- **Arterial Roadways** are the backbone of transportation in the Planning Area and are designed to move large volumes of traffic, primarily serving regional destinations through connections to other arterials and freeways. Due to their regional focus, local access is a secondary priority, and additional driveways and intersections should either be restricted or controlled. While automobile use is emphasized on arterial roadways, transit, bike, and pedestrian facilities should be considered and accommodated.
 - **Major arterials** in the Planning Area are the most important for regional connectivity and road safety, and efficiency should be prioritized. Major arterials in the Planning Area include Hawthorne Boulevard and Crenshaw Boulevard.
 - **Secondary arterials** in the Planning Area are designed to connect local streets to major arterials, as well as provide direct connections to local destinations, such as schools and businesses. They typically have a smaller footprint than major arterials and include Palos Verdes Drive North, Silver Spur Road, Palos Verdes Drive East, Indian Peak Road, Rolling Hills Road, and Crest Road.
- **Local streets'** primary function is to provide direct access to residential parcels throughout the Planning Area. For this reason, through-traffic should be discouraged, and speeds should be managed. All other roadways in the Planning Area are classified as local streets.

The roadway classifications for the Planning Area are shown in **Figure 4.16-1**. In addition, to promote the safe and efficient delivery of goods, the City maintains Hawthorne Boulevard, Silver Spur Road and Indian Peak Road between Hawthorne Boulevard and Crenshaw Boulevard, and Crenshaw Boulevard¹ between Indian Peak Road and the South Coast Botanic Garden as allowable roadways for commercial truck usage.

PEDESTRIAN FACILITIES

Pedestrian circulation and access within the Planning Area is provided primarily through sidewalks, crosswalks, and pedestrian trails along major/secondary arterials throughout the Planning Area. However, many local residential streets in neighborhoods across the Planning Area do not have sidewalks. Mixed-use paths and bridle trails also serve as pedestrian facilities along arterials, including along portions of Palos Verdes Drive North and Hawthorne Boulevard. Discontinuous sidewalks, steep grades, long distances between crossings and high auto speeds can make it difficult and uncomfortable to navigate through the Planning Area as a pedestrian.

¹ Crenshaw Boulevard between the City limits north of Silver Spur Road and the South Coast Botanic Garden becomes is a southbound-only truck route.



Source: City of Rolling Hills Estates, 2017; Los Angeles County GIS Data Portal, 2017; Fehr & Peers, 2021.

FIGURE 4.16-1
Roadway Classifications

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RECREATIONAL TRAILS AND EQUESTRIAN AND BICYCLE FACILITIES

Biking and horseback riding have always been popular forms of recreation in the Planning Area. The Planning Area has approximately 10 miles of designated bike facilities, over 30 miles of bridle trails, some bike and horse parking, and equestrian crossings on Rolling Hills Road and Palos Verdes Drive North. However, topographic constraints in the Planning Area are a barrier to many who may be interested in using their bikes for shorter trips but are nervous about tackling the steeper grades in some parts of the Planning Area. In addition, limited biking and equestrian amenities at major destinations is another known barrier to active transportation mode choice in the Planning Area. As a result, there is a significant network gap in connections between the Commercial District and residential neighborhoods.

TRANSIT FACILITIES

The Planning Area is served by three different transit providers: Metro, the City of Los Angeles Department of Transportation (LADOT) Commuter Express, and Palos Verdes Peninsula Transit Authority (PVPTA). Metro Line 344 connects to the Harbor Gateway Transit Center, which provides connections to Downtown Los Angeles via the Metro Silver Line. LADOT also provides service to Downtown Los Angeles with a Commuter Express route that operates during the morning and evening peak hours only. PVPTA provides more localized weekday-only service with connections throughout the Palos Verdes Peninsula.

EXISTING VMT

According to the 2019 American Community Survey, most City residents drive alone to work. As a result, the use of automobiles in the City is high and would likely remain the dominant mode choice for City residents, employees, and visitors over the horizon of the proposed GPU (i.e., through 2040). Correspondingly, the existing VMT for the City is relatively high.

The SCAG 2016-2040 RTP/SCS travel demand model² was used to estimate the average weekday VMT for the City and other cities and counties across Southern California within the six-county SCAG region. The SCAG model for the 2012 Base Year and 2040 Baseline scenarios was updated with land use information from the City of Rolling Hills Estates to produce the VMT estimates, which were calculated using the origin-destination methodology to capture the total VMT generated by residents and employees in the City. Due to limitations in the SCAG travel model, VMT generated by heavy duty truck trips or unique land uses (airports, seaports, and external gateways) are not included in these estimates.

Table 4.16-1 presents the existing VMT for the City for home-based generated trips and work-based attracted trips. The socioeconomic data used to determine the existing VMT for the 2021 Base Year, as shown in **Table 4.16-1**, were interpolated from the SCAG model for the 2012 Base Year and 2040 Baseline scenarios.

² SCAG is in the process of rolling out the 2020-2045 RTP/SCS travel demand model, and, as such, the 2016-2040 RTP/SCS travel demand model was used in this analysis. However, although the 2016-2040 model was used, the socioeconomic and demographic data for the 2021 base year model scenario was interpolated and confirmed with the City for use in the model.

**Table 4.16-1
Existing Vehicle Miles Traveled (2021 Base Year) for Rolling Hills Estates**

VMT Metric	Planning Area Base Year (2021)
Average Daily VMT per Service Population	45.3
Average Daily Home-Based VMT per Capita	17.8
Average Daily Home-Based Work VMT per Employee	20.1

Source: SCAG, 2016-2040 RTP/SCS Travel Demand Model, 2016; Fehr & Peers, 2021.

Figures 4.16-2 and 4.16-3 show how different parts of the Planning Area perform in the base year for residential VMT per capita and for work VMT per employee, respectively, compared to the Citywide average.

4.16.2 IMPACT ANALYSIS

4.16.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU’s impacts on transportation based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact related to transportation is considered significant if implementation of the proposed GPU would:

Threshold 4.16(a): *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.*

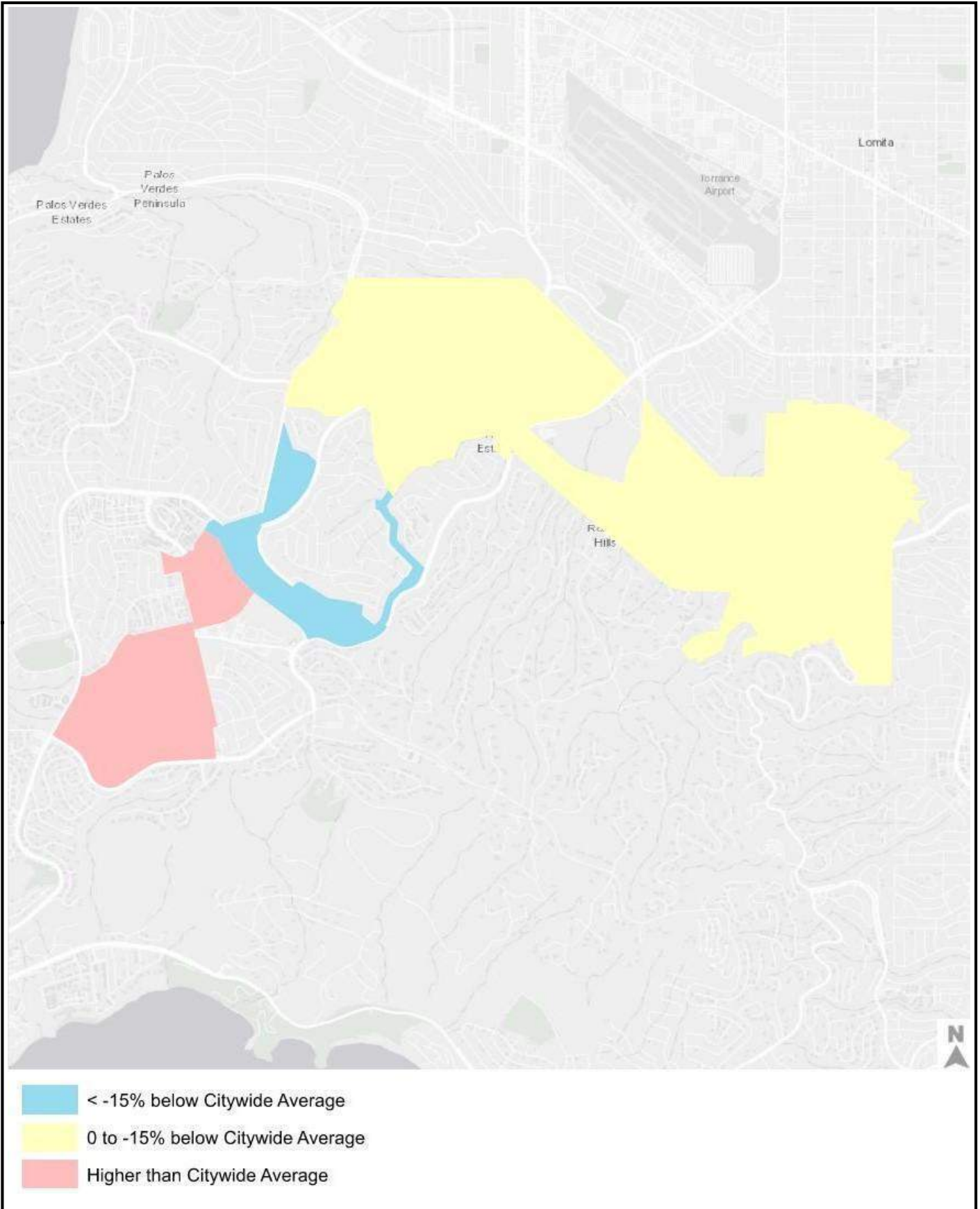
Threshold 4.16(b): *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).*

Threshold 4.16(c): *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

Threshold 4.16(d): *Result in inadequate emergency access.*

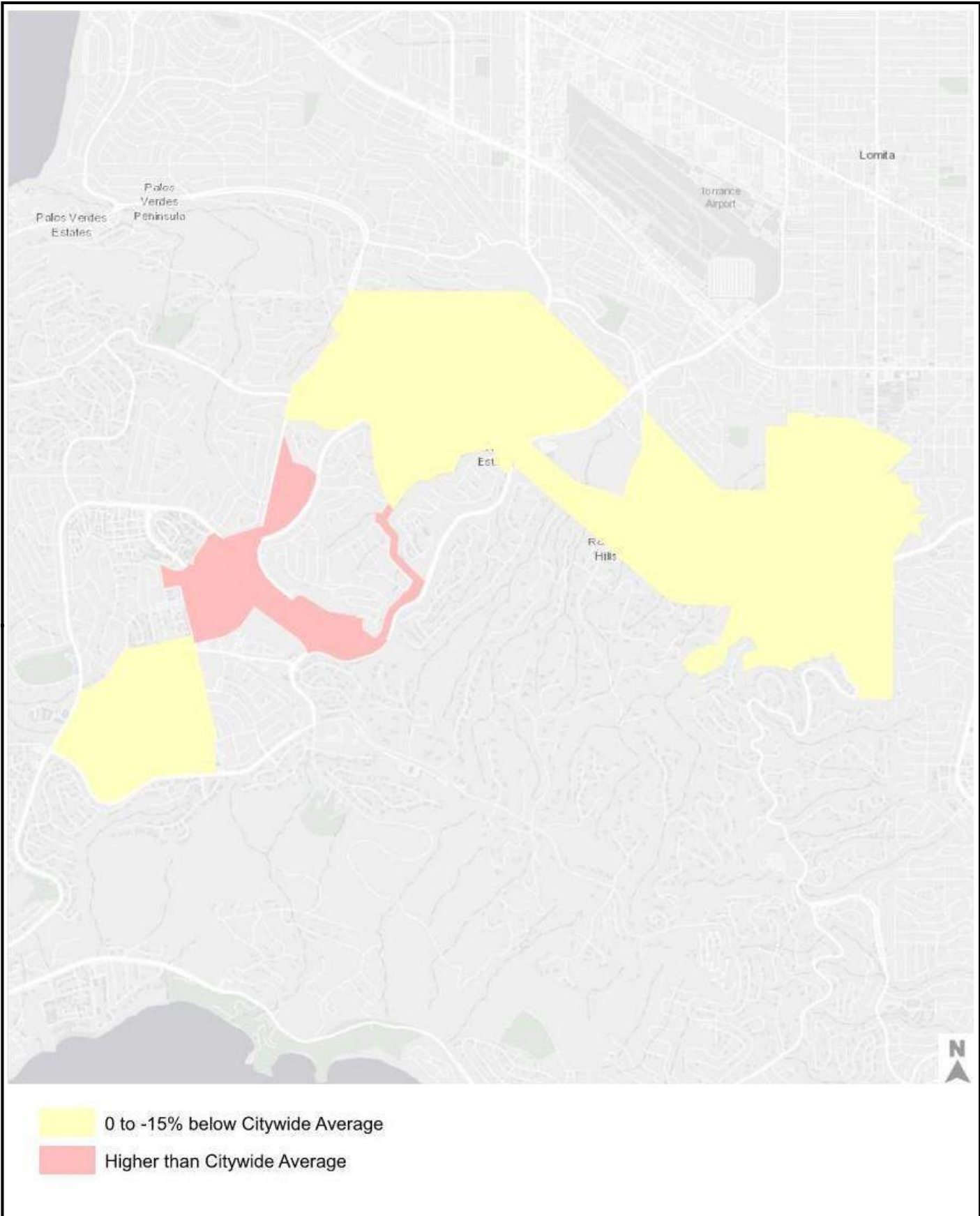
In addition, specific to the analysis related to Threshold 4.16(b), CEQA Guidelines Section 15064.7 allows lead agencies the discretion to select their own screening criteria. OPR provides guidance on the types of land use and transportation projects that can be screened from VMT analysis. The guidance suggests that project size and location can be used to evaluate and determine up front whether a project can be screened from VMT analysis under SB 743, or CEQA, transportation assessment requirements. Table 4.16-1, above, provides the 2021 baseline VMT metrics for the Planning Area. Those metrics include the following:

- **Residential Uses** – VMT per capita calculated as the total home-based productions VMT divided by the population of the proposed GPU buildout scenarios (i.e., low-range and high-range).
- **Employment Uses** – VMT per employee calculated at the total home-based work productions VMT divided by the number of employees of the proposed GPU buildout scenarios.



Source: SCAG Model 2016-2040 RTP/SCS; Fehr & Peers, 2021.

FIGURE 4.16-2
 Daily Residential Home-Based VMT per Capita
 Comparison to Citywide Average (2021 Baseline)



Source: SCAG Model 2016-2040 RTP/SCS; Fehr & Peers, 2021.

FIGURE 4.16-3
 Daily Home-Based Work VMT per Employee
 Comparison to Citywide Average (2021 Baseline)

4.16 TRANSPORTATION

- **Total VMT per Service Population** – Total origin/destination VMT divided by the sum of residents and employees of the proposed GPU buildout scenarios.

Table 4.16-2 presents the corresponding thresholds of significance for each of the VMT metrics. As calculated from the 2016-2040 SCAG RTP/SCS travel demand model, the average daily home-based VMT per capita in Rolling Hills Estates is 17.8, and the average daily home-based work VMT per employee is 20.1. For the purpose of analyzing the proposed GPU, the VMT threshold of significance for residential uses is 15 percent below the baseline Citywide average residential VMT per capita, which is equivalent to 15.1 residential VMT per capita. For employment-based uses, it is 15 percent below the baseline Citywide average work VMT per employee, which is equivalent to 17.1 for work VMT per employee.

**Table 4.16-2
City of Rolling Hills Estates VMT Thresholds of Significance**

Project Type	Metric Description	VMT Threshold
Residential	15 percent below the existing Citywide average VMT per capita	15.1
Work	15 percent below the existing Citywide average VMT per employee	17.1
Retail	No net change in total VMT	Δ VMT = 0
Mixed-Use	The project VMT impact should be considered significant if any (one or all) of the project land uses exceed the impact criteria for that particular land use, taking credit for internal capture. In such cases, mitigation options that reduce the VMT generated by any or all of the land uses could be considered.	15.1 for residential use; 17.1 for office use
Land Use Plans	15 percent below the existing Citywide average total VMT per service population	38.5

Source: City of Rolling Hills Estates, Draft Transportation Assessment Guidelines, 2021.

4.16.2.2 METHODOLOGY

The SCAG 2016-2040 RTP/SCS travel demand model was utilized to estimate the VMT metrics for the proposed GPU's two buildout scenarios in 2040. The first step for calculating the buildout scenario VMT was to update the appropriate traffic analysis zones (TAZs) within the SCAG 2016-2040 RTP/SCS travel demand model to reflect the proposed GPU's land uses for each buildout scenario. The population and employee totals were estimated based on the proposed land uses for each scenario (i.e., the number of households and square footage of commercial/non-residential) and calculated using standard conversion factors. The majority of the households added in each of the proposed GPU's buildout scenarios would be comprised of multi-family housing and accessory dwelling units (ADUs).

4.16.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.16(a): *Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Impact Analysis

The proposed GPU is intended to reflect the City's vision through the plan horizon of 2040, while complying with changes in State law and improving the usefulness of the General Plan. The proposed GPU involves updates to the City's seven General Plan Elements, including three that are related to transportation, namely the Mobility Element (formerly Transportation Element), Land Use Element, and Open Space and Recreation Element, as well as the addition of an eighth element (Sustainability Element).

The purpose of the Mobility Element is to provide a safe, multimodal, efficient transportation system that meets the current and future needs of the Planning Area. Planning Area residents have a diversity of mobility needs and a desire to be able to move through the Planning Area safely and efficiently, regardless of mode choice. The goals and policies introduced in the Mobility Element are aimed at providing safe, viable alternatives to the automobile when traveling throughout the Planning area, while continuing to provide efficient automobile circulation and recognizing the distinct, rural feel of the Planning Area.

The goals and policies provided in the Mobility Element are complementary to the following three elements identified in helping to achieve the objectives of the proposed GPU:

- **Land Use Element:** The Mobility Element complements the Land Use Element to provide safe, efficient connections to various land uses and seeks to meet the transportation needs of current and future development throughout the Planning Area. The Mobility Element also recognizes the unique needs of the Commercial District and works to promote the economic development of businesses by increasing foot traffic and promoting the Commercial District as a major destination in Rolling Hills Estates.
- **Open Space and Recreation Element:** The Mobility Element overlaps with the Open Space and Recreation Element in its effort to provide and enhance a quality trail network for both recreation and transportation uses. Bridle trails and mixed-use paths especially provide safe, comfortable off-street facilities that can be used by residents to move around the Planning Area.
- **Sustainability Element:** The Mobility Element complements the Sustainability Element in its effort to provide a multimodal transportation network that reduces greenhouse gas emissions in the Planning Area.

More specifically, the Mobility Element defines the City's transportation network, including streets, transit routes, equestrian trails, bikeways, and sidewalks and describes how people move throughout the City. Pursuant to SB 743, this Mobility Element considers approaches to improve the performance of the local transportation system to reduce VMT. No changes to the City's master plan of roads are proposed, except the following:

- Silver Spur Road is the primary connector through the Commercial District. The proposed Commercial District Area Vision Plan envisions changing Silver Spur Road from a four-lane street to a two-lane street, narrowing it to a "main street" scale street. This reconfiguration would free up street space to provide angled parking (instead of parallel parking) and buffered bike lanes. Beyond the capacity changes, the Commercial District Area Vision Plan reimagines Silver Spur Road as a two-sided commercial street with buildings flanking both sides of the street. This vision includes streetscape design elements, such as banners, landscaping, benches, bike parking,

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outdoor dining spaces, and other amenities. To fully realize the two-sided commercial street vision of Silver Spur Road, a reconfiguration of the Silver Spur Road/Bart Earle Way corridor would be required, as described below.

- Bart Earle Way is a slip road accessed by and parallel to Silver Spur Road. Its presence creates redundancy and sets buildings wide apart along the Silver Spur Road/Bart Earle Way corridor. The proposed Commercial District Vision Area Plan envisions the removal of Bart Earle Way (replaced by a rear entry drive aisle to access parking) and providing the roadway space for development as an addition to existing parcels along the north side of Bart Earle Way. The removal of Bart Earle Way would change the roadway width from approximately 144 feet between the buildings to approximately 100 feet, creating a traditional two-sided commercial main street corridor along Silver Spur Road.
- Deep Valley Drive is currently interrupted by the Promenade Mall. The proposed Commercial District Area Vision Plan envisions reconnecting Deep Valley Drive if and when redevelopment of the Promenade Mall site occurs.

The Commercial District, in particular, generally supports multimodal transportation options and would be consistent with policies, plans, and programs that support alternative transportation, as identified in the Mobility Element. The proposed GPU is intended to minimize impacts to the public right-of-way and enhance the user experience by integrating multimodal transportation options, including on-site pedestrian infrastructure and trails connecting to the Commercial District. In addition, the proposed GPU would encourage pedestrian and bicyclist activity because it concentrates the development near public transit and activity centers, which provides residences and visitors access to the Commercial District, which can be circulated by walking, biking, or taking transit. The proposed GPU would also accommodate pedestrian activity with its access locations and open space, which would be designed to City standards to provide adequate sight distance and pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. The proposed GPU would not preclude City action to fulfill or implement future projects associated with these networks but, instead, would contribute to overall walkability through enhancements to the Planning Area streetscape.

The proposed GPU's consistency with the 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS, which establish regional transportation goals, policies, and actions that are intended to guide development of planned multimodal transportation systems in Southern California, is analyzed in **Tables 4.8-1** and **4.8-2** in Section 4.8, Land Use and Planning, of this PEIR. As determined therein, the proposed GPU would support further implementation of 2016-2040 RTP/SCS and 2020-2045 RTP/SCS policies.

Accordingly, future development projects implemented under the proposed GPU would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and, as such, impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to not conflict with a program, plan, ordinance or policy addressing the circulation system, the representative projects themselves would not

conflict with a program, plan, ordinance or policy addressing the circulation system. Accordingly, impacts resulting from the representative projects related to conflict with plans would be less than significant.

Mitigation Measures

Impacts related to conflict with plans were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to conflict with plans were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.16(b): Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Impact Analysis

Table 4.16-3 provides a summary of the VMT metrics for the proposed GPU buildout scenarios. The VMT metrics include the residential VMT per capita, work VMT per employee, and total VMT per service population (where service population equals the sum of residents and employees in the City). Table 4.16-3 also includes a comparison of the 2040 VMT metrics to the 2021 Citywide baseline.

**Table 4.16-3
Proposed General Plan Update Buildout Scenarios – VMT Metrics**

	Existing Daily VMT	2040 Daily VMT	Comparison to 2021 City Baseline ^a	VMT Threshold	Significant Impact?
Low-Range Buildout Scenario					
Residential VMT per Capita	17.8	16.8	-5.6%	15.1	Yes
Work VMT per Employee	20.1	17.3	-13.9%	17.1	Yes
Total VMT per Service Population	45.3	36.5	-19.4%	38.5	No
High-Range Buildout Scenario					
Residential VMT per Capita	17.8	16.4	-7.9%	15.1	Yes
Work VMT per Employee	20.1	17.0	-15.4%	17.1	No
Total VMT per Service Population	45.3	33.8	-25.4%	38.5	No
Notes:					
^a Percentage must be 15 percent or more to meet the City's VMT significance threshold.					
Source: City of Rolling Hills Estates, Draft Transportation Assessment Guidelines, 2021; Fehr & Peers, 2021.					

Low-Range Buildout Scenario

The proposed GPU buildout in 2040 under the low-range scenario is projected to have a significant VMT impact for the residential VMT per capita and the work VMT per employee metric. The proposed GPU is projected to have a daily residential VMT per capita of 16.8, which is 5.6 percent below the 2021 base year Citywide average (17.8 residential VMT per capita). This does not meet the City's significance threshold of being 15 percent or better than the base year. Additionally, the proposed GPU is projected to have a daily work VMT per employee of 17.3,

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which is 13.9 percent below the 2021 base year Citywide average (20.1 work VMT per employee). However, the low-range buildout scenario is 15 percent or better for the total VMT per service population. While the low-range buildout scenario results in a net decrease in non-residential square footage (15 percent) compared to the 2021 baseline and, hence, fewer number of employees in the City, the City does not perform well for commuting trips given the existing imbalanced flow of workers, relatively long average commute trip lengths, and a lack of comparable/alternative modes of travel and infrastructure, including walking, biking, and/or taking public transit.

High-Range Buildout Scenario

The proposed GPU buildout in 2040 under the high-range buildout scenario is projected to have a significant VMT impact for the residential VMT per capita metric. The proposed GPU is projected to have a daily residential VMT per capita of 16.4, which is 7.9 percent below the 2021 base year Citywide average (17.8 residential VMT per capita). This does not meet the City's significance threshold of being 15 percent or better than the base year. However, for the other VMT metrics, the high-range buildout scenario is 15 percent or better for work VMT per employee and the total VMT per service population. The high-range buildout scenario results in a larger net increase in total number of households when compared to the low-range buildout scenario, and, given a proportion of the multifamily housing and accessory dwelling units (ADUs) would be built in low-VMT efficient areas (i.e., outside of the commercial district TAZ), this results in a significant VMT impact for the residential VMT per capita metric. Additionally, with the majority of the high-range buildout scenario housing allocated to the Commercial District, the work VMT per employee is no longer an impact given the model's improved jobs-housing balance, along with overall growing trends towards more telecommuting.

Conclusion

Given that both buildout scenarios do not meet the City's significance threshold for the residential VMT per capita metric, and the low-range buildout scenario does not meet the City's significance threshold for the work VMT per employee metric, the proposed GPU would be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be significant.

Representative Projects

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in significant impact related to residential VMT, the representative projects themselves would be inconsistent with CEQA Guidelines Section 15064.3(b) given (1) the City's overall development pattern, (2) the likelihood for personal automobile use to remain the dominant mode of transportation choice in the City through 2040; and (3) that the City is geographically isolated from most major employment centers in the Los Angeles Area, with transit and Transportation Demand Management (TDM) options to get to places of employment being limited and often very time-intensive, which results in a significant number of automobile trips to be irreplaceable with other transportation modes. Therefore, impacts of the representative projects related to VMT would also be considered significant.

Mitigation Measures

The types of mitigation that affect VMT are those that reduce the number of single-occupant vehicles generated by a project. This can be accomplished by changing the land uses being proposed or by implementing TDM strategies, which are reductions available from certain types of project site modifications, programming, and operational changes. The effectiveness of identified TDM strategies is based primarily on research documented in the 2010 California Air Pollution Control Officers Association (CAPCOA) publication, *Quantifying Greenhouse Gas Mitigation Measures*.³ For a comprehensive list of available TDM strategies, please refer to the CAPCOA document, which contains detailed equations to apply the TDM reductions given the land use type and built environment context. It should be noted that some TDM strategies have complementary benefits reducing VMT and need to be considered in combination and not individually.

Specific mitigation strategies need to be tailored to the characteristics of each future development project under the proposed GPU, and their effectiveness needs to be analyzed and documented as part of the environmental review process to determine if impacts could be mitigated or if they would remain significant and unavoidable. Given that research on the effectiveness of TDM strategies is continuing to evolve, feasible mitigation measures, including those below, should be considered based on the best data available at the time a project is being considered by the City and documented accordingly in the City's Transportation Assessment Guidelines (TAG).

MM-TRAN-1: The City shall work with future developers of multi-family housing, commercial projects, and mixed-use projects to ensure they provide the following as TDM measures for mitigating VMT:

- ***Provision of Pedestrian Network Improvements:*** Create a connected pedestrian network within the development and connect to nearby destinations.
- ***Construction or Improvements to Bike Facility or Expand Bikeway Network:*** Enhance bicycle network Citywide (or at similar scale), such that a building entrance or bicycle parking is within 200 yards walking or bicycling distance from a bicycle network that connects to at least one of the following: at least 10 diverse uses; a school or employment center, if the project total floor area is 50 percent or more residential; or a bus rapid transit stop, light or heavy rail station, commuter rail station, or ferry terminal.

MM-TRAN-2: For future projects that exceed the VMT significance thresholds shown in Table 4.16-2, or the VMT significance thresholds in place at the time of the application, the City shall require conditions of approval to reduce the project's VMT. In developing such conditions of approval, the City shall minimally consider the following:

- ***Expansion of Car Share Program:*** Implement a car-sharing program to (1) lower vehicle ownership rates to encourage a general shift to non-driving modes and (2) allow people to have on-demand access to a shared fleet of vehicles on an as-

³ California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.

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needed basis as a supplement to trips made by non-single-occupancy vehicle (SOV) modes.

- **Provision of Ridesharing Program:** Provide ride-sharing programs through a multi-faceted approach, such as designating a certain percentage of parking spaces for ride-sharing vehicles or designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles.
- **Implementation of Commute Trip Reduction Program:** Implement a commute trip reduction (CTR) program, which shall include all of the following to be effective:
 - Carpooling encouragement
 - Ride-matching assistance
 - Preferential carpool parking
 - Flexible work schedules for carpools
 - Half-time transportation coordinator
 - Vanpool assistance
 - Bicycle end-trip facilities (e.g., parking, showers, and lockers)

MM-TRAN-3: The City of Rolling Hills Estates shall coordinate with neighboring cities and LA Metro to seek additional transit opportunities and resources in the Planning Area and on the Palos Verdes Peninsula. Should a transit station or similar facility be sought on the Peninsula, the Peninsula Center Commercial District shall be a target location for such a facility to align the City's highest density development with transit opportunities.

Level of Significance After Mitigation

The combination of the strategies identified in **Mitigation Measure MM-TRAN-1** would yield approximately a 1-2 percent VMT reduction for the buildout scenarios. The TDM measures identified in **Mitigation Measure MM-TRAN-2** are primarily targeted at reducing the work VMT per employee metric (or home-based work attraction trips), whereas the VMT impact for both buildout scenarios is for the residential VMT per capita efficiency metric.

The location of the proposed housing and commercial uses would be mainly concentrated in the Commercial District, which is the most efficient location in the City with respect to VMT. To enhance this efficiency, **Mitigation Measure MM-TRAN-3** aims to target transit investments in the Commercial District to align the highest density development in the City with transit opportunities. However, requiring a substantial level of TDM measures for future projects would create a financial impediment for developers to build the number housing units outlined in the buildout scenarios, including the City's required Regional Housing Needs Assessment (RHNA) numbers. After considering all viable TDM strategies to reduce the VMT impact of the proposed GPU under both buildout scenarios, the proposed GPU would still result in a significant and unavoidable VMT impact.

Threshold 4.16(c): Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold 4.16(d): Would the Project result in inadequate emergency access?

Impact Analysis

While Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Commercial District. By focusing development in under-utilized areas of the Commercial District, the proposed GPU relieves pressure to develop in open space and lower density areas to avoid changing the semi-rural and suburban character of well-established neighborhoods in the Planning Area or create incompatible uses. In addition, any future development that is consistent with the allowable land uses in the Commercial District would be consistent with the surrounding development and, given engineering design standards, would not create a geometric design feature that would increase hazards in the Planning Area. Furthermore, access locations for each future development project under the proposed GPU would be designed to comply with City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian safety. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets.

Moreover, goals and policies identified in the proposed GPU, including the Mobility Element, Land Use Element, and Open Space and Recreation Element, address the provision of a safe, multimodal, efficient transportation system (encompassing automobile circulation, pedestrian facilities, bridle trails and mixed-use paths) that meets the current and future needs of the Planning Area, while continuing to recognize the distinct, rural feel of the Planning Area.

Accordingly, implementation of the proposed GPU would not result in increased hazards due to a geometric design feature or incompatible uses or result in inadequate emergency access.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to increased hazards due to a geometric design feature or incompatible uses, the representative projects themselves would not cause any potentially significant impacts related to increased hazards due to a geometric design feature or incompatible uses. In addition, as discussed above, individual development projects, such as the representative projects, would be required to comply with City standards related to access locations and pedestrian safety. Accordingly, the representative projects would result in a less-than-significant impact related to increased hazards due to a geometric design feature or incompatible uses.

Mitigation Measures

Impacts related to increased hazards due to a geometric design feature or incompatible uses were determined to be less than significant. Therefore, no mitigation measures are required.

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Level of Significance After Mitigation

Impacts related to increased hazards due to a geometric design feature or incompatible uses were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.16.2.4 CUMULATIVE IMPACTS

Impact Analysis

Cumulative transportation impacts consider regional population, housing, and employment growth projections prepared by SCAG and found in the 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS,⁴ as well as growth anticipated in the Planning Area. As shown in the analysis above, the proposed GPU would support further implementation of RTP/SCS policies, and, as such, cumulative impacts related to conflict with plans are less than significant.

Development associated with the implementation of the proposed GPU would involve an increase in residential development and a slight decrease in commercial development when compared to existing conditions. As shown in the analysis above, although both the low-range and high-range buildout scenarios would reduce daily VMT in 2040 compared to existing conditions, both buildout scenarios do not meet the City's significance threshold for the residential VMT per capita metric, and the low-range buildout scenario does not meet the City's significance threshold for the work VMT per employee metric. Accordingly, the proposed GPU has been determined to be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be significant. Although the proposed GPU includes numerous goals and policies related to (1) integrating transportation and land use planning to provide mobility options and comfort for pedestrians, bicyclists, equestrians, transit users, and personal vehicles, and (2) providing a balance of high-quality active and passive public open spaces, a regional trail system, and recreation facilities based on community needs, VMT reductions at buildout conditions for the residential VMT per capita metric are substantially lower than the 15-percent minimum threshold. As such, the proposed GPU's contribution to VMT generation in the region would be cumulatively considerable, and cumulative impacts would be considered significant.

Regarding increased hazards and inadequate emergency access, any future development project under the proposed GPU would be consistent with the surrounding development and would not create a geometric design feature that increase hazards in the Planning Area or create inadequate access. As such, cumulative impacts related to increased hazards and inadequate access would be less than significant.

Mitigation Measures

Please refer to **Mitigation Measures MM-TRAN-1 through MM-TRAN-3** above.

⁴ SCAG is in the process of rolling out the 2020-2045 RTP/SCS travel demand model, and, as such, the 2016-2040 RTP/SCS travel demand model was used in this analysis. However, although the 2016-2040 model was used, the socioeconomic and demographic data for the 2021 base year model scenario was interpolated and confirmed with the City for use in the model.

Level of Significance After Mitigation

Cumulative impacts related to conflict with plans, increased hazards, and inadequate access were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

However, as presented above, implementation of **Mitigation Measure MM-TRAN-1** would yield approximately a 1-2 percent VMT reduction for the buildout scenarios, which would not be sufficient to reduce the residential VMT per capita by 15 percent. Therefore, VMT impacts associated with the buildout of the proposed GPU would be cumulatively considerable, and, thus, are considered to be significant and unavoidable.

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4.17 TRIBAL CULTURAL RESOURCES

This section of the PEIR analyzes the potential for implementation of the proposed GPU to impact tribal cultural resources in the City of Rolling Hills Estates and its sphere of influence (Planning Area). The following analysis is based, in part, on the General Plan Update Existing Conditions Report prepared by Dyett & Bhatia. Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) tribal consultation letter correspondences are provided in **Appendix G**.

4.17.1 ENVIRONMENTAL SETTING

4.17.1.1 REGULATORY FRAMEWORK

FEDERAL

National Historic Preservation Act of 1966

Enacted in 1966 and amended most recently in 2014, the National Historic Preservation Act (NHPA) established a partnership between the federal government and state, tribal, and local governments that is supported by federal funding for preservation activities (54 USC Section 100101). The NHPA authorized the expansion and maintenance of the National Register of Historic Places (National Register), provided for the designation of a State Historic Preservation Officer in each state, the designation of state historic preservation review boards, and created the Advisory Council on Historic Preservation (ACHP). The NHPA also set up a mechanism to certify local governments to carry out the goals of the NHPA and assists Native American tribes in preserving their cultural heritage.

National Register of Historic Places

The NHPA is implemented through 36 CFR Part 800, which describes the required process to identify historic properties, including consultation with federally-recognized Native American tribes to identify culturally important resources.

Cultural resources may be considered eligible for listing in the National Register if they possess integrity of location, design, setting, materials, workmanship, feeling and association, and meet one of the following criteria A through D:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Are associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded or may be likely to yield, information important in prehistory or history.

STATE

California Public Resources Code

Archaeological resources are protected pursuant to various State policies and regulations detailed in the California Public Resources Code (PRC). PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites, and identify the

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powers and duties of the Native American Heritage Commission (NAHC). These sections also require notification of the discovery of Native American human remains to the most likely descendant, and provide for the treatment of human remains and associated grave goods. PRC Section 21074 defines tribal cultural resources as described below.

(a) “Tribal cultural resources” are either of the following:

- 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the California Register.
 - B) Included in a local register of historical resources as defined in PRC Section 5020.1(k).
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying the criteria set forth in PRC Section 5024.1(c) for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in PRC Section 21083.2(g), or a “nonunique archaeological resource” as defined in PRC Section 21083.2(h) may also be a tribal cultural resource if it conforms with the criteria of Section 21083.2(a).

California Register of Historical Resources (California Register)

According to PRC Section 5020.1(j), a historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. The California Register was established as an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change pursuant to PRC Section 5024.1(a). Criteria for listing a resource in the California Register were developed to be in accordance with the established criteria for listing in the National Register. According to PRC Sections 5024.1(c)(1)–(4), a resource is considered historically significant if it meets any of the following criteria:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- 2) Is associated with the lives of persons important in our past.
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

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Historical resources eligible for the California Register must also retain sufficient integrity as defined in California Code of Regulations (CCR) Title 14, Division 3, Chapter 11.5, Section 4852(c). According to 14 CCR, Division 3, Chapter 11.5, Section 4852(d)(2), a resource may be considered for listing in the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance. Additionally, pursuant to PRC 5024.1(d)(2), resources listed in, or formally determined eligible for listing in the National Register are automatically listed in the California Register, as well as California Registered Historical Landmarks numbers 770 onward.

California Health and Safety Code

The discovery of human remains is regulated by the California Health and Safety Code Section 7050.5, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation until the coroner has determined that the remains are not subject to...provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and...has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Senate Bill 18

Senate Bill (SB) 18, signed into law in 2004, requires that local governments, such as cities and counties, notify and consult with the NAHC and California Native American tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places. Cities and counties must notify California Native American tribes that the NAHC has identified as having traditional lands located within the city or county boundaries, of proposed general plans, general plan amendments, specific plans, and specific plan amendments. As part of the planning process, California Native American tribes must be given the opportunity to consult with the lead agency for the purpose of identifying, preserving, and mitigating impacts to cultural places.

Assembly Bill 52

Assembly Bill (AB) 52, which was signed into law in 2014 and took effect July 1, 2015, incorporates tribal consultation and analysis of impacts to tribal cultural resources into the CEQA process. AB 52 requires tribal cultural resources be analyzed just as other CEQA topics and establishes a consultation process for lead agencies and California tribes. Projects that require a Notice of Preparation of an EIR or Notice of Intent to adopt a Negative Declaration or Mitigated Negative Declaration are subject to AB 52. A significant impact on a tribal cultural resource is considered a significant environmental impact, requiring feasible mitigation measures.

According to PRC Sections 21074(a)(1) and (2), tribal cultural resources must have certain characteristics:

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1. Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources.
2. The lead agency, supported by substantial evidence, chooses to treat the resources as a tribal cultural resource.

LOCAL

The current (1992) Rolling Hills Estates General Plan Conservation Element includes goals and policies that address protection of archaeological resources. These applicable goal and policies are included below.

Goal 3: Promote the preservation of cultural, historical and natural resources within the City.

Policy 3.1: Implement General Plan guidelines for the protection of sites of paleontological, archaeological, historical or culturally valuable significance.

4.17.1.2 EXISTING CONDITIONS

ETHNOGRAPHIC SETTING

At the beginning of the historic period, the Planning Area is understood to be within the ancestral territory of the Gabrieliños although no Gabrieliño villages are known to be within the Planning Area. The place name *Haraasnga* is located approximately 2.5 miles south of the Planning Area.¹ The Gabrieliño Indians are thus named because of their association with the Mission San Gabriel Arcángel, located approximately 28 miles northeast of the Planning Area. Generally, their territory included all of the Los Angeles Basin; parts of the Santa Ana and Santa Monica Mountains; along the coast from Aliso Creek in the south to Topanga Canyon in the north; and San Clemente, San Nicolas, and Santa Catalina Islands.

The Gabrieliño spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrieliño shared this language with their neighboring groups to the south and east.²

Groups of Gabrieliño lived in villages that were autonomous from other villages. Each village had access to hunting, collecting, and fishing areas.³ Villages were typically located in protected coves or canyons near water. Acorns were the most important food for the Gabrielino although the types and quantity of different foods varied by season and locale. Other important sources of food were grass and many other seed types, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals.

Typically, Gabrieliño women gathered and men hunted, although work tasks often overlapped. Each village had a chief who controlled religious, economic, and warfare authorities. The chief had an

¹ McCawley, W., *The First Angelinos: The Gabrielino Indians of Los Angeles*, 1996.

² Bean, L.J. and C.R. Smith, Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549; Shipley, W.F., Native Languages of California, In *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 80-90.

³ Bean, L.J. and C.R. Smith, Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549.

4.17 TRIBAL CULTURAL RESOURCES

assistant and an advisory council who assisted in important decisions and rituals. Each of these positions was hereditary being passed down from generation to generation.⁴ According to mapping of Gabrieliño villages undertaken by McCawley, no known villages were located within the Planning Area.⁵ The two nearest Gabrieliño villages, which may be composed of large areas rather than just a single location, are *Haraasnga* and *Toveemonga*, approximately 2.5 miles and 3 miles, respectively, to the south of the Planning Area. In addition, the Kirkman-Harriman Pictorial and Historical Map of Los Angeles does not identify any Gabrielino villages within the Planning Area.⁶

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Section 4.4, Cultural Resources, of this PEIR, describes the results of a California Historical Resources Information System records search that was conducted on June 22, 2021 at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The records search indicated 36 previous cultural resources studies have been conducted within the Planning Area and identified 16 previously recorded cultural resources within the Planning Area, 11 of which are prehistoric archaeological resources and one which is a multi-component resource consisting of a prehistoric site and a historic-period water reservoir. None of these resources have been identified as tribal cultural resources.

NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

The City requested a Sacred Lands File search of the Planning Area and an SB 18 tribal consultation list from the NAHC on November 27, 2017. The NAHC replied on December 5, 2017 indicating negative results for the Sacred Lands File search and identified five Native American representatives from the following Native American tribes with traditional lands or cultural places located within the Planning Area boundaries:

- Chairperson Andrew Salas, Gabrieleno Band of Mission Indians – Kizh Nation
- Chairperson Anthony Morales, Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Chairperson Sandonne Goad, Gabrielino/Tongva Nation
- Chairperson Robert Dorame, Gabrielino Tongva Indians of California Tribal Council
- Charles Alvarez, Gabrielino-Tongva Tribe

TRIBAL CONSULTATION

In accordance with AB 52 and SB 18 requirements, the City sent letters via certified mail to California Native American tribal representatives that have requested project notifications from the City and/or that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area, as identified in **Table 4.17-1** below. The letters included maps and a description of the proposed GPU, and inquired if the tribe would like to consult with the City regarding the proposed GPU and the potential to impact any tribal cultural resources. The City followed up with the tribal representatives a week later via email. Results of the City's outreach efforts are summarized in **Table 4.17-1**.

⁴ Bean, L.J. and C.R. Smith, Gabrielino, in *California*, Handbook of North American Indians, Vol. 8, 1978, edited by R.F. Heizer, pp. 538-549.

⁵ McCawley, W., *The First Angelinos: The Gabrielino Indians of Los Angeles*, 1996.

⁶ Kirkman, G.W. Kirkman-Harriman Pictorial and Historical Map of Los Angeles County, 1938.

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**Table 4.17-1
AB 52 and SB 18 Native American Tribal Outreach**

Native American Tribal Representative	Notification Method	Response to City Notification Letter
Andrew Salas, Chairperson Gabrieleño Band of Mission Indians – Kizh Nation	May 12, 2021, certified mail	The tribe indicated it would only need to consult with the City if the proposed GPU includes ground disturbance. Communication between the City and the tribe has been completed.
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	May 12, 2021, certified mail	No response
Sam Dunlap, Cultural Resources Director Gabrielino/Tongva Nation	May 12, 2021, certified mail	No response
Sandonne Goad, Chairperson Gabrielino/Tongva Nation	May 12, 2021, certified mail	No response
Robert Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council	May 12, 2021, certified mail	No response
Charles Alvarez, Tribal Chairman Gabrielino-Tongva Tribe	May 12, 2021, certified mail	No response
Jairo Avila, Tribal Historic and Cultural Preservation Officer (THCPO) Fernandeño Tataviam Band of Mission Indians	May 12, 2021, certified mail	Responded via phone on May 19, 2021 and requested a copy of cultural resources studies prepared for the Project. The City Planning Manager replied on May 19, 2021 (stated that the studies had been requested and when available, they would be shared) and provided Mr. Avila the CHRIS records search results via email on July 27, 2021.
John Valenzuela, Chairperson San Fernando Band of Mission Indians	May 12, 2021, certified mail	No response
Donna Smith Yocum, Chairwoman San Fernando Band of Mission Indians	May 17, 2021, certified mail	No response
Joseph Ontiveros, Cultural Resources Director Soboba Band of Luiseño Indians	May 12, 2021, certified mail	No response
Michael Mirelez, Cultural Resources Coordinator Torres Martinez Desert Cahuilla Indians	May 12, 2021, certified mail	No response
Source: SCCIC, Records Search Results for the Rolling Hills Estates GPU Project, June 22,2021.		

Native American archaeological resources in the region have been found near sources of water, including perennial and intermittent streams and springs, on mid-slope terraces and elevated knolls above the flood plain, and near ecotones and other productive environments. The Planning Area contains several perennial and intermittent streams, mid-slope terraces, and ecotones. Given the similarity of these environmental factors, coupled with the number of known habitation sites in the area, there is a high likelihood that unrecorded Native American archaeological sites exist within the Planning Area.⁷

⁷ Dyett & Bhatia, Rolling Hills Estates General Plan 2040 Existing Conditions Report, January 2018.

4.17.2 IMPACT ANALYSIS

4.17.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on tribal cultural resources based on the thresholds of significance identified in CEQA Guidelines Appendix G. Based on these criteria, an impact on tribal cultural resources is considered significant if implementation of the proposed GPU would:

Threshold 4.17(a): Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- (i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k),***
- (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

4.17.2.2 METHODOLOGY

This analysis evaluates anticipated changes in the physical environment resulting from the proposed GPU against the thresholds of significance identified above, to determine if direct or indirect changes from existing conditions would constitute potentially significant impacts to tribal cultural resources. Project changes are described and potential impacts, if any, are identified under each impact discussion. Where impacts would be considered potentially significant, mitigation measures are identified to reduce impacts to a less-than-significant level.

4.17.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.17(a): Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- (i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?***
- (ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c)? (In applying the criteria***

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set forth in PRC Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe)

Impact Analysis

No known tribal cultural resources that are listed in or eligible for listing in the California Register or a local register of historical resources are present within the Planning Area. No tribal cultural resources that could be impacted by the proposed GPU have been identified by the City through the SB 18 or AB 52 process with traditionally geographically affiliated California Native American tribes, or other cultural resources identification efforts.

The proposed GPU does not propose any development in and of itself but is a regulatory document that sets the framework for future development and redevelopment in the Planning Area. Because various prehistoric archaeological sites have been identified in the Planning Area, the area is considered potentially sensitive for tribal cultural resources, which could be identified during analysis and CEQA review of future projects. Future development and redevelopment projects must be analyzed on a project-specific basis for conformance with the proposed GPU and other local, State, and federal requirements, including CEQA and the CEQA Guidelines. Ground-disturbing activities (e.g., excavation, grading, vegetation removal, and construction) associated with future development and redevelopment projects allowed under the proposed GPU would have the potential to unearth, damage, and/or destroy known or unknown tribal cultural resources and have the potential to result in adverse impacts. Therefore, impacts to tribal cultural resources would potentially be significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a potentially significant impact on tribal cultural resources due to the potential inadvertent discovery of known or unknown tribal cultural resources during ground disturbance at a development site, future development activity, such as the representative projects, may cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, the potential for inadvertent discoveries of sensitive tribal cultural resources would be considered a significant impact. Accordingly, the representative projects would result in a potentially significant on tribal cultural resources.

Mitigation Measures

Please see **Mitigation Measures MM-CUL-4** through **MM-CUL-7** in Section 4.4, Cultural Resources, of this PEIR. No additional mitigation measures beyond these are required.

Level of Significance After Mitigation

Future projects proposed in accordance with the proposed GPU would be required to conduct an archaeological resources assessment and archaeological survey to determine whether the development site has high, moderate, or low sensitivity for archaeological resources, including tribal cultural resources (**Mitigation Measure MM-CUL-4**). If archaeological resources are discovered, **Mitigation Measure MM-CUL-5** details additional archaeological testing that shall be conducted to determine significance, and **Mitigation Measures MM-CUL-6** and **MM-CUL-7** require pre-construction training and monitoring if the development site is determined to have high

4.17 TRIBAL CULTURAL RESOURCES

and moderate sensitivity, respectively. Implementation of the recommended mitigation measures and adherence to applicable federal, State, and local regulations would reduce potential impacts of the buildout of the proposed GPU on tribal cultural resources; however, the potential loss of tribal cultural resources may not be adequately mitigated through data recovery and collection methods, as the value of a tribal cultural resource lies in cultural values and religious beliefs of associated tribes. Since significant impacts to tribal cultural resources from future projects building out the Planning Area under the proposed GPU cannot be precluded, impacts are considered significant and unavoidable.

4.17.2.4 CUMULATIVE IMPACTS

Impact Analysis

There are no known tribal cultural resources within the Planning Area, but it is possible that unknown tribal cultural resources could exist within the Planning Area. Future development and redevelopment projects allowed by the proposed GPU would have the potential to result in a cumulative impact associated with the loss of unknown tribal cultural resources through ground-disturbing activities that could cause substantial adverse change in the significance of tribal cultural resources. These projects would be regulated by applicable federal, State, and local regulations and would be subject to Mitigation Measures **MM-CUL-4** through **MM-CUL-7**. However, the potential loss of tribal cultural resources on a regional level may not be adequately mitigated through data recovery and collection methods specified in these mitigation measures as the value of a tribal cultural resource lies in cultural values and religious beliefs of associated tribes. Therefore, cumulative impacts to tribal cultural resources would potentially be significant.

Mitigation Measures

Please refer to **Mitigation Measures MM-CUL-4** through **MM-CUL-7** in Section 4.4, Cultural Resources, of this PEIR. No additional mitigation measures are required.

Level of Significance After Mitigation

Implementation of Mitigation Measures **MM-CUL-4** through **MM-CUL-7** would reduce the potential for adverse impacts on tribal cultural resources both individually and cumulatively; however, there is the potential for significant impacts because data recovery and collection methods specified as mitigation may not reduce the impact to resources to a less-than-significant level. Potential impacts and mitigation would need to be evaluated on a project-by-project basis. Future development projects allowed under the proposed GPU, in combination with cumulative development projects in the surrounding cities in the Palos Verdes Peninsula, would have the potential to result in a significant cumulative impact to tribal cultural resources. Therefore, cumulative impacts to tribal cultural resources are considered significant and unavoidable.

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4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

The section of the PEIR provides a discussion of the potential impacts to water supplies and infrastructure associated with the implementation of the proposed GPU. This section includes a description of the existing water demand and facilities serving the Planning Area that would be potentially affected by the proposed GPU's implementation.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes potential impacts on water facilities that may result from the proposed GPU. Impacts to water supplies are addressed in terms of potential effects involving increased water demand.

4.18.1 ENVIRONMENTAL SETTING

4.18.1.1 REGULATORY FRAMEWORK

FEDERAL

The Safe Drinking Water Act (SDWA) authorizes the U.S. Environmental Protection Agency (USEPA) to establish national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The USEPA, states, and water systems then work together to ensure that these standards are met. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap. SDWA applies to every public water system in the nation.

STATE

California Water Plan

The California Water Plan is the State's blueprint for integrated water management and sustainability. The California Department of Water Resources (DWR) updates the plan approximately every five years. The California Water Plan is a Statewide strategic plan for water management through the year 2050. The plan includes a framework and resource management strategies promoting two major initiatives: (1) integrated regional water management that enables regions to implement strategies appropriate for their own needs and helps them become more self-sufficient; and (2) improved Statewide water management systems that provide for upgrades to large physical facilities, such as the State Water Project (SWP), and Statewide management programs essential to California's economy.

California Code of Regulations Title 24, Parts 5 and 11

In accordance with the California Code of Regulations (CCR) Title 24, Part 5, the California Plumbing Code, establishes efficiency standards, such as maximum flow rates, for all new federally regulated plumbing fittings and fixtures, including showerheads and lavatory faucets. Additionally, CCR Title 24, Part 11, the California Green Building Standards Code, commonly referred to as the CALGreen Code, establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all flush toilets are limited to 1.28 gallons per flush, and urinals

4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at: 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads; 1.2 gpm at 60 psi for residential lavatory faucets; and 1.8 gpm at 60 psi for kitchen faucets.

Urban Water Management Planning Act

In 1983, the California legislature enacted the Urban Water Management Planning Act (UWMPA), creating Water Code Sections 10610–10656. The UWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 AF of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The UWMPA describes the contents of urban water management plans, as well as how urban water suppliers should adopt and implement the plans. It is the UWMPA's intention to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

Senate Bill 610

A key provision in Senate Bill (SB) 610 requires that projects of certain sizes subject to the California Environmental Quality Act (CEQA) supplied with water from a public water system be provided a specified water supply assessment (WSA), except as specified in the law. WSAs are required under SB 610 for projects that include 500 units of residential development (or would demand an amount of water equivalent to, or greater than, the amount of water required by a project with 500 dwelling units) and for projects that would increase the number of the public water system's existing service connections by 10 percent. In accordance with Water Code Section 10912, projects subject to CEQA requiring submittal of a WSA include the following:

- Residential developments of more than 500 dwelling units;
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotels, motels, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plant, or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;
- Mixed-use projects that include one or more of the above-identified categories; or
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project.

None of the representative projects considered in this PEIR would involve a residential development of more than 500 dwelling units, a hotel of having more than 500 rooms, or mixed-use development including one or more of the identified categories.

Assembly Bill 901

Assembly Bill (AB) 901 requires urban water management plans to include information relating to the quality of existing sources of water available to an urban water supplier over given time periods and the manner in which water quality affects water management strategies and supply.

4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

Assembly Bill 1420

Effective January 1, 2009, AB 1420 amended the UWMPA to require that water management grants or loans made to urban water suppliers and awarded or administered by DWR, the State Water Resources Control Board, or the California Bay-Delta Authority or its successor agency be conditioned on implementation of the water demand management measures.

Senate Bill x7-7 (Chapter 4, Statutes of 2009)

SBx7-7, the Water Conservation Act of 2009, required the State to achieve a 20-percent reduction in urban per capita water use by December 31, 2020. The responsibility for this conservation falls to local water agencies, which must increase water use efficiency through promotion of water conservation standards that are consistent with the California Urban Water Conservation Council's best management practices (BMPs). Each urban retail water supplier was also required to develop urban water use targets and an interim urban water use target by July 1, 2011, based on the alternative methods set out in the 2009 act. The agencies were required to meet those targets by the 2020 deadline.

The Cal Water Palos Verdes District actual gallons per capita per day (GPCD) in 2020 is 229 gallons versus a SBx7-7 target of 223 gallons. Therefore, because the 2020 actual GPCD is greater than the target GPCD, the Palos Verdes District is not in compliance with SB X7-7 requirements for individual water supplier targets. However, the Palos Verdes District is a member of the Cal Water South Coast Regional Alliance, which includes the Dominguez, East Los Angeles, Hermosa Redondo, and Westlake Districts. In aggregate, the South Coast Regional Alliance has an actual 2020 GPCD of 139 GPCD with a SBx7-7 target of 161 GPCD, meaning that the Alliance achieved its target reduction for 2020.

State Model Water Efficient Landscape Ordinance

The State Model Water Efficient Landscape Ordinance (MWELo) promotes the efficient use of water in new or retrofitted landscapes by establishing irrigation system efficiency standards, which include greywater usage, on-site stormwater capture, limiting the percentage of turf planted in new landscapes, and reporting on the implementation and enforcement of the ordinance by local agencies. Local agencies are required to either adopt the MWELo or adopt a local ordinance, which must be at least as effective in conserving water as MWELo. Section 17.59.010 of the Rolling Hills Estates Municipal Code (RHEMC), as discussed below, implements the provisions of the MWELo at the local level.

LOCAL

California Water Service (Cal Water) 2020 Urban Water Management Plan, Palos Verdes District

In June 2021, Cal Water adopted the 2020 Urban Water Management Plan (2020 UWMP) for the Palos Verdes District (District), which includes the Planning Area. The 2020 UWMP provides a broad perspective on a number of water supply issues and is a planning tool that generally guides water supply and resource management in the Palos Verdes Peninsula area. The 2020 UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands and water supplies and the resulting reliability during a set of defined water supply conditions over a 20-year planning horizon. The 2020 UWMP also describes the actions the District is taking to promote water conservation, both by the District itself and by its customers,

4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

and includes a plan to address potential water supply shortages, such as drought or other impacts to supply availability. The UWMP is updated every five years, as required by the Urban Water Management Planning Act.

In the event of a water shortage, such as a drought or a water supply interruption, the District's 2020 UWMP includes a Water Shortage Contingency Plan (WSCP), which outlines specific policies and actions to be implemented at various shortage level scenarios. The primary objective of the WSCP is to ensure that the District has in place the necessary resources and management responses needed to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during a water supply shortage. The WSCP includes six levels to address water shortage conditions ranging from 10 percent water shortage to greater than 50 percent shortage by identifying a suite of demand mitigation measures for the District to implement at each level, and identifying procedures for the District to annually assess whether or not a water shortage is likely to occur in the coming year.

West Basin Municipal Water District 2020 Urban Water Management Plan

West Basin Municipal Water District (WBMWD) was created in 1947 to reduce groundwater overpumping and to make local water supplies more reliable through new sources of water. The WBMWD is a wholesale potable water provider to 17 cities, including those in the Planning Area.¹ Specifically, Cal Water purchases imported water for the Palos Verdes District from the WBMWD, which is a member agency of the Metropolitan Water District of Southern California (MWD). The 2020 UWMP prepared by WBMWD provides a detailed summary of present and future water resources and demands within WBMWD's service area. It also assesses WBMWD's water resource needs. Specifically, the UWMP provides water supply planning for a 25-year planning period in five-year increments and identifies water supplies needed to meet existing and future demands. The demand analysis identifies supply reliability under three hydrologic or rainfall conditions: an average (or normal) year, a single-dry year, and multiple-dry years.

Rolling Hills Estates Municipal Code (RHEMC)

RHEMC Section 17.59.010 sets forth the landscaping and irrigation standards for all new development in the City and codifies the implementation of the State MWEL. Specifically, the purpose of RHEMC Section 17.59.010 is to encourage the efficient use of water through appropriate low water-using plant materials, water-conserving irrigation design, and regular maintenance of landscaped areas. Further, the intent of RHEMC Section 17.59.010 is to encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased without a decline in the quality or quantity of landscapes.

RHEMC Chapter 13.04, Water Conservation and Water Shortage Management Plan, establishes water conservation regulations that apply to all uses within the City. These mandatory water conservation measures include the following:

- A. Excessive Water Flow or Runoff. Watering in a manner that results in overspray or excessive runoff onto paved or hardscaped areas is prohibited.
- B. Water Fountains and Decorative Water Features. Water fountains and decorative water features must have a water recirculation system.

¹ West Basin Municipal Water District, 2020 Urban Water Management Plan, June 28, 2021.

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- C. No Watering After Measurable Rainfall. Watering any lawn or landscape area at any time within forty-eight hours after a measurable rainfall is prohibited. For the purposes of this regulation, a “measurable rainfall” means at least 0.25 inch of rainfall over a 24-hour period based on the rainfall precipitation map maintained by the Los County Department of Public Works, Water Resource Division.
- D. Repair of Leaks. No person may permit or cause to permit the excess use, loss or escape of water through breaks, leaks, or other malfunctions in the water user’s plumbing or distribution system for any period of time after such escape of water should have reasonably been discovered or corrected. All leaks must be repaired upon discovery but no later than within 72 hours of notification by the City or the City’s water retailer unless other arrangements are made with the City or the City’s water retailer.
- E. Washing Vehicles. Washing any automobile, truck, van, bus, motorcycle, boat or any other vehicle is restricted to the use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This provision does not apply to a commercial car washing facility.
- F. Washing Hard or Paved Surfaces. Washing of hard or paved surfaces, including sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards or as surface preparation for the application of any architectural coating or painting. All such permitted washing must be done by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, a low-volume, high-pressure cleaning machine, or a low-volume high-pressure waterbroom.

In addition to these permanent water conservation measures, the City has a four-tiered system of additional water conservation measures, which are implemented based on the severity of the water shortage by declaration of City Council.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to the conservation, management, or preservation of natural and cultural resources within the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The General Plan Conservation Element and Public Safety Element’s goals and policies related to water supply conservation are as follows:

Conservation Element

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

Policy 1.6: Participate in management programs established by Los Angeles County for water conservation, liquid and solid waste management, and flood control.

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Public Safety Element

Goal 2: Require that the City's Planning and Engineering Departments to review projects future development in the City.

Policy 2.8: The City will continue to enforce the Water Conservation Ordinance adopted in 1991.

Policy 2.11 Support the development of secondary water supplies for emergency water flow needs in an emergency.

4.18.1.2 EXISTING CONDITIONS

Water service is provided to the Planning Area by Cal Water. Cal Water's Palos Verdes District is part of the Rancho Dominguez District, which encompasses the service areas of the Hermosa-Redondo, Dominguez, and Hawthorne systems. Cal Water's Rancho Dominguez District purchases imported Colorado River and SWP water supplies to serve the domestic water system on the Palos Verdes Peninsula. Cal Water does not have any groundwater wells within the Palos Verdes District.²

The Palos Verdes District has a service population of approximately 70,400 people located in the Cities of Rolling Hills Estates, Rancho Palos Verdes, Palos Verdes Estates, and Rolling Hills and delivered 18,067 acre-feet (af) of water (or about 16 million gallons per day) to 24,097 municipal connections in 2020 through 345 miles of pipeline. This includes the pipeline infrastructure upgraded as part of the 2020 Palos Verdes Peninsula Water Reliability Project, which involved installation of seven miles of new pipeline and construction of a new pumping station on a separate electrical grid along Crenshaw Boulevard, between Silver Spur Road and Palos Verdes Drive North.³

The District delivers water to residential, commercial, and governmental customers; however, residential customers account for most of the District's service connections and 77 percent of its water uses. Non-residential water uses account for 16 percent of total demand, and distribution system losses account for 7 percent.

The 2020 UWMP includes current and projected service area population, which is based on data from the Southern California Association of Governments (SCAG), which show that population is anticipated to increase from 70,363 in 2020 to 73,256 in 2045. The stock of housing in the District is older than for California as a whole. The 2020 UWMP states that only 6.4 percent of homes were built after 1990 compared to 25.5 percent for all of California. Homes built after 1990 are more likely to have plumbing fixtures that are compliant with State and federal water and energy efficiency standards.

While the District delivered 18,067 af of water to residential, commercial, and government customers in 2020, the District estimates that water demand will decrease by 2025. Specifically, the District states that average water use per service is adjusted over the 2020-2045 forecast period to account for anticipated reductions in water use due to the ongoing effects of appliance standards and plumbing codes, the District's conservation and customer assistance programs,

² California Water Service, 2020 Urban Water Management Plan, Palos Verdes District, June 2021.

³ California Water Service, 2020, Largest Water Infrastructure Improvement Project to Date Completed in Palos Verdes Peninsula, <https://www.calwater.com/latest-news/2020-1013-pv-pipeline/>, accessed September 22, 2021.

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and growth in the inflation-adjusted cost of water service and household income. Projected demand of potable water use within the District is presented in **Table 4.18-1** below.

Table 4.18-1
Projected Water Use within the Cal Water Palos Verdes District

Use Type	Projected Water Use (af)				
	2025	2030	2035	2040	2045
Single Family	13,392	13,458	13,618	13,720	13,924
Multi Family	606	605	607	610	616
Commercial	2,044	1,998	1,997	2,003	2,013
Government	645	628	625	625	627
Other Potable	27	27	27	27	27
Landscape	1	1	1	1	1
Losses	1,158	1,065	1,074	1,083	1,092
Total	17,873	17,782	17,950	18,070	18,300
Notes: af. = acre-feet					
Source: Cal Water, 2020 UWMP, June 2021.					

As stated above, Cal Water does not operate any groundwater wells on the Palos Verdes Peninsula as the current water supply for customers of the District is purchased, imported water. As stated above, Cal Water purchases imported water from the WBMWD, which is a member agency of the MWD. This water is imported into Southern California through MWD’s connections to the SWP and the Colorado River. The WBMWD acts as a secondary wholesale water agency, purchasing the water from MWD and reselling it to Cal Water for use within the District. By approximately 2030, the District plans to provide limited quantities of recycled water, but this will be initially limited to supplying 194 af of water annually for irrigation purposes at the Palos Verdes Golf Course.⁴ While only a limited amount of recycled water will be provided to the District, the WBMWD is increasing production of recycled water for delivery to commercial, municipal, and industrial clients, as well as for use in replenishment of the West Coast Groundwater Basin aquifer. Specifically, retail deliveries of recycled water within the WBMWD are anticipated to increase from approximately 15,000 af per year in 2020 to 30,000 af per year in 2030.⁵ Increasing the availability of recycled water within the WBMWD will alleviate pressure on potable water demand and allow potable water to be reserved for drinking uses with recycled water prioritized for other uses, such as the golf course irrigation example provided above. For context, the WBMWD 2020 UWMP estimates that SCAG population growth forecasts within the 2020-2045 Regional Transportation Plan/Sustainable Communities Assessment for southern California would result in an estimated 4,550 af per year increase of water demand from 2020 to 2025. This growth assumes a relatively high growth rate associated with the Regional Housing Needs Assessment (RHNA) that is mandated by State housing law as part of the periodic process of updating local housing elements of the General Plan. Therefore, a planned doubling of recycled water supplies (from 15,000 af per year to 30,000 af per year) delivered to end users between 2020 and 2030 within the WBMWD

⁴ California Water Service, 2020 Urban Water Management Plan, Palos Verdes District, June 2021.

⁵ West Basin Municipal Water District, 2020 Urban Water Management Plan, June 28, 2021.

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could meaningfully alleviate pressures on water demand associated with projected new development.

The 2020 UWMP states that, based on projections by MWD and WBMWD, purchased water will be sufficient to serve all demand through 2045 under all hydrologic conditions. Similarly, recycled water supplies, discussed above, are expected to be available to meet recycled water demands under all hydrologic conditions. Therefore, the projected water supply amounts in the UWMP for years 2025 through 2045 equal the projected demand values provided in **Table 4.18-1**, as is presented in **Table 4.18-2**, below.

**Table 4.18-2
Projected Water Supplies for the Cal Water Palos Verdes District**

Water Supply	Projected Water Supply (af)				
	2025	2030	2035	2040	2045
Purchased or Imported Water	17,873	17,782	17,950	18,070	18,300
Recycled Water	0	194	194	194	194
Total	17,873	17,976	18,144	18,264	18,494
Notes: af. = acre feet Source: Cal Water, 2020 UWMP, June 2021.					

The WBMWD’s 2020 UWMP states that it will be able to serve 100 percent of projected demands in normal, single dry, and multiple dry years. Additionally, the Metropolitan Water District of Southern California, which manages the SWP water supplying the WBMWD states that the region can provide reliable sources of water under conditions similar to the single driest year in the last 94 years (1977), as well as under conditions similar to the five consecutive driest years in that same timeframe (1988 through 1992).⁶ The Metropolitan Water District of Southern California made this determination while assuming a greater future water demand from the WBMWD than the WBMWD’s 2020 UWMP projects for future use, resulting in a conservative analysis. Therefore, given that water management agencies and wholesalers supplying the District (i.e., the Metropolitan Water District of Southern California and WBMWD) project that there would be sufficient supplies of water to serve future demand, the District determined that, under all hydrologic conditions, purchased water supplies (in combination with the future recycled supplies discussed previously) will fully serve the District’s future potable demand in single dry-year and multiple dry-year scenarios.

4.18.2 IMPACT ANALYSIS

4.18.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU’s impacts on water supply and facilities based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact on water facilities is considered significant if implementation of the proposed GPU would:

⁶ West Basin Municipal Water District, 2020 Urban Water Management Plan, Section 6.2.4, June 28, 2021.

4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

Threshold 4.19(a): Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects.

Threshold 4.19(b): Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

4.18.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would exceed the capacity of existing water systems and/or result in the relocation or construction of new or expanded water conveyance infrastructure. The methodology for determining the significance of impacts on water facilities compares existing conditions to the expected future water demand under the proposed GPU.

4.18.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.19(a): Would the Project require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

Threshold 4.19(b): Would there be insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Impact Analysis

Regarding the need for relocation or construction of new or expanded water facilities, the majority of development associated with buildout of the proposed GPU would involve intensification of land uses within the Commercial District, which is an urbanized area that is served by existing water infrastructure. As such, future development within the Commercial District would connect to existing Cal Water infrastructure and would not involve extension of water service to currently unserved areas. Further, Cal Water regularly maintains and upgrades water infrastructure on the Palos Verdes Peninsula, as needed, such as replacing aging water mains and hydrants, as well as service connections. One notable example includes the Palos Verdes Water Reliability Project, discussed above in Subsection 4.18.1.2, which involved installation of seven miles of new pipeline and construction of a new pumping station. A more recent project involved replacement of approximately 4,800 feet of 6-inch water main, 87 customer service connections, and six aging fire hydrants in the Montecillo neighborhood in the northeastern portion of the Planning Area in the summer of 2021.⁷ Therefore, given (1) that development associated with buildout of the proposed GPU would occur incrementally through 2040 and would be concentrated in previously developed areas already served by water infrastructure, (2) that Cal Water regularly maintains and upgrades water infrastructure as part of their normal operations, and (3) the relatively small increase in total water demand associated with buildout of the proposed GPU, the proposed GPU would not require or result in the relocation or construction of new or expanded water facilities, and impacts would be less than significant.

⁷ California Water Service, Cal Water to Replace Aging Infrastructure in Rolling Hills Estates, <https://www.calwater.com/latest-news/2021-0618-rhe-mrp/>, June 18, 2021.

4.18 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY

Buildout of the proposed GPU could result in the development of additional residential uses, comprising primarily of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area. Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Commercial District, where the most intense land uses and most dense development currently occur in the City. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net change in water demand in the Planning Area. The recycling of commercial properties into mixed-use and residential development would result in a net increase in water demand in the Planning Area as estimated using wastewater generation factors for commercial and residential uses. Wastewater generation factors are utilized in this analysis as the proposed GPU's impact on water demand can be assumed to be approximately equal to the proposed GPU's estimated wastewater generation, as discussed in Section 4.19, Utilities and Service Systems—Wastewater, of this PEIR. This is a reasonable method for estimating water demand because the Commercial District where intensification is likely to occur is urbanized, predominantly covered by impervious surfaces and does not include large expanses of irrigated land, such as agriculture land. While there are not large expanses of irrigated land within the Planning Area, landscaping irrigation is already occurring throughout the areas that are proposed for intensification through the proposed GPU. As development occurs within these areas through buildout of the proposed GPU, landscaped areas would either be converted to developed uses, or would be irrigated by systems complying with the most recent water efficiency regulations included within the RHEMC and the California Building Code. As such, irrigation water demand associated with buildout of the proposed GPU would be similar, if not less than existing conditions. Therefore, this analysis focuses only on water demand from plumbing fixtures, which would be captured by wastewater systems because these areas are already developed and buildout of the proposed GPU would not extend water services to previously unserved areas. Further, this approach represents a conservative analysis because wastewater generation rates used to determine the proposed GPU's estimated wastewater generation do not account for water conservation and efficiency requirements mandated by Title 24 building regulations (i.e., the CALGreen building code and California Plumbing Code) or water efficiency requirements within RHEMC Section 17.59.010 (the MWELo). Especially given that existing housing stock within the District is aging (between 87 and 95 percent of the housing stock within the District was constructed prior to 1990 depending on the jurisdiction), it is likely that future water demand of residential land uses within the Planning Area would naturally decrease over time through home renovations and installation of water efficient appliances and fixtures by homeowners.⁸ Similarly, as the proposed GPU would primarily involve intensification of existing land uses within the commercial district, future development would likely involve renovation or replacement of existing structures with new structures that would be required to adhere to updated water efficiency measures related to plumbing fixtures and landscaping irrigation, resulting in a more water efficient building stock.

As further discussed in Section 4.19, Utilities and Service Systems—Wastewater, of this PEIR, and presented in **Table 4.19-1**, wastewater generation within the Planning Area through buildout of the

⁸ California Water Service, 2020 Urban Water Management Plan, Palos Verdes District, June 2021. In Rolling Hills Estates, 87 percent of existing housing was constructed prior to 1990. In Rancho Palos Verdes, over 95 percent of existing housing was constructed prior to 1990. These values are greater than California as a whole, where approximately 74 percent of existing housing was constructed prior to 1990.

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proposed GPU would increase by approximately 99,789 gpd (or approximately 112 af per year) under the low range development scenario and 312,735 gpd (approximately 350 af per year), under the high range development scenario. Therefore, annual water demand resulting from buildout of the proposed GPU is conservatively assumed to be between 112 af per year and 350 af per year. Future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in water demand would occur gradually as additional development occurs in the Planning Area. Additionally, as stated above, these values do not account for water efficient plumbing fixtures and irrigation systems that would be required in new development per State and local building codes and regulations. Furthermore, these increases at buildout of the proposed GPU represent only a small percentage of the total projected water demand for the Palos Verdes District in 2040 (0.6 percent for the low range development scenario and 1.9 percent for the high range development scenario). Therefore, given the relatively small percentage of water demand associated with buildout of the proposed GPU, which would occur gradually through 2040, and given the UWMP's determination that water purchased by the District will be sufficient to serve all water demand within the District through 2045 under all hydrologic conditions, there would be sufficient water supplies available to serve development associated with buildout of the proposed GPU during normal, single dry, and multiple dry years. Further, the 2020 UWMP prepared by the WBMWD, states that water supplies would be sufficient to meet projected demand under three hydrologic or rainfall conditions: an average (or normal) year, a single-dry year, and multiple-dry years. Additionally, the 2020 UWMP states that the WBMWD "ensures water reliability for service area residents and businesses through balanced and affordable supply diversification: maximizing water recycling, expanding water efficiency and conservation efforts, desalting brackish groundwater, and evaluating desalinated ocean water."⁹ By increasing the amount of recycled water available over time, as is discussed in Subsection 4.18.1.2, above, making more potable WBMWD water would be available for potable water use from suppliers like Cal Water. For all the reasons discussed above, impacts related to water supply and water facilities would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, water demand associated with the representative projects has already been accounted for in the estimated water demand increase in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on water facilities and water supplies, the representative projects themselves would not cause any potentially significant impacts on water facilities or supplies. In addition, individual development projects, such as the representative projects, would connect to existing water infrastructure and would be required to pay connection charges to Cal Water, as appropriate. Accordingly, the representative projects would result in a less-than-significant impact on water facilities and supplies.

Mitigation Measures

Impacts related to water facilities and supplies were determined to be less than significant. Therefore, no mitigation measures are required.

⁹ West Basin Municipal Water District, 2020 Urban Water Management Plan, page 3-6, June 28, 2021.

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Level of Significance After Mitigation

Impacts related to water facilities and supplies were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.18.2.4 CUMULATIVE IMPACTS

Impact Analysis

The geographic context for this cumulative analysis is the jurisdiction of the Cal Water Palos Verdes District. Future projections of water demand and availability for the District are discussed above along with examples of infrastructure improvements recently undertaken by Cal Water within the District. Since future cumulative development citywide as allowed under the proposed GPU would not result in the need for relocation or construction of new or expanded District facilities or an increase in water demand beyond available supplies provided by the District, and since the 2020 UWMP found that water supplies would be sufficient to meet the service area's projected demand under three hydrologic or rainfall conditions: an average (or normal) year, a single-dry year, and multiple-dry years, the proposed GPU's cumulative impact would be less than significant.

Mitigation Measures

Cumulative impacts to water facilities and supplies were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to water facilities and supplies were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS—WASTEWATER

The section of the PEIR provides a discussion of the potential impacts to wastewater services associated with the implementation of the proposed GPU. This section includes a description of the existing wastewater services for the Planning Area that would be potentially affected by the proposed GPU's implementation.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential wastewater services impacts that may result from the proposed GPU. Impacts to wastewater services are addressed in terms of potential effects involving increased demand for wastewater services.

4.19.1 ENVIRONMENTAL SETTING

4.19.1.1 REGULATORY FRAMEWORK

FEDERAL

The Clean Water Act (CWA) (33 United States Code Section 1251 *et seq.*) is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutants discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. The CWA makes it illegal to discharge pollutants from a point source to the waters of the United States. CWA Section 402 creates the National Pollutant Discharge Elimination System (NPDES) regulatory program. Point sources must obtain a discharge permit from the proper authority. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, which eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by the CWA "pretreatment" program.

STATE

General Waste Discharge Requirements

In May 2006, the State Water Resources Control Board (SWRCB) adopted Statewide General Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program (MRP) for sanitary sewer systems by issuing Order No. 2006-0003 and Order No. 2013-0058EXEC (revised) respectively. The regulations in the order were in response to growing public concern about the water quality impacts of sanitary sewer overflows (SSOs), particularly those that cause

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beach closures, adversely affect other bodies of water, or pose serious health and safety or nuisance problems.

Two major components of the WDRs require the following:

- (1) The owners/operators of publicly owned sewer collection systems, a mile long or greater, must apply for coverage under the WDRs.
- (2) The owners/operators must develop and implement a Sewer System Management Plan (SSMP) specific to the sanitary sewer system.

California Code of Regulations Title 24, Part 11

In accordance with the California Code of Regulations (CCR) Title 24, Part 11, the California Green Building Standards Code, commonly referred to as the CALGreen Code, establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all flush toilets are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at: 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads; 1.2 gpm at 60 psi for residential lavatory faucets; and 1.8 gpm at 60 psi for kitchen faucets.

California Code of Regulations Title 22, Water Recycling Criteria

The Water Recycling Criteria of 22 CCR regulates how treated and recycled water are discharged and used. The standards require the State's Department of Health Services to develop and enforce water and bacteriological treatment standards for water recycling and reuse. Reclaimed water and its reuse are regulated under the Water Recycling Criteria and the Porter-Cologne Water Quality Control Act while effluent treatment standards are set and enforced by the State's nine Regional Water Quality Control Boards (RWQCB) in consultation with the California Department of Public Health. The City of Rolling Hills Estates is located within the jurisdiction of the Los Angeles RWQCB (LARWQCB).

REGIONAL

Given the highly diverse environmental and land use characteristics of regions within the State, region specific water quality regulations are contained in Water Quality Control Plans (Basin Plans) that recognize regional beneficial uses, water quality characteristics, and water quality problems. The LARWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (1) designates beneficial uses for surface and ground waters, (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's antidegradation policy, and (3) describes implementation programs to protect all waters in the region.

In addition, the Basin Plan incorporates (by reference) all applicable State and LARWQCB plans and policies and other pertinent water quality policies and regulations. The Basin Plan is a resource for the LARWQCB and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. The Basin Plan provides valuable information to the public about local water quality issues and is reviewed and updated as

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necessary. Following the Basin Plan adoption by the LARWQCB, the Basin Plan and subsequent amendments are subject to approval by the State Water Resources Control Board (SWRCB), the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (USEPA).

LOCAL

Rolling Hills Estates – Sewer System Management Plan (SSMP)

The City of Rolling Hills Estates Sewer System Management Plan (SSMP) is intended to meet the requirements of the LARWQCB and the Statewide WDRs. The SSMP identifies the following goals for the management, operation, and maintenance of the sewer system and discusses the role of the SSMP in supporting these goals:

1. The City's sanitary sewer collection system is properly operated, maintained, and managed to reduce the frequency and severity of SSOs and their potential impacts on public health, safety, and the environment.
2. When SSOs occur, prompt action is taken to identify, contain, and remove the cause; promptly report the event to appropriate regulatory authorities; and take measures such that the public is adequately and timely notified.
3. All SSOs, system deficiencies, and remedial actions taken are well documented.
4. The City's sewer system operators, employees, contractors, responders, and other agents are adequately trained and equipped to address an SSO event.
5. The City's sewer system is designed, constructed, and funded to provide adequate capacity to convey base and peak flows while meeting or exceeding applicable regulations, laws, and the generally accepted practices relative to sanitary sewer system operation and maintenance.

Palos Verdes Peninsula Enhanced Watershed Management Program (EWMP)

The Palos Verdes Peninsula Enhanced Watershed Management Program (EWMP) was developed through the collaboration among the cities of Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, County of Los Angeles (unincorporated County), and Los Angeles County Flood Control District (LACFCD) to address the water quality priorities for the Palos Verdes Peninsula watersheds and are known as the Palos Verdes Peninsula Watershed Management Group (Peninsula WMG). The EWMP was developed to implement the requirements of the Municipal Separate Storm Sewer System Permit (MS4 Permit) on a watershed scale. Implementation is to be achieved on a watershed basis through customized strategies, control measures, and best management practices (BMPs) to ensure that discharges from the permittees' MS4s (1) achieve applicable water quality based effluent limitations (WQBELs); (2) do not cause or contribute to exceedances of receiving water limitations; and (3) do not include non-storm water discharges that are effectively prohibited. The goal of these requirements is to reduce the discharge of pollutants from MS4s to the maximum extent

4.19 UTILITIES AND SERVICE SYSTEMS—WASTEWATER

practicable.¹ The EWMP incorporates State agency input from various sources on priority setting and implementation issues.

Rolling Hills Estates Municipal Code (RHEMC)

RHEMC Chapter 13.08 adopts the Los Angeles County Sanitary Sewer and Industrial Waste Ordinance (SSIWO) as the City's SSIWO. The SSIWO establishes regulations for sanitary sewers and the deposit of discharge of sewage and other waste matter in the incorporated territory of the County of Los Angeles. More specifically, the SSIWO prohibits illicit discharges into the sanitary sewer system; requires that sewers and connections be properly designed and constructed; and ensures access for maintenance, inspection, or repairs.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to the conservation, management, or preservation of natural and cultural resources within the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The Rolling Hills Estates General Plan Conservation Element (Conservation Element) is a State-mandated element and fulfills the requirements of California Government Code Section 65302(d). The Conservation Element contains the goals and policies regulating public safety issues of concern in the City. These goals and policies provide the basis for Conservation plans and measures, identify standards and programs that increase public awareness concerning the presence and condition of natural and cultural resources to promote their conservation and management.

The Conservation Element empowers the City to regulate the use of certain local resources to prevent their destruction and exploitation and to ensure that conservation efforts are constant and equitable. Conservation includes the regulation of the extent of resource utilization, of the appropriate preservation techniques and of the conduct of activities which affect or preclude the use of resources, including water, air, and biotic resources. The Conservation Element outlines strategies to maintain an ecological balance and improve the quality of life in the City of Rolling Hills Estates.

The Conservation Element goal and policies related to wastewater services are as follows:

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

Policy 1.4: Require that all future developments connect to public sewers to prevent contamination and pollution of the local groundwater.

Policy 1.6: Participate in management programs established by Los Angeles County for water conservation, liquid and solid waste management, and flood control.

¹ Palos Verdes Peninsula Watershed Management Group, Enhanced Watershed Management Program (EWMP), revised April 5, 2019.

4.19 UTILITIES AND SERVICE SYSTEMS—WASTEWATER

Policy 1.8: Inform residents of the environmental concerns regarding air quality, water resources, land, and other ecological resources to solicit cooperation and support in the City’s conservation plans.

Policy 1.10: Environmental impact reports for future projects must address cumulative impacts which will include other projects on the peninsula, downstream traffic, regional air quality, sewage generation, and other environmental constraints of the area.

4.19.1.2 EXISTING CONDITIONS

The Los Angeles County Sanitation Districts (Districts) owns, operates, and maintains the large trunk sewers that form the backbone of the regional wastewater conveyance system. Local collector and/or lateral sewer lines are the responsibility of the jurisdiction in which they are located. The Planning Area is located within the jurisdictional boundaries of the South Bay Cities Sanitation District and District No. 5. According to the Districts, no deficiencies currently exist in the Districts’ facilities serving the Planning Area.²

The City’s sanitary sewer collection system serves a population of more than 8,000 residents and consists of approximately 33.8 miles of gravity sewer lines³ and three pump stations maintained by the City’s Sewer Maintenance Division (SMD), as shown in **Figure 4.17-1**. Most of the sewer lines in the Planning Area are 8-inch vitrified clay pipes (VCP), with 10-inch VCP lines in Crenshaw Boulevard and 8-inch to 15-inch VCP lines in Silver Spur Road. The City’s local sewers discharge into the Districts’ facilities for conveyance, treatment, and disposal.⁴

Wastewater generated by existing uses in the Planning area is treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP has a capacity of 400 million gallons per day (mgd) and currently processes an average flow of 259.6 mgd (approximately 140.4 mgd remaining capacity).⁵

4.19.2 IMPACT ANALYSIS

4.19.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU’s impacts on wastewater facilities based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact on wastewater facilities is considered significant if implementation of the proposed GPU would:

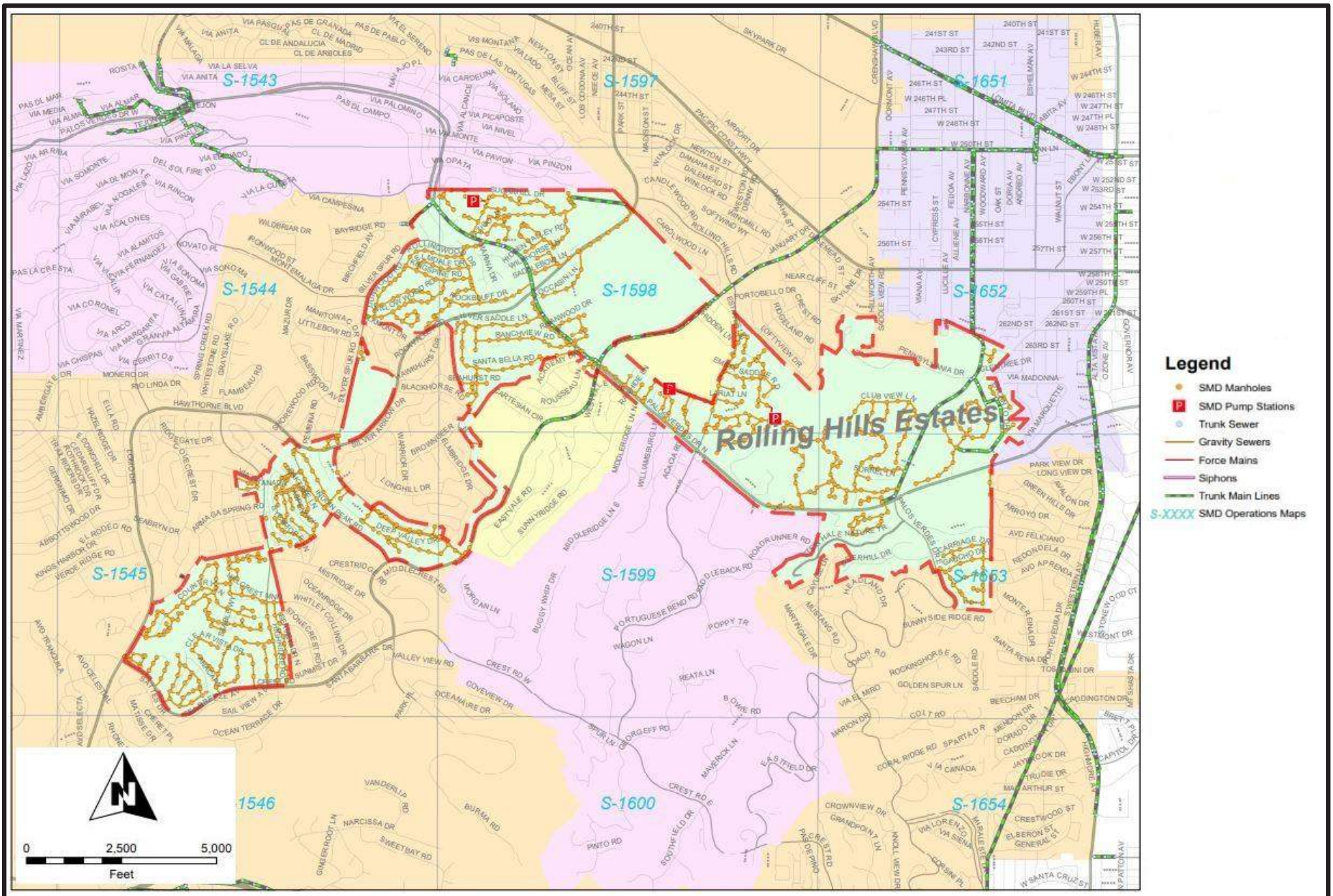
Threshold 4.19(a): Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

² Adriana Raza, Real Property Agent, Facilities Planning Department, Los Angeles County Sanitation Districts, NOP Response for City of Rolling Hills General Plan Update, June 17, 2021.

³ In 1958, the City granted the County of Los Angeles the consent and jurisdiction to annex portions of the City’s sewer system into the Consolidated Sewer Maintenance District (CSMD) to manage, operate, and maintain its sanitary sewer system; however, the City still maintains ownership of the sewer system.

⁴ City of Rolling Hills Estates, Sewer System Management Plan, 2019.

⁵ Adriana Raza, Real Property Agent, Facilities Planning Department, Los Angeles County Sanitation Districts, NOP Response for City of Rolling Hills General Plan Update, June 17, 2021.



Source: City of Rolling Hills Estates, 2019; Los Angeles County Public Works, 2019.

FIGURE 4.19-1
Sewer Facilities in the Planning Area

4.19 UTILITIES AND SERVICE SYSTEMS—WASTEWATER

Threshold 4.19(b): Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

4.19.2.2 METHODOLOGY

The following analysis focuses on determining whether buildout of the proposed GPU would exceed the capacity of existing wastewater systems and/or result in the relocation or construction of new or expanded wastewater conveyance or treatment infrastructure. The methodology for determining the significance of impacts on wastewater facilities compares existing conditions to the expected future wastewater generation under the proposed GPU.

4.19.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.19(a): Would the Project require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

Threshold 4.19(b): Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis

Buildout of the proposed GPU could result in the development of additional residential uses, comprising primarily of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area. Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Peninsula Center Commercial District, where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers and existing structures, and where the larger sewer lines (i.e., 15-inch lines) are located to accommodate the land use intensification. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net change in wastewater generation in the Planning Area. As shown in **Table 4.19-1**, the replacement of commercial uses by residential uses would result in a net increase in wastewater generation in the Planning Area. More specifically, under the low range scenario and high range scenario, wastewater generation within the Planning Area would increase by approximately 99,789 gpd (approximately 0.1 mgd) and 312,735 gpd (approximately 0.3 mgd), respectively. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in wastewater generation would occur gradually as additional development occurs in the Planning Area. Furthermore, these increases at buildout of the proposed GPU represent only a small percentage of the JWPCP's remaining capacity at 0.07 percent under the low range scenario and 0.21 percent under the high range scenario.

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**Table 4.19-1
Estimated Wastewater Generation in the Planning Area**

Land Use	Generation Factor (gpd) ^a	Low Range Scenario		High Range Scenario	
		Sq. Ft./ No. of Units	Estimated Generation (gpd)	Sq. Ft./ No. of Units	Estimated Generation (gpd)
<i>Total Commercial Uses (sq.ft.)^b</i>		(236,726)		(148,290)	
Commercial General (sq.ft.) ^c	150/1,000	(221,091)	(33,164)	(132,655)	(19,898)
Commercial Office (sq.ft.) ^d	200/1,000	(24,514)	(4,903)	(24,514)	(4,903)
Neighborhood Commercial (sq.ft.) ^e	100/1,000	8,879	888	8,879	888
Proposed Residential (units) ^f	156/unit	878	136,968	2,158	336,648
Totals			99,789		312,735

Notes: Sq. Ft. = square feet gpd = gallons per day

^a Factors from the Los Angeles County Sanitation Districts' "Table 1: Loadings for Each Class of Land Use" as provided by the Districts in their NOP comment.

^b Citywide change from existing uses as identified in Table 2.5-4 in Section 2.0, Project Description, of this PEIR.

^c Regional Mall factor was used.

^d Office Building factor was used.

^e Store factor was used.

^f Five Units or More factor was used.

Source: Los Angeles County Sanitation Districts, Table 1: Loadings for Each Class of Land Use, <https://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3531>, accessed September 10, 2021.

In addition, developers of future development projects under the proposed GPU would be required to pay sewer construction permit fees and connection charges. A portion of the sewer connection permit fee is allocated toward the determination of capacity to ensure that there is capacity available to serve such future development project. Furthermore, the Districts are authorized by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is used by the Districts to upgrade or expand the Sewerage System. Payment of a connection fee may be required before a project is permitted to discharge to the Districts' Sewerage System. Accordingly, buildout of the proposed GPU would not result in a determination by the City, the Districts, or the JWPCP that there would be inadequate capacity to serve the projected wastewater treatment demands or require the construction of new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects.

Based on the above, the proposed GPU's impacts on wastewater facilities (i.e., local collection infrastructure and regional treatment facilities) would be considered less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, new development generated by the representative projects have already been accounted for in the estimated wastewater generation increase in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on wastewater facilities, the representative projects themselves would not cause any potentially

4.19 UTILITIES AND SERVICE SYSTEMS—WASTEWATER

significant impacts on wastewater facilities. In addition, as discussed above, individual development projects, such as the representative projects, would be required to pay sewer construction permit fees and connection charges to ensure that there is additional capacity available to serve the representative projects. Accordingly, the representative projects would result in a less-than-significant impact on wastewater facilities.

Mitigation Measures

Impacts related to wastewater facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to wastewater facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.19.2.4 CUMULATIVE IMPACTS

Impact Analysis

The geographic context for this cumulative analysis is the Planning Area, as served by the Districts and JWPCP. Since the City has determined that future cumulative development citywide as allowed under the proposed GPU would not result in the need for expansion of or construction of wastewater treatment plants, the proposed GPU's cumulative impact would be less than significant.

Mitigation Measures

Cumulative impacts to wastewater facilities were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts to wastewater facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

The section of the PEIR provides a discussion of the potential impacts to solid waste services associated with the implementation of the proposed GPU. This section includes a description of the existing solid waste services for the Planning Area that would be potentially affected by the proposed GPU's implementation and the consistency of the proposed GPU with established relevant policies.

Pursuant to the environmental scoping process conducted during the initial phase of the CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential solid waste service impacts that may result from the proposed GPU. Impacts to solid waste services are addressed in terms of potential effects involving increased demands for solid waste services and the potential need for expanding or adding solid waste disposal facilities in order to meet current and future services demands.

4.20.1 ENVIRONMENTAL SETTING

4.20.1.1 REGULATORY FRAMEWORK

FEDERAL

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address municipal and industrial solid waste generated nationwide. The RCRA (Title 40 of the Code of Federal Regulations, Parts 239 through 282) grants individual states the authority to regulate solid waste disposal facilities, including state programs and permits, and sets forth a framework for the management of hazardous and nonhazardous solid wastes.

STATE

Assembly Bill 341

On May 7, 2012, the Office of Administrative Law approved Assembly Bill (AB) 341 to adopt regulations for mandatory commercial recycling. The law addresses recycling requirements for businesses that generate four or more cubic yards of commercial solid waste per week and multifamily residential dwellings with five or more units, regardless of the amount of waste generated. In addition, local jurisdictions would need to implement a program that includes education, outreach, monitoring, and reporting. The regulations are designed to allow jurisdictions flexibility to utilize their existing tools and solid waste management infrastructure to inform the businesses of the state requirement and to follow up with businesses that are not recycling. In addition to mandatory commercial recycling, AB 341 sets a statewide goal of 75 percent disposal reduction by the year 2020.

Assembly Bill 939

AB 939, the California Integrated Waste Management Act of 1989, as amended, was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. The term "integrated waste management" refers to the use of a variety of waste management practices to handle the municipal solid waste stream safely and effectively with the least adverse impact on human health and the environment. AB 939 establishes a waste management hierarchy

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

to guide implementation in the order of priority: (1) source reduction, (2) recycling and composting, and (3) transformation and disposal.

AB 939 mandated that California jurisdictions implement waste management programs aimed at a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. The law also requires each county to prepare a new Integrated Waste Management Plan (IWMP) and each city to prepare a Source Reduction and Recycling Element (SRRE) to identify how each jurisdiction would meet the mandatory state waste diversion goals.

Assembly Bill 1826

AB 1826, the Mandatory Commercial Organics Recycling Act, requires mandatory recycling of organic waste generated by certain commercial uses such as restaurants and grocery stores. Each local jurisdiction is required to implement an organic waste recycling program to divert organic waste on and after January 1, 2016. Beginning on April 1, 2016, businesses that generate 8 cubic yards (cy) or more of organic waste per week must separate food scraps and yard trimmings and arrange for recycling services for that waste in a specified manner. Beginning January 1, 2017, businesses that generate 4 cy or more of organic waste per week also are subject to this requirement. AB 1826 phased in the requirements for businesses over time but offered an exemption process for rural counties. In September of 2020, the threshold was reduced to 2 cubic yards of solid waste (solid waste is the total of trash, recycling, and organics) generated by covered businesses.

Assembly Bill 1327

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327), as amended, requires each local jurisdiction to adopt an ordinance requiring any commercial, industrial, or institutional building, marina, or residential building having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdiction's ordinance.

Senate Bill 1374

SB 1374 Construction and Demolition Waste Materials Diversion Requirements was passed in 2002 and requires that California's Department of Resources Recycling and Recovery (CalRecycle) to adopt a model ordinance for diverting 50 to 75 percent of all C&D waste from landfills. SB 1374 also requires jurisdictions to include a synopsis of the amount of construction and demolition (C&D) waste diverted in their annual AB 939 report.

California Green Building Standards Code (California Code of Regulations Title 24, Part 11)

The California Green Building Standards Code, commonly referred to as the CALGreen Code, sets standards for new structures to minimize the State's carbon output. California requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction retains the administrative authority to exceed the new CALGreen standards. The 2019 CALGreen Code went into effect January 1, 2020.

REGIONAL

Los Angeles County Integrated Waste Management Plan

Pursuant to AB 939, each county is required to prepare and administer a Countywide Integrated Waste Management Plan (CoIWMP), including preparation of an annual report. The CoIWMP is to comprise various county and city solid waste reduction planning documents, plus an IWMP Summary Plan (Summary Plan) and a Countywide Siting Element. The Summary Plan describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion rate by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within Los Angeles County (County). The Countywide Siting Element estimates the amount of solid wastes generated in the County, proposes various diversion and alternate disposal options, and describes how the County and the cities within the County plan to manage the disposal of their solid waste for a 15-year planning period. The Los Angeles County Department of Public Works is responsible for preparing and administering the Summary Plan and the Countywide Siting Element. The County continually evaluates landfill disposal needs and capacity as part of the preparation of the CoIWMP Annual Report. Within each annual report, future landfill disposal needs over the next 15-year planning horizon are addressed in part by determining the available landfill capacity. The most recent annual report, the CoIWMP 2019 Annual Report, published in September 2020, provides disposal analysis and facility capacities for 2019, as well as projections to the CoIWMP's horizon year of 2034. As stated within the CoIWMP 2019 Annual Report, the County is not anticipating a solid waste disposal capacity shortfall within the next 15 years under current conditions. A variety of strategies, including mandatory commercial recycling, diversion of organic waste, and alternative technologies (e.g., engineered municipal solid waste conversion facilities or anaerobic digestion) would be implemented to ensure that the County would be able to accommodate the solid waste generated through the horizon year of 2034.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC)

Chapter – 8.20 Integrated Waste Management

RHEMC Chapter 8.20 establishes the rules and regulations associated with solid waste generation, storage, use, and disposal on commercial and residential premises. RHEMC Chapter 8.20 provides solid waste collection, transportation, and permit requirements and guidelines. In addition, RHEMC Chapter 8.20 establishes solid waste clean-up responsibilities, prohibits scavenging through or mixing wastes, and prohibits solid waste collection without a franchise or permit, and provides the definitions set forth in Division 30, Part 1, Chapter 2 of the Public Resources Code Section 40105 and the regulations of the California Integrated Waste Management Board.

RHEMC Section 8.20.200 provides for residential solid waste franchises, which authorizes the City council to periodically award an exclusive residential solid waste franchise to a qualified solid waste collector. This allows the franchisee to collect, transport, and dispose of all solid waste generated from all residential premises except as provided under Sections 8.20.040 and 8.20.050. The franchisee under a residential franchise must also provide residential roll-off services upon the request of any responsible person.

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Additionally, RHEMC Section 8.20.210 provides for commercial solid waste franchises wherein the city council may award an exclusive commercial solid waste franchise to a qualified solid waste collector authorizing such franchisee to collect, transport, and dispose of all commercial solid waste generated from all commercial premises except as authorized under 8.20.040 and 8.20.050 or as otherwise permitted by other applicable law. The city council may also periodically award an exclusive roll-off franchise to a qualified solid waste collector authorizing such franchisee to collect, transport, and dispose of commercial solid waste generated from any commercial premises at the request of a responsible person.

RHEMC Section 8.20.230 states that the City may impose fees and charges upon solid waste collectors for costs related to use of the City's right-of-way, and solid waste, recyclable, green waste, and organic waste planning and program development, and administration. Such fees may include costs of preparing and implementing source reduction and recycling elements, household hazardous waste elements, and integrated waste management plans.

RHEMC Section 8.20.260 establishes recycling and organic waste requirements for commercial premises and multi-family dwellings, including the provision of appropriate containers for recyclable materials and organic waste.

RHEMC Section 8.20.270 sets requirements for solid waste containers and the use and placement of containers and bulky items.

RHEMC Section 8.20.300 and 8.20.310 establish that the responsible persons for each residential or commercial premises is directly liable to the solid waste collector who may establish, charge, and collect customer rates and charges as compensation for services related to collecting, handling, transporting, or disposing of solid waste.

RHEMC Section 8.20.400 establishes edible food recovery requirements in accordance with Title 14, Division 7, Chapter 12 of the California Code of Regulations.

Chapter – 8.24 Rubbish and Waste Material

RHEMC Section 8.24.041 sets diversion requirements for nonresidential solid waste haulers. Pursuant to Section 8.24.041, a nonresidential hauler must demonstrate compliance with a fifty percent waste diversion standard in order to maintain a valid permit to collect, remove or convey solid waste. Nonresidential haulers must document and demonstrate compliance by submitting a waste generation-based report that conclusively shows that the fifty percent diversion requirement has been achieved or, in the event that the fifty percent diversion cannot be achieved, document to the satisfaction of the city manager reasons it cannot be achieved due to material marketability, economic and/or technical reasons.

The City of Rolling Hills Estates Solid Waste Collection Services Franchise Agreement

The City of Rolling Hills Estates has an exclusive franchise agreement with Waste Management for both residential and commercial solid waste, recycling, organic and construction debris collection services. In order to meet California's new recycling regulations and diversion goals, which have affected the costs associated with solid waste collection service, the City established that collection services be exclusive with any contractor that enters into an agreement with the City. The franchise system provides benefits to establish quality service and promote cleaner neighborhoods through recycling services, environmental workshops, bulky item pick-ups, manure collection programs, on-call curbside and at-your-door special collections, and annual

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

cleanup events. The franchise system is designed to provide uniform service standards for haulers operating in each franchise area. The system provides each community with the flexibility needed to create services that will benefit area residents. These features are modified to reflect feedback received through customer service feedback, community meetings, and city council assessments of the City's solid waste services demands and needs. This interactive process allows the City to tailor each agreement to meet the needs voiced by each community. The franchise system also benefits the community by assisting the City in meeting the State's waste reduction mandate and reduces the need for new landfills.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to the conservation, management, or preservation of natural and cultural resources within the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with state planning law. The elements, along with their goals and policies, that are related to solid waste services are presented below.

Conservation Element

The Rolling Hills Estates General Plan Conservation Element is a State-mandated element and fulfills the requirements of California Government Code Section 65302(d). The Conservation Element contains the goals and policies that provide the basis for Conservation plans and measures, identify standards and programs, increase public awareness concerning the presence and condition of natural and cultural resources and promote their conservation and management. The Conservation Element outlines strategies to maintain an ecological balance and improve the quality of life in the City of Rolling Hills Estates.

The Conservation Element goals and policies as it is related to solid waste services are as follows:

Goal 1: Preserve the natural environment of the Palos Verdes Peninsula through the conservation of natural resources, the maintenance of a balanced ecology and the prevention of environmental degradation.

- Policy 1.5: Develop and implement a comprehensive program for the recycling of waste such as paper, aluminum, bottles, organic waste, and motor oil pursuant with the requirements of AB939, AB1820, and AB2707.
- Policy 1.6: Participate in management programs established by Los Angeles County for water conservation, liquid and solid waste management, and flood control.
- Policy 1.10: Environmental impact reports for future projects must address cumulative impacts which will include other projects on the peninsula, downstream traffic, regional air quality, sewage generation, and other environmental constraints of the area.

4.20.1.2 EXISTING CONDITIONS

Waste Management (WM) is the exclusive waste hauler for the City of Rolling Hills Estates and provides the City with comprehensive waste management services, including trash collection, recycling, and disposal. City Council approved a renegotiated exclusive franchise agreement with WM upon conclusion of their 13-year exclusive franchise agreement for residential and commercial solid waste, recycling, organic and construction debris collection services, effective

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

October 1, 2018.¹ WM delivers the solid waste collected from the City to landfills in Los Angeles, Orange, Riverside, and Ventura counties.

As shown in **Table 4.20-1**, the City disposed of approximately 9,946 tons of solid waste in 2019, the most recent year that data was available. Approximately 102 tons of the total disposal amount was transformed at the Southeast Resource Recovery Facility. Of the total amount landfilled, more than 80 percent was delivered to the El Sobrante Landfill in Riverside County.

**Table 4.20-1
Rolling Hills Estates Disposal by Landfill in 2019**

Disposal Facility	County	Remaining Capacity as of December 2019 (Million Tons)	Landfilled (Tons) ^a	Transformed (Tons) ^a
Antelope Valley	Los Angeles	10.97 ^b	962.88	-
Azusa Land Reclamation	Los Angeles	58.84 ^b	160.66	-
Chiquita Canyon	Los Angeles	56.99 ^b	36.91	-
El Sobrante	Riverside	142 ^c	8,107.85	-
Frank R. Bowerman	Orange	102 ^c	49.59	-
Olinda Alpha	Orange	143 ^c	36.51	-
Prima Deshecha	Orange	80 ^c	173.91	-
Simi Valley	Ventura	48 ^c	50.83	-
Sunshine Canyon	Los Angeles	55.16 ^b	264.62	-
Southeast Resource Recovery Facility	Los Angeles	N/A	-	101.95
Total:		696.96	9,843.81	101.95
Total Disposal Amount for 2019			9,945.76 tons	
Notes:				
^a The City's disposal by facility was provided by CalRecycle's Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility report which estimates of the disposal amounts for jurisdictions in California as reported by county and regional agency disposal reporting coordinators and report shows the total amount disposed by the jurisdiction at each disposal facility for a requested year. See source below.				
^b Los Angeles County Department of Public Works, Countywide Integrated Waste Management Plan 2019 Annual Report – Appendix E-2, Table 4, September 2020.				
^c Los Angeles County Department of Public Works, Countywide Integrated Waste Management Plan 2019 Annual Report pages 49-50, September 2020.				
Source: CalRecycle, Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility – 2019 Rolling Hills Estates, https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility , accessed September 16, 2021; Los Angeles County Department of Public Works, Countywide Integrated Waste Management Plan 2019 Annual Report, September 2020.				

Pursuant to AB 939, the California Integrated Waste Management Act of 1989, the City is required to achieve a 50 percent diversion rate. According to CalRecycle, the required 50 percent diversion rate is equivalent to a target per capita disposal rate of 8.3 pound per person per day (ppd) for residents and 14.9 ppd for employees in 2019, the most recent year for which data is available.²

¹ City of Rolling Hills Estates, Solid Waste Collection, <https://www.ci.rolling-hills-estates.ca.us/government/services-utilities/trash>, accessed September 16, 2021.

² CalRecycle, Disposal Rate Calculator – 2019 Rolling Hills Estates, <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed September 16, 2021.

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The City's actual per capita disposal rate in 2019 was 6.5 ppd for residents and 12.7 ppd for employees.³

To increase waste diversion and recycling, the City has implemented a three three-cart system for residents to recycle household plastic and glass containers, cans, and paper, as well as green waste. This has resulted in City residents consistently keeping more than 60% of their waste out of the trash carts and out of landfills.⁴ The City also provides curbside pickup of used oil and filters for recycling along with yard waste and other recyclables. This has increased curbside collection of used oil by 160 percent and used oil filters by 590 percent in the City.⁵ In addition, City residents with horses also have access to manure collection and recycling service. The City also provides pickup of bulky items at no extra cost to residents. Furthermore, most City parks and many transit stops in the City are equipped with separate beverage container recycling collection containers along with trash cans to support recycling efforts.

4.20.2 IMPACT ANALYSIS

4.20.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's noise impacts based on the thresholds of significance identified in Appendix G of the CEQA Guidelines. Based on these criteria, a noise impact is considered significant if implementation of the proposed GPU would:

Threshold 4.20(a): *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.*

Threshold 4.20(b): *Not comply with federal, state, local management and reduction statutes and regulations related to solid waste.*

4.20.2.2 METHODOLOGY

The following analysis analyzes whether buildout of the proposed GPU would result in the generation solid waste that exceeds state or local standards, or the capacity of landfills, or otherwise impairs the attainment of solid waste reduction goals. The methodology for determining the significance of impacts on solid waste facilities compares existing conditions to the expected future solid waste generation under the proposed GPU.

The estimated amount of solid waste that would be generated by the proposed GPU is determined by using the per capita disposal rates provided by CalRecycle. The amount of solid waste currently generated within the City based on the most recent available data is subtracted from the estimated amount of solid waste to determine the total increase in solid waste generation with implementation of the proposed GPU. This section provides a conservative analysis of the impacts on solid waste facilities since waste diversion and recycling efforts are expected to increase throughout the buildout of the GPU.

³ CalRecycle, Disposal Rate Calculator – 2019 Rolling Hills Estates, <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed September 16, 2021.

⁴ City of Rolling Hills Estates, Greener Path, <https://www.ci.rolling-hills-estates.ca.us/services/greener-path>, accessed September 16, 2021.

⁵ City of Rolling Hills Estates, Greener Path, <https://www.ci.rolling-hills-estates.ca.us/services/greener-path>, accessed September 16, 2021.

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4.20.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.20(a): *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Impact Analysis

The buildout of the proposed GPU could result in the development of an additional 878 residential units and a decrease of 236,726 square feet of commercial uses under the low range scenario, or the development of an additional 2,158 residential units and a decrease of 148,290 square feet of commercial uses under the high range scenario. As discussed above, the City disposed of approximately 9,946 tons of solid waste at landfills in Los Angeles, Orange, Riverside, and Ventura counties in 2019. **Table 4.20-2** provides the estimated solid waste generation in the Planning Area at buildout of the proposed GPU. As shown in **Table 4.20-2**, the projected net growth in the Planning Area would generate an additional 2,209 ppd of solid waste under the low range scenario or 23,067.4 ppd of solid waste under the high range scenario. This equates to an annual total of 403.14 tons per year under the low range scenario or 8,419 tons per year under the high range scenario over existing conditions.

**Table 4.20-2
Estimated Solid Waste Generation in the Planning Area**

Proposed Land Use	Disposal Rate (lbs/per/day) ^a	Low Range Scenario			High Range Scenario		
		Sq. Ft./ Units	Increase in Employees/ Residents ^b	Estimated Solid Waste Generation (lbs/day)	Sq. Ft./ Units	Increase in Employees/ Residents ^b	Estimated Solid Waste Generation (lbs/day)
Commercial	12.7	(236,726)	(690)	(8,763.00)	(148,290)	(343)	(4,356.10)
Residential	6.5	878	1688	10,972.00	2,158	4,219	27,423.50
Total				2,209.00			23,067.40
Annual Total^c		806,285 lbs/yr (403.14 tons/yr)			8,419,601 lbs/yr (4,209.8 tons/yr)		
Notes: lbs = pounds Sq. Ft. = square feet yr = year							
^a Disposal rate from CalRecycle, Disposal Rate Calculator – 2019 Rolling Hills Estates, https://www2.calrecycle.ca.gov/LG/Central/AnnualReporting/DisposalRateCalculator , accessed September 16, 2021..							
^b Total employees and residents resulting from the implementation of the GPU low range and high range scenarios are based on calculations provided in Appendix B of this Draft PEIR.							
^c 2,000 lbs = 1 ton							
Source: Michael Baker International, 2021.							

The landfills that received the City’s solid waste in 2019 and their remaining capacity are listed in **Table 4.20-1**. As shown in **Table 4.20-1**, the majority of the City’s solid waste was delivered by WM, the City’s exclusive waste hauler, to El Sobrante in Riverside County. The El Sobrante landfill has an estimated remaining capacity of approximately 142 million tons as of December 2019. Conservatively assuming that the maximum amount of solid waste that could be generated by the implementation of the GPU under the high range scenario would be taken to the El Sobrante landfill, the total amount of 8,419 tons per year would represent less than 0.006 percent

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

of its remaining capacity. In addition, it is likely that WM would distribute the City's solid waste to other landfills listed on **Table 4.20-1**. These landfills, including El Sobrante have a total remaining capacity of approximately 697 million tons, which would be more than sufficient to accommodate the City's additional 8,419 tons per year. Furthermore, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any increase in solid waste generation would occur gradually as additional development occurs in the Planning Area.

As discussed above under Existing Conditions, the City is required to achieve a 50-percent diversion rate pursuant to AB 939. Based on the 2019 data provide by CalRecycle, the City's actual per capita diversion rate is less that the target per capita disposal rate necessary to achieve the required 50-percent diversion. It is expected that the City's future per capita disposal rate would be lower than 6.5 ppd and 12.7 ppd rates for residents and employees, respectively, achieved in 2019 based on the waste diversion and recycling programs implemented by the City. Thus, the proposed GPU would comply with the 50-percent diversion requirement mandated by AB 939. In addition, the City complies with and would continue to comply with AB 341, AB 1826, and AB 1327 under future conditions. RHEMC Section 8.20.260 sets recyclables and organic waste requirements for commercial uses and multi-family dwellings and Section 8.24 sets a 50 percent diversion requirement for nonresidential solid waste haulers in compliance with AB 341, AB 939, and AB 1826. RHEMC Section 8.20.270 sets requirements for solid waste containers and the use and placement of containers and bulky items in compliance with AB 1327. Furthermore, RHEMC Chapter 15.04 adopts by reference the Los Angeles County Green Building Standards Code (Los Angeles County Code Title 31), which in turn incorporates by reference the 2019 CALGreen Code. Moreover, the proposed GPU contains goals and policies to that address solid waste management and diversion to ensure that state and local solid waste reduction goals are met.

Based on the above, buildout of the proposed GPU would not generate solid waste in excess of state or local standards, or in excess of the capacity of the landfills serving the City, or otherwise impair the attainment of solid waste reduction goals. As such, impacts related to solid waste would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU, new development generated by the representative projects have already been accounted for in the estimated solid waste generation increase in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact related to solid waste, the representative projects themselves would not cause any potentially significant solid waste impacts. Accordingly, the representative projects would result in a less-than-significant solid waste impact.

Mitigation Measures

Impacts related to solid waste were determined to be less than significant. Therefore, no mitigation measures are required.

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

Level of Significance After Mitigation

Impacts related to solid waste were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.20(b): Would the Project comply with federal, state, local management and reduction statutes and regulations related to solid waste?

Impact Analysis

As discussed above under Threshold 4.20(a), it is expected that the City's future per capital disposal rate would comply with the 50-percent diversion requirement mandated by AB 939. In addition, future development proposed under the GPU would be required to comply with the RHEMC, including Sections 8.20.260, Section 8.20.70, Section 8.24, and Chapter 15.04. Compliance with RHEMC would ensure that implementation of the proposed GPU complies with AB 341, AB 939, AB 1826, AB 1327, and CALGreen Code. Furthermore, the proposed GPU contains goals and policies that address solid waste management and diversion to ensure that State and local solid waste reduction goals are met. Therefore, the proposed GPU would comply with federal, State, local management and reduction statutes and regulations related to solid waste. As such, impacts would be less than significant.

Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impacts related to compliance with solid waste management and reduction regulations, the representative projects would also result in a less-than-significant impacts.

Mitigation Measures

Impacts related to compliance with solid waste management and reduction regulations were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to compliance with solid waste management and reduction regulations were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.20.2.4 CUMULATIVE IMPACTS

Impact Analysis

Future development associated with the proposed GPU and other future development projects serviced by WM and the landfills listed in **Table 4.20-1** above would increase demand for solid waste collection and disposal services. The increase in solid waste generated by the proposed GPU and other future development projects together may significantly impact the finite resources associated with solid waste disposal. However, all future development projects, including those within the Planning Area of the proposed GPU, would be required to meet State and local recycling goals at the time of development, including AB 341, AB 939, AB 1826, AB 1327, and CALGreen Code, which would reduce the amount of solid waste disposed of at the landfills. In addition, California continues to implement source reduction measures, such as recycling and converting waste to energy, that would divert solid waste away from landfills. Furthermore,

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

as analyzed above, implementation of the proposed GPU would not significantly impact the remaining capacities of the landfills listed in **Table 4.20-1**. As such, the incremental increase in solid waste from the proposed GPU would not be cumulatively considerable, and cumulative impacts to solid waste facilities would be considered less than significant.

Mitigation Measures

Cumulative impacts related to solid waste were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to solid waste were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.20 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

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4.21 UTILITIES AND SERVICE SYSTEMS—ENERGY AND TELECOMMUNICATIONS INFRASTRUCTURE

4.21 UTILITIES AND SERVICE SYSTEMS—ENERGY AND TELECOMMUNICATIONS INFRASTRUCTURE

The section of the PEIR provides a discussion of the potential impacts to electric power, natural gas, and telecommunications infrastructure associated with the implementation of the proposed GPU.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A** of this PEIR), this section of the PEIR evaluates and analyzes the potential impacts on the existing energy and telecommunications infrastructure that may result from the proposed GPU. Potential impacts associated with energy demand and energy conservation policies are discussed in Section 4.5, Energy, of this PEIR.

4.21.1 ENVIRONMENTAL SETTING

4.21.1.1 REGULATORY FRAMEWORK

FEDERAL

The Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority. In addition, the Federal Communications Commission (FCC) requires all new cellular tower construction to be approved by the State or local authority for the proposed site and comply with FCC rules involving environmental review.

STATE

California Government Code Section 4216

California Government Code Section 4216 requires contractors to contact the Underground Service Alert—Southern California, which notifies utility companies of proposed excavation sites. Utility companies are required to mark where underground pipelines and transmission lines are located to ensure they are not affected during construction.

Senate Bill 649

Senate Bill 649 (SB 649) requires small cellular installations be on vertical infrastructure and on property outside of public rights-of-way. The installation is required to comply with all applicable federal, State, and local health and safety regulations. Additionally, cellular equipment that is no longer in use is required to be removed at no cost to the City.

California Green Building Standards

California Green Building Standards Code (CALGreen Code) is California's first green building code and the first State-mandated green building code in the nation. The CALGreen Code (California Code of Regulations, Title 24, Part 11) The CALGreen Code requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g. lighting; heating, ventilation, and air conditioning [HVAC]; and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not

4.21 UTILITIES AND SERVICE SYSTEMS—ENERGY AND TELECOMMUNICATIONS INFRASTRUCTURE

prohibitively expensive and that there is a significant cost-savings potential in green building practices and materials.

LOCAL

Rolling Hills Estates Municipal Code (RHEMC) Chapter 17.39

RHEMC Chapter 17.39 establishes the guidelines and standards for the operations and placement of personal wireless service facilities throughout the City and to protect the public against any adverse impacts on the City's aesthetics resources and public welfare. This chapter of the RHEMC was established in accordance with the Telecommunications Act of 1996, which preserves local government's zoning authority.

Current (1992) Rolling Hills Estates General Plan

The City of Rolling Hills Estates General Plan, adopted in 1992, is a comprehensive, long-range plan designed to serve as a guide for a citywide approach to emergency preparedness and hazard prevention to protect the City. The General Plan consists of an integrated and internally consistent set of goals, policies, and implementation measures and contains seven sections or elements in accordance with State planning law.

The Rolling Hills Estates General Plan Public Safety Element is a State-mandated element and fulfills the requirements of California Government Code Section 65302(g). The Public Safety Element contains the goals and policies regulating public safety issues of concern in the City. These goals and policies provide the basis for public safety plans and measures, identify standards and programs to protect public safety and outline adequate facilities and services to meet the emergency needs of the City. The Public Safety Element provides an inventory of both natural and manmade hazards, including earthquakes, floodplains, landslides, geologic hazards, urban and wildfire, and hazardous materials/wastes. The Public Safety Elements outlines strategies to eliminate, counter, and/or minimize the impacts of potential natural or manmade hazards.

The Public Safety Element policy related to utility infrastructure is as follows:

Policy 1.5: Support earthquake strengthening and provision of alternative or backup services, such as water, sewer, electricity, and natural gas pipelines and connections, especially in areas of high seismic or geologic high hazard or where weak segments are identified by existing or future studies.

4.21.1.2 EXISTING CONDITIONS

ELECTRICITY¹

Southern California Edison (SCE) is one of the nation's largest electric utility companies, delivering electricity to 15 million residents through 5 million customer accounts in 445 communities and 13 Native American tribes, encompassing approximately 50,000 square miles across the Central Coast and Southern California.² SCE operates and maintains a vast electricity

¹ It should be noted that the Clean Power Alliance (CPA) is the City's electricity provider. However, CPA's electricity is distributed through Southern California Edison's (SCE) power lines and infrastructure. Accordingly, the focus of this analysis is on the proposed GPA's impact on infrastructure.

² Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, p. 2.

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system, including 4,600 circuits, 1.4 million poles, 119,000 miles of transmission and distribution lines, and 730,000 transformers.³

SCE invests more than \$5 billion each year in maintaining, improving, and hardening its infrastructure by implementing the following:⁴

- Infrastructure reliability – updating underground cables, poles, switches, and transformers
- Wildfire mitigation – hardening infrastructure, bolstering situational awareness capabilities, and enhancing operational practices
- Transmission – connecting renewables, installing new substations, and updating lines
- Grid readiness – updating the grid for impacts from new technologies
- Long-term energy policy – supporting energy storage, electric vehicles, and renewables

In 2020, SCE completed a number of capital improvements, including the replacement of 235 miles of underground cable, 97 miles of overhead conductor for public safety, 11,100 distribution poles, 3,600 transmission poles, and 79 underground structures and the installation of 960 miles of covered conductors, 6,090 fire-resistant poles, and 3,025 fast-acting fuses for wildfire mitigation.⁵

SCE operates and maintains 16 circuits, consisting of eleven 16-kilovolt (kV) circuits and five 4.16-kV circuits, that serve approximately 22,363 customers in Rolling Hills Estates.⁶ SCE's 2021 Capital Improvement Plan for the City includes electrical equipment replacement near the Commercial District; grid modernization primarily along Palos Verdes Drive North; pole replacement throughout the Planning Area; circuit public safety upgrade primarily in areas north of Palos Verdes Drive North and east of Crenshaw Boulevard, along Kingspine Road, and along the northern boundary of the Commercial District; circuit rebuild primarily along Palos Verdes Drive North and Silver Spur Road; circuit reliability upgrade primarily in the eastern portion of the Planning Area east of Rolling Hills Road and along Silver Spur Road near Hawthorne Boulevard; and underground conversion in the northwestern corner of the Chandler Ranch Project Site.⁷

NATURAL GAS

Southern California Gas Company (SoCalGas) is the nation's largest natural gas distribution utility company, delivering natural gas to 21.8 million consumers through 5.9 million gas meters in more than 500 communities, encompassing approximately 24,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.⁸

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada, as well as local California supplies.⁹

³ Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, p. 3.

⁴ Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, p. 4.

⁵ Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, pp. 4-5.

⁶ Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, p. 11.

⁷ Southern California Edison, Circuit Reliability Review: Rolling Hills Estates, 2021, p. 16.

⁸ SoCalGas, Company Profile: About SoCalGas, <https://www.socalgas.com/about-us/company-profile>, accessed September 14, 2021.

⁹ California Gas and Electric Utilities, 2020 California Gas Report, p. 111.

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The traditional southwestern United States sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.¹⁰ Gas supply available to SoCalGas from California sources averaged 97 million cubic feet per day in 2019 (the most recent year for which data are available).¹¹

SoCalGas provides natural gas to the City of Rolling Hills Estates through existing underground gas mains located in City streets.

TELECOMMUNICATIONS

Currently, the City's internet and/or TV providers are Cox Communications, AT&T and DIRECTV, Frontier, Viasat, HughesNet, and Spectrum.¹²

The City is served by several cellular towers.¹³ All cellular towers and equipment are managed by private telecommunications service providers under the jurisdiction of the FCC.

4.21.2 IMPACT ANALYSIS

4.21.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts on energy and telecommunications infrastructure based on the threshold of significance identified in Appendix G of the State CEQA Guidelines. Based on this criterion, an impact on energy and telecommunications infrastructure is considered significant if implementation of the proposed GPU would:

Threshold 4.21(a): Require or result in the relocation or construction of new or expanded electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

4.21.2.2 METHODOLOGY

The following analysis focuses on determining whether existing and projected electrical power, natural gas, or telecommunications infrastructure capacities would be sufficient to meet future demands associated with the buildout of the proposed GPU and, if not, whether the construction of needed new or expanded electrical power, natural gas, or telecommunications facilities would result in significant environmental effects.

¹⁰ California Gas and Electric Utilities, 2020 California Gas Report, pp. 111-112.

¹¹ California Gas and Electric Utilities, 2020 California Gas Report, pp. 143.

¹² BroadbandNow, Internet Providers in Rolling Hills Estates, <https://broadbandnow.com/California/Rolling-Hills-Estates>, accessed September 15, 2021.

¹³ CellReception, Rolling Hills Estates, CA Cell Towers & Signal Map, http://www.cellreception.com/towers/towers.php?city=rolling%20hills%20estate&state_abr=ca, accessed September 15, 2021.

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4.21.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.21(a): *Would the Project require or result in the relocation or construction of new or expanded electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Impact Analysis

Buildout of the proposed GPU could result in the development of additional residential uses, comprising primarily of multifamily dwelling units and accessory dwelling units (ADUs), that would range from 878 units to 2,158 units over existing conditions in the Planning Area. Since Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Peninsula Center Commercial District, where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development that would result in a net increase in electricity and natural gas consumption (see Section 4.5, Energy, of this PEIR) and use of telecommunications facilities in the Planning Area. However, future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand. Thus, any net increase in electricity and natural gas consumption and use of telecommunications facilities in the Planning Area would occur gradually as additional development occurs in the Planning Area.

One of the proposed policies included in the update to the Safety Element involves the protection of lives and prevention of damage to property and the environment from natural hazards. Both SCE and SoCalGas regularly maintain and upgrade their transmission lines and equipment to ensure that electricity and natural gas pipeline connections withstand natural hazards, such as seismic events and wildfires. As discussed above, SCE is already implementing capital improvements, including public safety upgrades and circuit reliability upgrades, to adequately serve its existing and future customers. Any work that may affect services to the existing electricity, natural gas, and telecommunication lines would be coordinated with service providers and the City, as applicable. In addition, another proposed policy in the Sustainability Element promotes the application of active solar energy systems in residential development, which would reduce demand on SCE services. Furthermore, future development projects under the proposed GPU would be expected to incorporate energy conservation features and comply with applicable regulations, including the CALGreen Code and State energy standards under Title 24. Accordingly, future development projects would be more energy-efficient than existing buildings to minimize the increase in demand for energy supply and infrastructure.

Therefore, buildout of the proposed GPU would not be anticipated to require or result in the relocation or construction of new or expanded electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. As such, the proposed GPU's impact on electrical power, natural gas, or telecommunications infrastructure would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU.

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Since the representative projects are a subset of buildout of the proposed GPU, new development generated by the representative projects have already been accounted for in the anticipated net increase in electricity and natural gas consumption and use of telecommunications facilities in the Planning Area from buildout of the proposed GPU. As the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on electrical power, natural gas, or telecommunications infrastructure, the representative projects themselves would not cause any potentially significant impacts on electrical power, natural gas, or telecommunications infrastructure.

Mitigation Measures

Impacts related to electrical power, natural gas, or telecommunications infrastructure were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to electrical power, natural gas, or telecommunications infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.21.2.4 CUMULATIVE IMPACTS

Impact Analysis

Electricity and natural gas infrastructures are typically expanded in response to increasing demand, and system expansion and improvements by SCE and SoCalGas, respectively, are on-going. Energy service providers would continue to expand delivery capacity, as needed, to meet demand increased with their service areas, consistent with their environmental priorities and reliability standards. Future development under the proposed GPU, as well as other development projects within SCE and SoCalGas service areas, would be reviewed by these energy providers to identify necessary energy facilities and service connections to meet the needs of each development project. In addition, future development projects under the proposed GPU, as well as other development projects within the SCE and SoCalGas service areas, would be expected to incorporate energy conservation features and comply with applicable regulations, including the CALGreen Code and State energy standards under Title 24. Accordingly, the incremental effect of the proposed GPU on energy infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant.

Similarly, the City is well-served by telecommunications facilities, and no restrictions on the expansion of service, as necessary, to meet future demands is anticipated anywhere in the Planning Area. Any future expansion of telecommunications facilities would be required to adhere to existing State and local requirements related to telecommunication service. As such, the incremental effect of the proposed GPU related to the provision of telecommunication infrastructure would not be cumulatively considerable, and cumulative impacts would be less than significant.

Mitigation Measures

Cumulative impacts to electrical power, natural gas, or telecommunications infrastructure were determined to be less than significant. Therefore, no mitigation measures are required.

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Level of Significance After Mitigation

Cumulative impacts to electrical power, natural gas, or telecommunications infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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4.22 WILDFIRE

This section of the PEIR discusses the potential wildfire impacts associated with the implementation of the proposed GPU.

Pursuant to the environmental scoping process conducted during the initial phase of CEQA review process (see Initial Study in **Appendix A**), this section of the Draft EIR evaluates the potential for implementation of the proposed GPU to have a substantial adverse effect related to wildfire, by impairing the implementation of an adopted emergency or evacuation plan, or exacerbating a wildfire risk in a way that exposes residents to pollution concentrations, uncontrolled spread of a wildfire, or wildfire-induced drainage changes and slope instability, such as flooding and landslides.

4.22.1 ENVIRONMENTAL SETTING

4.22.1.1 REGULATORY FRAMEWORK

FEDERAL

The Federal Occupational Safety and Health Administration (OSHA) outlines fire-related requirements under Part 1926 of Title 29 of the Code of Federal Regulations (CFR) for construction sites. General requirements are specified under Fire Protection and Prevention in Subpart F, including maintaining fire suppression equipment specific to construction on-site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site firefighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

STATE

California Code of Regulations Title 8 (Sections 1270 and 6773)

In accordance with the California Code of Regulations (CCR), Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Code of Regulations Title 24 with Amendments

Title 24 of the CCR sets forth complete regulations and general construction building standards within the California Building Code (CBC), including administrative, fire and life safety, and field inspection provisions. The building standards in the CBC apply to all locations in California, except where more stringent standards have been adopted by State agencies and local governing bodies. Topics addressed within the California Fire Code (CFC), include fire-safety-related building standards, fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazard safety, hazardous materials storage and use, provisions to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises.

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California Code of Regulations Title 14 (Sections 1270-1276)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

California Health and Safety Code (Sections 13000 et seq.)

State fire regulations are set forth in Section 13000 *et seq.* of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices, such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training.

California Public Resources Code (Sections 4201-4204)

Pursuant to California Public Resources Code (PRC) Sections 4201 through 4204, the California Department of Forestry is required to classify all State Responsibility Areas (SRAs) into fire hazard severity zones. The purpose of these sections of the PRC is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

California Public Resources Code (Section 4291)

PRC Section 4291 requires that brush, flammable vegetation, or combustible growth be removed within 100 feet of buildings in mountainous areas, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material. Vegetation that is more than 30 feet from the building, less than 18 inches high, and important for soil stability may be maintained, as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid-fire transmission from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also found in CFC Sections 4906 and 4907.

California Office of Emergency Services – Emergency Readiness Plan

The State passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Senate Bill 1241

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7 Division 2 of the California Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated very high fire hazard, or that are in a State Responsibility Area, unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of

the subdivision and its lots are consistent with defensible space regulations found in PRC Section 4290-91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

LOCAL

Los Angeles County Fire Department

Fire services are provided in the Planning Area by the Los Angeles County Fire Department (LACoFD). The LACoFD's Fire Prevention Division is under the leadership of the Department's Fire Marshal and focuses on educating communities on benefits of proper safety practices and identifying and eliminating all types of hazardous conditions posing a threat to life, property, and the environment. Safety inspections are consistently conducted in commercial, industrial and residential developments. Specifically, the Fire Prevention Division's Land Development Unit reviews water and Fire Department access for City and County entitlement projects prior to a public hearing. Additionally, the LACoFD Forestry Division's Fuel Modification Unit's objective is to create defensible space necessary for effective fire protection in newly constructed and/or remodeled homes within the LACoFD-designated Fire Hazard Severity Zones. The Fuel Modification Unit provides guidelines and reviews landscape and irrigation plans submitted by property owners for approval before construction or remodeling of a structure. Fuel modification reduces radiant and convective heat and provides valuable defensible space for firefighters to make an effective stand against an approaching fire front. A fuel modification plan identifies specific zones within a property, subject to fuel modification.

Fuel modification plans are reviewed by the LACoFD for defensible space, fire safety, and compliance with the Los Angeles County Fire Code (adopted by reference by the City of Rolling Hills Estates, as described below), LACoFD fuel modification guidelines, and CCR. Fuel modification plans require the designation of three zones: Zone A, Setback Zone; Zone B, Irrigated Zone; and Zone C, Native Brush Thinning Zone. Plans also include criteria for fire access roads and maintenance activities. Specifications for these plans are summarized below.¹

Zone A – Setback Zone extends 30 feet from combustible structures and can include green lawns or ground cover no more than six inches in height. Adequately spaced and fire-resistant shrubs are allowed in this zone, such as small herbaceous or succulent plants. No vines or climbing plants are allowed in this zone and trees are not recommended. All plants must be properly irrigated by automatic or manual systems to maintain plant health and fire resistance.

Zone B – Irrigated Zone extends from the outer edge of Zone A to 100 feet from combustible structures and can include green lawns or ground covers no more than six inches in height. Plants on slopes may grow up to 12 inches in height within 50 feet of a structure and 18 inches in height beyond 50 feet. Annual grasses and weeds must not grow above three inches. Trees are allowed but they must be an appropriate species as determined by the LACoFD. Plants in this zone can be planted at a slightly higher density than Zone A.

Zone C – Native Brush Thinning Zone extends from the outer edge of Zone B up to 200 feet from combustible structures and follows the same guidelines as Zone B, but at a slightly higher planting density. Irrigation systems are not required.

¹ County of Los Angeles Fire Department, Fuel Modification Plan Notes, 2020.

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Fire access roads to be used for access by fire-fighting apparatus or resources must have clearance of 10 feet on both sides that is free of flammable growth and a vertical clearance of 20 feet. Roadways must be designed in accordance with the Los Angeles County Fire Code, including having an unobstructed width of 20 feet and appropriate turning radii (pursuant to Los Angeles County Code Section 503.2.1). All trees shall be planted far enough from structures and fire access roads, so as to not overhang any structure or access at maturity.

Maintenance activities in fuel modification zones must include thinning, pruning, removal of plant litter and invasive species, and maintenance of irrigation systems. Maintenance measures must be implemented year-round.

Rolling Hills Estates Municipal Code (RHEMC)

Chapter 8.12 Abatement of Substandard Building and Property – Section 8.12.050 – Substandard conditions – description

RHEMC Chapter 8.12 establishes the abatement of substandard buildings and properties that have the potential of endangering the life, limb, health, safety and welfare of the public or occupants. Buildings that have remained unkempt or unfinished with no activity for an unreasonable time (less than two years) may be deemed a substandard building. Conditions include but are not limited to hazardous and unsanitary premises such as accumulation of vegetation, junk, dead organic matter, stagnant water or hazardous materials that may induce fire, health, or safety hazards. Conditions that create inadequate fire protections and lack of fire-fighting equipment, such as fire-resistive construction or fire extinguishing system or equipment required by RHEMC Chapter 15.04, except those buildings or portions thereof which conformed with all applicable laws at the time of their construction and whose fire-resistive integrity and fire extinguishing systems and equipment provide adequate fire safety.

Chapter 8.16 Fire Code – Section 8.16.010 – County fire code adoption by reference

RHEMC Section 8.16.010 adopts the Los Angeles County Fire Code, codified as Title 32 of the Los Angeles County Code, as such code may be amended from time to time, except as amended by this chapter and is adopted by reference as the fire code of the City. The purpose of Title 32 is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosive materials or dangerous conditions in new and existing buildings, structures and premises, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations. Title 32 addresses explosives, hazardous materials, combustibles, wildfire prevention, building standards, various fire issues, and fire suppression and compliance.

Chapter 8.16 Fire Code – Section 8.16.020 – Fire Designation for the City of Rolling Hills Estates

RHEMC Section 8.16.020 establishes that portions of the City of Rolling Hills Estates, including all surrounding unincorporated areas and incorporated cities on the Palos Verdes Peninsula, are designated as being located in the local agency VHFHSZ, as mapped by the State of California. The City will comply with all County Fire Code (Title 32) and Building Code (Title 26) requirements of this designation.

Rolling Hills Estates General Plan

The current (1992) Rolling Hills Estates General Plan Public Safety Element (Public Safety Element) has several goals and policies that aim to protect life and property and specifically address wildfire hazards. These applicable goals and policies are included below.

Goal 1: To the fullest extent possible, the City will work with the County to ensure that critical structures remain safe and functional in the event of a disaster.

Policy 1.3: Work with the County to ensure that all fire equipment remains operable and adequate to respond to a major disaster.

Goal 2: Require that the City's Planning and Engineering Departments to review projects future development in the City.

Policy 2.3: Develop stringent site design and maintenance standards for areas with high fire hazard or soil erosion potential.

Policy 2.6: Encourage residents to plant ground cover to reduce the brush fire hazard in areas adjacent to canyons, and to maintain native drought tolerant slope cover and provide appropriate irrigation to maintain plant cover and prevent erosion.

Policy 2.10: The City will continue to enforce existing ordinances and regulations that apply to roofing materials. The City will require old roofs to be removed prior to reroofing to increase fire-resistance of the structure.

Goal 3: Plan and provide for the occurrence of disasters and emergencies.

Policy 3.9: Establish and maintain a Multi-hazard Functional Plan, mutual aid agreement with neighboring jurisdictions, and coordinate with the American Red Cross and Los Angeles County Fire, Sheriff, and Public Social Services to develop specific plans for responding to emergencies.

Policy 3.10: Coordinate emergency planning efforts with building managers of high-occupancy facilities, dependent care centers (nursing homes, day care centers, etc.) and critical facilities located in the City to facilitate emergency response.

The Public Safety Element includes a Hazards Management Overlay Zone, which applies to portions of the City susceptible to seismic, wildfire, flood, slope stability, and landfill gas hazards. Wildfire hazard areas identified within the Public Safety Element are located throughout the City and are identified in the Subsection 4.22.1.2, Existing Conditions, below.

Multi-Jurisdiction Hazard Mitigation Plan (2020)

In November 2020, the Federal Emergency Management Agency (FEMA) approved the Multi-Jurisdiction Hazard Mitigation Plan (HMP) for the Cities of Rolling Hills Estates and Rancho Palos Verdes. The HMP was prepared in response to the Disaster Mitigation Act of 2000, which required State and local jurisdictions to prepare mitigation plans to document their mitigation planning process, and identify hazards, potential losses, mitigation needs, goals, and strategies. The HMP includes a description of the planning process, hazard risk assessments and community profiles, mitigation strategies, and plans for implementation of such strategies. The hazards that are analyzed in the HMP include seismic hazards, tsunami, hazardous materials, human-caused

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events, wildfire, and utility-related events. Wildfire hazards are identified as having a “likely” probability within the City of Rolling Hills Estates, meaning that there is an annual probability of between 1 in 10 years and 1 in 100 years of wildfire occurrence in the Planning Area. The HMP identifies a series of eight mitigation actions related to wildfire that address the HMP’s goals of protecting life and property, enhancing public awareness, preserve natural systems, encourage partnerships and implementation, and strengthen emergency services. These eight mitigation actions, which have implementation timelines that range between 1 and 5 years, are identified below.

1. Encourage development and dissemination of information relating to the fire hazard to help educate and assist builders and homeowners in being engaged in wildfire mitigation activities, and to help guide emergency services during response.
2. Continue communication, coordination & collaboration between wildland/urban interface property owners, local planners and fire prevention crews and officials to address risks, existing mitigation measures, and federal assistance programs.
3. Encourage implementation of wildfire mitigation activities through enforcement in a manner consistent with the goals of promoting sustainable ecological management and community stability.
4. Conduct annual LACOFD open house.
5. Establish and implement a Weed Abatement Enforcement Program.
6. Defensible home and fuel modification model project that shows building changes residents can implement.
7. Participation in the Alert Wildfire Camera Program and Fire Detection Network in partnership with neighboring jurisdictions and outside research and/or utility companies.
8. Undergrounding of electrical utilities for wildfire prevention.

4.22.1.2 EXISTING CONDITIONS

BACKGROUND ON WILDFIRE HAZARDS

A “wildfire” is defined in Section 51177(j) of the California Government Code as “...an unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to extinguish the fire.”

The “wildland/urban interface” exists where well-defined urban and suburban development presses up against open expanses of wildland areas. Certain conditions usually need to be present for significant interface fires to occur, including hot, dry, windy weather; large fuel load (dense vegetation); the inability of fire services to contain or suppress the fire; and the occurrence of multiple fires that overwhelm committed resources. Once such a fire has started, various physical conditions influence its behavior, including weather, wind, fuel load, topography, moisture, and development patterns. Southern California has two distinct areas of risk for wildland fires: (1) the foothills and lower mountain areas, typically covered with scrub brush or chaparral; and (2) the higher elevations of mountains, covered with heavily forested terrain.

The fall of 2003 was one of the most destructive wildfire seasons in Southern California history. In a 10-day period, 12 separate fires raged across Los Angeles, Riverside, San Bernardino, San Diego, and Ventura counties, burning almost 750,000 acres and resulting in the loss of 22 lives and 4,812 homes. The magnitude of the 2003 fires resulted from a combination of factors, including extended drought followed by thunderstorms; lightning strikes and windy conditions; an infestation of bark beetles that killed thousands of mature trees; and the practice of suppressing wildfires over the last century that has led to buildup of brush and highly flammable fuel loads. In Los Angeles County, the 2009 Station Fire consumed 160,000 acres, the 2014 Colby Fire in Glendora burned more than 2,000 acres, the 2018 Woolsey Fire consumed more than 97,000 acres and burned over 1,600 structures, the 2019 Tick Fire consumed approximately 4,600 acres near Santa Clarita and destroyed 22 structures, the 2019 Maria Fire consumed approximately 10,000 acres in the hills east of Ventura, and in 2020, the Lake Fire consumed over 31,000 acres in the Angeles National Forest north of Santa Clarita.²³ Other major fire events include the 2021 Dixie Fire, which as of September 2021, has consumed over 960,000 acres in five counties (Butte, Plumas, Tehama, Shasta, and Lassen Counties).⁴ According to the Multi-Jurisdiction HMP discussed above, the most recent wildfire in the Planning Area is the 2009 Portuguese Bend Reserve Fire, which burned approximately 180 acres of land in the Cities of Rancho Palos Verdes and Rolling Hills Estates.

Wildfires are primarily driven by the following three components: fuels, weather, and topography. Wildland fuel is vegetation covering the landscape that provides the energy source that fire needs to spread. Vegetation found in open space natural areas, as well as ornamental vegetation around homes and structures are considered fuel. Weather, comprised of temperature, wind, relative humidity, cloud cover, precipitation, and atmospheric stability is the most dynamic component of the fire environment and can change rapidly. Weather patterns, such as long periods of drought and high temperatures drastically impact fire conditions by increasing the amount of dried vegetation (fuel) in an area. Finally, topography includes elements of slope, aspect, elevation, or the lay of the land. These factors play an important role while fighting wildland fires. Slope affects the rate of fire spread, while aspect may affect fire intensity.

Wildfires can require evacuation of portions of the population, revised traffic patterns to accommodate emergency response vehicle operations, and restrictions on water usage during the emergency. Exacerbated health hazards may exist for elderly or disabled persons who cannot evacuate or succumb to smoke and heat. The loss of utilities and increased demand on medical services can also be anticipated.

A wildfire's significant alteration of hillside areas and the associated stream systems can be noticeable for periods varying from a few years to decades. Wildfires can have significant adverse effects on watersheds, watercourses, and water quality. Large fires can clear vegetation and expose mineral soil, thus leading to soil erosion. Loss of vegetation also results in less water being absorbed by plants, which can cause a short-term increase in the quantity and the delivery rate of water entering streams. Increased runoff and the associated sediment load can cause

² Los Angeles County Fire Department, 2020 Strategic Fire Plan, June 3, 2020.

³ The California Department of Forestry and Fire Protection, Fire incident map, <https://www.fire.ca.gov/incidents/2020/>, accessed September 20, 2021.

⁴ The California Department of Forestry and Fire Protection, Dixie Fire, <https://www.fire.ca.gov/incidents/2021/7/13/dixie-fire/>, accessed September 20, 2021.

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costly damage to downstream assets such as homes, roads, debris basins, and other infrastructure.

Wildfires can potentially affect water quality through increased sedimentation, turbidity, and nutrient loading. Concentration of nutrients (phosphorous and nitrogen) are increased from burned vegetation and delivered to streams through surface runoff. Stream temperatures often increase after fires, typically through the removal of overhead protective vegetation.

WILDFIRE HAZARDS WITHIN THE PLANNING AREA

Wildfires can impact the Planning Area because of the undulating terrain and prevalence of undeveloped hillsides and natural areas located throughout the Planning Area. The Planning Area is largely developed with low- and medium-density residential uses, with small portions of the Planning Area designated for high-density residential and commercial uses, such as the Commercial District. The California Department of Forestry and Fire Protection's (CAL FIRE) FRAP has identified the Palos Verdes Peninsula, including the entire Planning Area, as being located within a Very High Fire Hazard Severity Zone (VHFHSZ) within an Local Responsible Area (LRA) (See **Figure 4.22-1**).⁵ Chaparral-filled canyon areas within the Planning Area and brush hazards in neighboring jurisdictions, such as Rolling Hills, Rancho Palos Verdes, and Palos Verdes Estates, pose a fire hazard in the City, which highlights the need for the City to strictly enforce brush management and fire prevention programs, as identified in the local regulatory framework, discussed above.⁶

The local topography of the Planning Area can best be described as dominated by hillsides and canyons. Development in portions of the Planning Area, which extends into the canyons can reduce fire hazards by removing vegetation around the perimeter of the suburban structures. However, development that extends into these vegetated areas of open space can also introduce the human element into more outlying locations, thus increasing wildfire hazard. Given the wildfire hazards that are present in open space and highly vegetated portions of the Planning Area, the City identified high risk areas in the current (1992) General Plan Public Safety Element. Fire hazard areas are located through the Planning Area. Specifically, the identified fire hazard areas include the open space canyon area in the southwestern portion of the Planning Area, north of Crest Road and east of Hawthorne Boulevard; the sloped, undeveloped hillside on the southwest side of the Commercial District along Indian Peak Road and near the Vista Del Norte Reserve in Rancho Palos Verdes; the undeveloped hillside on the west side of Crenshaw Boulevard between Silver Spur Road and Palos Verdes Drive North; the neighborhood located south of Palos Verdes Drive North between Crenshaw Boulevard and Hawthorne Boulevard near Ranchview Road; the area near Ernie Howlett Park and Nansen Field north of Hawthorne Boulevard and east of Palos Verdes Drive North; and the George F. Canyon Nature Preserve. Other areas within the City that are undeveloped or have high density vegetative cover, such as the Palos Verdes Landfill area, the South Coast Botanic Garden, or other highly vegetated canyon areas, may also result in enhanced fire hazards.

⁵ LRAs are areas of California where local governments have financial responsibility for wildland fire protection.

⁶ City of Rolling Hills Estates, General Plan Public Safety Element, 1992.

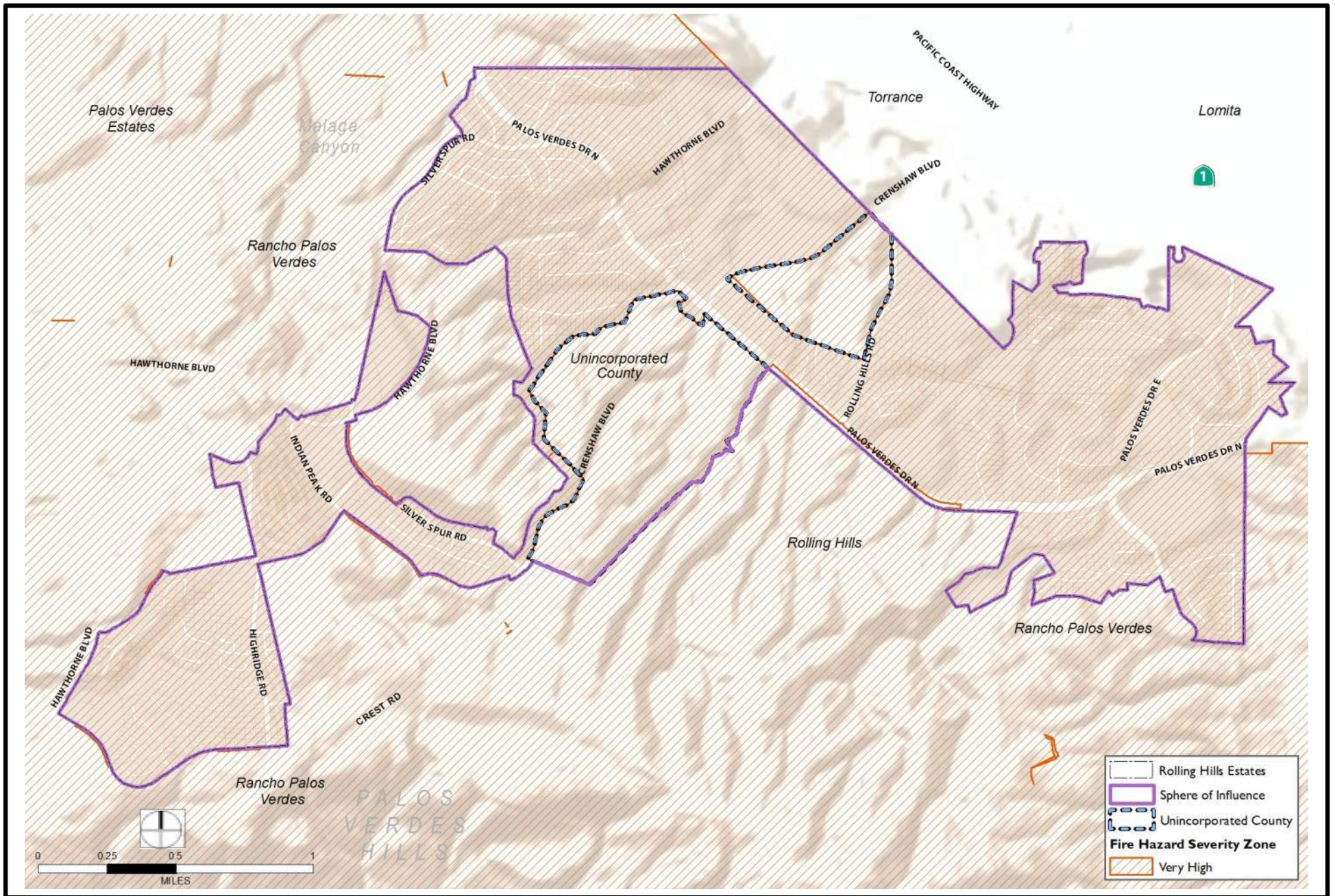


FIGURE 4.22-1
Fire Hazard Severity Zone in the Planning Area

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Fire services are provided in the Planning Area by the LACoFD, which operates nine divisions, 22 battalions, 175 fire stations and 9 fire suppression camps and answers over 394,585 emergency calls annually, as of 2019. Additionally, the LACoFD has Forestry, Planning, Information Management, Fire Prevention, Air and Wildland, Lifeguard, and Health Hazardous Materials Divisions, which provide valuable services to over four million Los Angeles County residents. LACoFD Battalion 14 operates five fire stations in the Palos Verdes Peninsula, including Fire Station 106 (Battalion 14 Headquarters) at 27413 Indian Peak Road within the Planning Area. The other four stations include Station 2, located on Palos Verdes Drive West adjacent to Palos Verdes Estates City Hall; Station 56, located on Crest Road in the City of Rolling Hills; Station 53, located on Palos Verdes Drive South in the City of Rancho Palos Verdes; and Station 83, located at the corner of Palos Verdes Drive East and Miraleste Drive in the City of Rancho Palos Verdes. According to the Los Angeles County Fire District Facilities Master Plan (FMP), Fire Station 2, which is over 60 years old, is in poor condition and in need of replacement due to issues related to functionality, age, condition, and projected future 2040 capacity. In addition, the FMP projected 2040 stressed units at Fire Station 106. The new station to replace the existing Fire Station 2 with additional firefighting and paramedic unit is anticipated to also relieve the anticipated future demands at Fire Station 106.⁷ No other fire stations within the Palos Verdes Peninsula were identified as having any demand, capacity, or functionality issues.

The Multi-Jurisdictional HMP identifies critical facilities, which are defined by FEMA as facilities essential to the health and welfare of the population and are important following hazard events, such as police and fire stations, emergency evacuation shelters, transportation systems, utility systems, such as potable water, wastewater, and natural gas and electricity utilities, and locations that house or handle hazardous materials. All of the critical facilities identified by the HMP as within the Planning Area are listed as susceptible to wildfire hazard impacts, including utility infrastructure (the California Water Service pumping station on Crenshaw Boulevard and the Metropolitan Water District facility on Palos Verdes Drive North and Palos Verdes Drive East), City facilities (such as the City maintenance yard and City Hall), the LACoFD Station 106 on Indian Peak Road, and telecommunication support (Cox Communications in the Peninsula Shopping Center).⁸ Additionally, the HMP identifies the County-designated evacuation routes within the Planning Area, which include Hawthorne Boulevard and Crenshaw Boulevard, as well as City-designated evacuation routes, which include Highridge Road, Silver Spur Road, Palos Verdes Drive North, and Palos Verdes Drive East.

4.22.2 IMPACT ANALYSIS

4.22.2.1 THRESHOLDS OF SIGNIFICANCE

This analysis evaluates the proposed GPU's impacts related to wildfires based on the thresholds of significance identified in Appendix G of the State CEQA Guidelines. Based on these criteria, an impact related to wildfires is considered significant if implementation of the proposed GPU would:

⁷ Los Angeles County Fire District, CEQ Asset Management Branch Master Planning Unit, Los Angeles County Fire District Facilities Master Plan, October 2020.

⁸ City of Rolling Hills Estates and City of Rancho Palos Verdes, Multi-Jurisdiction Hazard Mitigation Plan, Table: Impacts to Critical Facilities in the Project Area, November 2020.

Threshold 4.22(a): *Substantially impair an adopted emergency response plan or emergency evacuation plan.*

Threshold 4.22(b): *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentration from a wildfire or the uncontrolled spread of a wildfire.*

Threshold 4.22(c): *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.*

Threshold 4.22(d): *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.*

4.22.2.2 METHODOLOGY

Potential wildfire impacts associated with implementation of the proposed GPU are identified and evaluated based on the potential modifications to the existing physical wildfire conditions of the Planning Area and a review of local and regional plans and existing infrastructure. The proposed GPU does not identify any specific development project. Accordingly, the following analysis is based on the potential reasonable “worst case” (i.e., most intense) development that would be allowed under the proposed GPU. The analysis below also identifies where the majority of development potential would exist and where there could be associated wildfire impacts as a result of implementation of the proposed GPU.

4.22.2.3 PROJECT IMPACTS AND MITIGATION

Threshold 4.22(a): *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Impact Analysis

The majority of sites envisioned for potential intensification through buildout of the proposed GPU are located on underutilized parcels that are characterized by suburban development, such as institutional uses (e.g., Palos Verdes Peninsula High School, Dapplegray Elementary School, and existing municipal and church properties) and commercial development (such as development within the City’s Commercial District and commercial office properties). By focusing development on institutional and commercial land uses and in the Commercial District, which includes the City’s most intense land uses with subregional-serving commercial centers, office buildings, and residential buildings ranging in height from two to four stories, the proposed GPU would relieve development pressure on open space and low density areas that are characterized by steep hillsides and canyons. This would reduce overall wildfire risk by concentrating future development in areas that are not characterized by mature dense tree stands, or native or non-native vegetation that could fuel spread of a wildfire. Further, the proposed GPU would not result in land use changes that would convert open space to other development uses. As such, buildout of the proposed GPU within already developed areas would not result in an increase in the construction of combustible structures and improvements in areas immediately surrounded by dense, flammable vegetation.

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However, because the entirety of the Planning Area is located within a VHFHSZ, future residential and commercial structures would be required to comply with more stringent standards to resist ignition and slow the spread of fire. Further, any changes in the circulation around a project would be designed and constructed in accordance with LACoFD standards to ensure that future development would not impede or obstruct evacuation procedures during the event of a wildfire. In addition, any future projects developed as part of the proposed GPU that would be located in close proximity to dense vegetation or mature stands of trees would require a Fuel Modification Plan and would require installation and irrigation of non-flammable landscaping materials, as well as use of ignition-resistant building materials and roofing, consistent with LACoFD standards.

Future development is assumed to occur over multiple years through 2040; as such, any impacts associated with an increase in population and, thus, an increase in the number of residents in a given area using evacuation routes during a wildfire emergency, would occur gradually as additional development and associated population growth is added to the Planning Area. In addition, any future development under the proposed GPU would be required to comply with the provisions of the California Fire and Building Codes for fire access and circulation. Individual project development plans would be reviewed by the City and LACoFD to determine specific fire requirements (e.g., fire flow capacities, emergency access, fuel modification plans) applicable to the specific development and to ensure compliance with these requirements. Further, in the event of a future wildfire event that requires evacuation, emergency responders would assess local conditions in an ongoing manner, to identify locations and severity of threats to homes and businesses within the Planning Area and any other land uses that place people in the path of a wildfire. Based on those assessments, decisions would be made on where to focus fire response efforts, initiate calls for back-up assistance and assignment of additional resources, and when/where to implement emergency evacuations if no other options are deemed viable. This could include partial or total evacuation of the Planning Area, sheltering in place for some parts of the community, possibly moving people to the critical facilities identified in the HMP, or combinations of all of these approaches. Actions by emergency responders to direct evacuation efforts would be based, in part, on indications of where congestion is occurring so that evacuees could be directed in a different direction.

Therefore, because future development would be required to adhere to strict design standards regarding fire resistance and circulation, and because future development would be concentrated in the City's Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area, the proposed GPU would not result in a substantial increase in the potential for wildfires to move through developed areas of the Planning Area and substantially impair the City's emergency response and emergency evacuation plan along the Planning Area's street network through the Multi-Jurisdictional HMP. As such, impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact on the implementation of an emergency evacuation plan, the representative projects themselves would not cause any potentially significant impacts on the implementation of an emergency response plan or emergency evacuation plan. In addition, as discussed above, individual development projects, such as the representative projects, are required to adhere to strict design standards regarding traffic circulation and building materials. Accordingly, the representative projects would result in a less-than-significant

impact on the City's emergency response and emergency evacuation plan through the Multi-Jurisdictional HMP.

Mitigation Measures

Impacts related to emergency response and evacuation plans were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to emergency response and evacuation plans were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.22(b): Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentration from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis

As stated above, the majority of sites envisioned for potential intensification through buildout of the proposed GPU are located on underutilized parcels that are characterized by suburban development, thus, reducing overall wildfire risk by concentrating future development in areas that are not characterized by mature, dense tree stands, or native or non-native vegetation that could fuel spread of a wildfire.

If future development were to occur near areas of the Planning Area that are characterized by dense tree canopies and vegetation that could provide fuel for a wildfire, such development would be required to adhere to the design standards identified above for construction within a VHFHSZ regarding traffic circulation and the use of flammable materials and landscaping, as regulated by the City and the LACoFD. Such requirements would limit wildfire risks and, therefore, reduce the risk of exposing Planning Area inhabitants to pollutants released by wildfires.

Additionally, as future development would consist primarily of commercial and residential development, future development is not expected to store, use, or dispose of significant quantities of hazardous materials. However, it is possible that future commercial development within the Planning Area could include development of a gas station, which would handle and store automotive fuels. Such uses would be required to adhere to federal, state, and local regulations for the safe storage and handling of such materials, which would be adequate to ensure that wildfire impacts would be less than significant. For other retail commercial, office, or residential uses anticipated through buildout of the proposed GPU, there would be no significant sources of hazardous materials that could add to the fuel load and potential pollutant burden in the event of an on-site fire. Therefore, buildout of the proposed GPU would not substantially exacerbate wildfire risks, and impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact regarding wildfire risks and associated pollution impacts, the representative projects themselves

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would not cause any potentially significant impacts related to wildfire risks and exposing future project inhabitants to pollutants, and impacts would be less than significant.

Mitigation Measures

Impacts related to wildfire risks and associated pollution impacts were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to wildfire risks and associated pollution impacts were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.22(c): Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis

As stated above, the majority of sites envisioned for potential intensification through buildout of the proposed GPU are located on underutilized parcels that are characterized by suburban development, such as institutional uses and in the Commercial District. These properties are characterized by existing suburban development and predominantly include impervious surfaces and managed landscaping areas with minimal areas of native and non-native grasses. These areas are also characterized by existing roadways and utilities infrastructure (including pressurized water systems). Future development would connect to existing electricity sources and utility lines for water and sewer service. Further, these utilities are predominantly located underground, further reducing the risk of wildfire.

Construction activities associated with individual projects that are near open space areas, such as those along the south side of Indian Peak Road in the Commercial District, could exacerbate the risk of wildfire in the short-term. Such construction-related wildfire risks include discarding lit cigarettes, use of flammable materials and fuels, and operation of combustion-powered machinery that could generate a spark that could ignite spilled fuels or other flammable materials, as well as vegetation. However, as individual projects are constructed near open space or canyon areas, fuel modification requirements would mandate removal of vegetation in close proximity to a proposed structure and would require irrigation and landscaping management to reduce fuel loads. In short, individual projects constructed through implementation of the proposed GPU would be required to comply with more stringent standards to resist ignition and slow the spread of fire per LACoFD standards, and no building permits would be issued by the City until construction plans have been reviewed and determined to be in full compliance with all applicable standards for development in a VHFHSZ. Such standards include requirements for incorporating fire-resistant building materials, sprinkler systems, certain water flow pressures for fire hydrants, adequate internal circulation, and site access for fire engines and crews.

Further, no wildfire-resistant design measures, such as emergency water storage facilities, additional fire roads or fuel breaks, or additional power facilities, are anticipated to support buildout of the proposed GPU. Therefore, the proposed GPU would not exacerbate fire risks or result in temporary

or ongoing impacts to the environment related to the installation or maintenance of associated infrastructure, and impacts would be less than significant.

When considering the representative projects, there are no additional or different environmental impacts associated with wildfire risks beyond those described above resulting from the overall buildout of the proposed GPU. Since the representative projects are a subset of buildout of the proposed GPU and the total buildout of the proposed GPU has been determined to result in a less-than-significant impact regarding exacerbation of wildfire risks, the representative projects themselves would not require the installation or maintenance of infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As such, impacts would be less than significant.

Mitigation Measures

Impacts related to wildfire risks were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to wildfire risks were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold 4.22(d): Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis

As discussed in Section 4.6, Geology and Soils, of this PEIR, the Planning Area contains numerous landslide zones, particularly along Crenshaw Boulevard, along the northern boundary of the Planning Area, and the areas south of Palos Verdes Drive North between Crenshaw Boulevard and Silver Spur Road. The Commercial District is underlain by the Silver Spur Landslide Complex and is in proximity to the Cabrillo Fault. The precise location and boundaries of the Silver Spur Landslide Complex is unknown; however, there is potential for future developments within the Commercial District to be located on an unstable geologic unit. In addition, infill developments within the Planning Area that result from buildout of the GPU could also be located on steep slopes. These potential landslide areas are included within the Hazard Management Overlay zone, and any future development within this overlay zone would require geotechnical evaluation and implementation of recommended design and safety measures.

Furthermore, future developments would be required to comply with the grading standards established in the RHEMC to reduce landslide potential and ensure soil stability. For example, RHEMC Chapter 17.18.050 prohibits slopes greater than 25 percent from being substantially graded or filled; slopes greater than 33.3 percent from being improved; and requires a 35-foot setback from the crest of a hill for any proposed structure greater than five feet in height. As such, any future development that would occur through buildout of the GPU would be required to adhere to these local requirements regarding seismic stability and location in relation to steep slopes, as well as the design requirements for projects located within a VHFHSZ, relating to landscaping irrigation, fuel management, and use of flame-resistant construction materials.

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The majority of future development associated with buildout of the proposed GPU would be located within the Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. In the event that future development were to occur in close proximity to sloped areas characterized by flammable vegetation, such development would be required to adhere to strict design guidelines, such as fuel modification activities required by LACoFD, which would remove some of the flammable vegetation in close proximity to a proposed combustible structure and replace it with irrigated and/or fire-resistant vegetation. Such fire resistant vegetation would be less likely to burn during a wildfire event and would serve to stabilize slopes in a post-fire scenario. As such, buildout of the proposed GPU would not expose people or structures to significant risks associated with post-fire slope instability or drainage changes, and impacts would be less than significant.

Mitigation Measures

Impacts related to post-fire slope instability or drainage changes were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Impacts related to post-fire slope instability or drainage changes were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

4.22.2.4 CUMULATIVE IMPACTS

Impact Analysis

Future development under the proposed GPU would result in additional demand on existing project design oversight provided by LACoFD and would result in an increase in development activities within a VHFHSZ. However, as discussed above, any new development in the Palos Verdes Peninsula would be required to comply with all applicable California Fire Code requirements, as well as each jurisdictional city's and LACoFD design standards and oversight requirements for construction, access, water mains, fire flows, hydrants, construction materials, and fuel modification. Individual projects would be reviewed by each jurisdictional city in the Palos Verdes Peninsula and LACoFD to determine site-specific wildfire risks and design/fuel modification requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, compliance with regulatory requirements would encourage fire prevention and fire-resistant communities, which, in turn, would reduce wildfire risks within the Palos Verdes Peninsula.

The City, in consultation with LACoFD, would continue to consider the wildfire impacts of individual projects and require fuel modification as necessary, given that all future development would be located within a VHFHSZ. Further, while development construction activities near open space areas can result in a temporary increase in wildfire risks, intensification of already developed land uses, as would predominantly occur through implementation of the proposed GPU, would serve to further reduce the fuel load within the Planning Area through mandatory fuel modification activities for projects in close proximity to flammable vegetation. As such, the incremental effect of the proposed GPU on wildfire risks within the Palos Verdes Peninsula would not be cumulatively considerable, and cumulative impacts regarding wildfire risks resulting from the implementation of the proposed GPU in consideration of other projects on the Palos Verdes Peninsula would be considered less than significant.

Mitigation Measures

Cumulative impacts related to wildfire risks were determined to be less than significant. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

Cumulative impacts related to wildfire risks were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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5.0 ALTERNATIVES TO THE GENERAL PLAN UPDATE

5.1 INTRODUCTION

CEQA Guidelines Section 15126.6 requires the identification and evaluation of a range of reasonable alternatives designed to feasibly achieve most of the basic objectives of the project, while avoiding or substantially lessening any of the significant environmental effects of the project. In addition, CEQA requires a comparative evaluation of the merits of the alternatives.

Pursuant to CEQA Guidelines Section 15126.6(f)(1), factors that may be taken into account when addressing the feasibility of alternatives include, but are not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). Although these factors do not present a strict limit on the scope of reasonable alternatives to be considered, they help establish the context in which “the rule of reason” is measured against when determining an appropriate range of alternatives sufficient to establish and foster meaningful public participation and informed decision-making.

5.2 PROJECT OBJECTIVES

An EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with the action while, at the same time, avoiding or substantially lessening any of the significant effects associated with the proposed project. As identified in Section 2.0, Project Description, of this PEIR, the Vision and Guiding Principles of the proposed GPU, along with the City’s required housing goals, together constitute the Project objectives and are as follows:

VISION

Rolling Hills Estates in 2040 has maintained a rural feel and equestrian identity, while becoming a more vibrant and connected community. The commercial district is an attractive and thriving destination for residents and visitors from the Palos Verdes Peninsula, providing ample opportunities for shopping, outdoor dining, entertainment, and living. Rolling Hills Estates is a model for sustainable practices and is admired for its quality local environment, natural semi-rural setting, and recreational amenities, including trails, parks, and open spaces. Residents and visitors can conveniently walk, ride horses, bike, and take transit to and within the community. Rolling Hills Estates is a family-, youth-, and senior-friendly City, with safe places for people of all ages to gather, play, and learn.

GUIDING PRINCIPLES

1. Preserve the community’s distinctive rural character and high quality of life.
2. Improve mobility and emphasize a spectrum of transportation choices.
3. Promote a vibrant commercial district.
4. Maintain equestrian character.
5. Provide quality parks, trails, open spaces, and community facilities.

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6. Enhance the public realm and promote quality design.
7. Become a more sustainable city.

HOUSING

The proposed Housing Element states:

Meeting the housing needs established by the State of California is an important goal for the City of Rolling Hills Estates. As the population of the State continues to grow and scarce resources decline, it becomes more difficult for local agencies to create adequate housing opportunities while maintaining a high standard of living for all citizens in the community. State law recognizes that housing needs may exceed available resources and, therefore, does not require that the City's quantified objectives be identical to the identified housing needs. This recognition of limitations is critical, especially during this period of financial uncertainties in both the public and private sectors.

5.3 ALTERNATIVES CONSIDERED AND REJECTED DURING THE PROJECT PLANNING PROCESS

CEQA Guidelines Section 15126.6(c) requires that an EIR identify any alternatives that were considered for analysis but rejected as infeasible. Such potential alternatives are discussed below.

NO DEVELOPMENT ALTERNATIVE

The No Development Alternative would prohibit all new development, limiting urban growth to its current condition. No changes to the City would occur (with the exception of previously approved development), and all residential development, commercial, office, and institutional uses, and recreational uses and open space would generally remain in their current conditions. Some minor population growth could occur within the City to the extent that existing residential units or previously approved development could accommodate additional residents. Although none of the impacts of the proposed GPU, adverse or beneficial, would occur, the City has no legal means to halt development within the Planning Area since the current 1992 General Plan allows for redevelopment and future growth within certain land use designations and zoning. Accordingly, the No Development Alternative does not represent a scenario that would potentially occur. In addition, implementation of this alternative would not provide adequate housing supply required to meet the City's obligations to provide its fair share of affordable housing. Furthermore, this alternative would not achieve any of the objectives established for the proposed GPU. Therefore, this alternative has been rejected from further consideration.

PROJECT WITHOUT INCREASE IN BASE RESIDENTIAL DENSITY ALTERNATIVE

Under the Project without Increase in Base Residential Density Alternative, the base residential density of the Commercial District would remain at 22 dwelling units per acre. Based on a market study conducted for the proposed GPU, it is estimated that there is a market demand for 95 to 749 new residential units in the Planning Area over the next two decades; however, there may not be enough developable land to accommodate these many new units without increasing the base residential density as proposed under the Project. In addition, the market study revealed that residential development at 22 dwelling units per acre is not reasonably economically feasible. Accordingly, this alternative was found not to be viable since it would not result in the revitalization

5.0 ALTERNATIVES TO THE GENERAL PLAN UPDATE

of the Planning Area's Commercial District as envisioned in the Commercial District Area Vision Plan or be expected to provide adequate housing supply required to meet the City's obligations to provide its fair-share of affordable housing. Therefore, this alternative has been rejected from further consideration.

DISTRIBUTED GROWTH ALTERNATIVE

The proposed GPU would focus future growth in the Commercial District with little development considered elsewhere in the Planning Area. Under the Distributed Growth Alternative, distributing growth in other portions of the Planning Area would not reduce the significant and unavoidable impacts of the proposed GPU, which are related to air quality, cultural resources, transportation, and tribal cultural resources. In addition, as most of the Planning Area is residential, distributing growth in other portions would not achieve the City's goals of preserving the semi-rural and suburban character of well-established neighborhoods in the Planning Area. In fact, more spread-out growth, or growth in other portions of the Planning Area, would likely result in greater impacts to visual quality, scenic views, cultural resources, land use (e.g., encroachment into recreational areas and open space), and transportation. Increased building height impacts would also be greater in sensitive residential areas, an impact that would not occur under the proposed GPU. The City carefully considered those areas in the Planning Area, particularly the Commercial District, with the highest potential to accommodate future growth while limiting environmental impacts. Therefore, this alternative was rejected from further consideration.

5.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Three alternatives have been identified to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the proposed GPU but that may avoid or substantially lessen any of the significant effects of the proposed GPU. The following alternatives are analyzed in further detail below:

- No Project Alternative
- Project without Local Density Bonus Alternative
- Project without Mixed-Use Overlay on Commercial Office Alternative

A detailed description and environmental analysis for each of these alternatives is provided within Sections 5.4.1 through 5.4.3 below.

5.4.1 ALTERNATIVE 1: NO PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate and analyze the impacts of a No Project Alternative. When the Project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the No Project Alternative is the continuation of the existing plan, policy, or operation into the future. Accordingly, under Alternative 1, no changes to the current General Plan would occur, including no changes to the land use designations or circulation plan. Alternative 1 would continue to allow future development within the Planning Area of what would be reasonably expected under the current (1992) General Plan based on existing land use designations and their corresponding allowable uses and densities.

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AESTHETICS

Alternative 1 is anticipated to result in some increase in development within the City. As the City is predominantly built out, future development projects under the current (1992) General Plan would likely occur as infill or redevelopment. Although Alternative 1 would reduce the amount of development expected when compared to the proposed GPU, future development under the current General Plan would result in similar impacts related to scenic vistas as the proposed GPU. There are several publicly accessible locations in the Planning Area that provide scenic vistas, including views of the Pacific Ocean and the Los Angeles Basin. There are no State scenic highways within the Planning Area; however, there are City-designated scenic corridors within the Planning Area. Similar to the proposed GPU, the No Project Alternative does not involve any components that would change the scenic features associated with the City-designated scenic corridors or the undeveloped natural open space areas within the Planning Area. In addition, future development under the current General Plan would continue to be subject to the requirements of the City's Neighborhood Compatibility Ordinance and View Protection Ordinance, as well as the zoning code and other ordinances regarding aesthetic quality. Therefore, impacts under Alternative 1 regarding scenic vistas and those related to conflict with applicable zoning and other regulations governing scenic quality would be less than significant and similar to the proposed GPU.

AIR QUALITY

Although Alternative 1 would reduce the amount of development expected when compared to the proposed GPU, future development under the current (1992) General Plan would result in similar air quality impacts to the proposed GPU. During construction of future development under the current General Plan, regional and localized emissions could still exceed the South Coast Air Management District (SCAQMD) daily significance thresholds, resulting in significant and unavoidable impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in non-attainment, and exposure of sensitive receptors to substantial pollutant concentrations, similar to the proposed GPU. Therefore, air quality impacts under Alternative 1 during construction of future development projects could be significant and unavoidable and similar to the proposed GPU.

Because less new development would be allowed under the current General Plan when compared to the proposed GPU, overall operational emissions generated by mobile sources and area sources would be less under the Alternative 1 than the proposed GPU. However, unlike the proposed GPU, this alternative would not result in a new Sustainability Element, which aims to reduce air pollutant emissions in the Planning Area with long-term adaptability by participating in regional strategies, pursuing lobbying strategies to encourage high-quality transit opportunities, and seeking funding opportunities that support climate and long-term adaptability. As with the proposed GPU, given the volume of air pollutants attributable to buildout of the Planning Area, impacts related to operational emissions under Alternative 1 would be conservatively considered significant and unavoidable although slightly less than those of the proposed GPU.

BIOLOGICAL RESOURCES

Since the Planning Area is predominantly built out, as with the proposed GPU, future new development under the current (1992) General Plan is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, future development would avoid most of the sensitive

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biological resource areas within the Planning Area, including the George F. Canyon Nature Preserve and the Linden H. Chandler Preserve, and those that are immediately adjacent to the Planning Area, including Hesse Community Park and the Vista del Norte Reserve in the City of Rancho Palos Verdes and the Agua Amarga Reserve in the City of Palos Verdes Estates. Therefore, the potential to impact sensitive or special status species, riparian habitat, sensitive natural communities, federally protected wetlands, and wildlife corridors under Alternative 1 would be similar to the proposed GPU. Overall, similar to the proposed GPU, impacts related to biological resources associated with Alternative 1 would be reduced upon compliance with current regulatory requirements. However, without the benefit of implementing **Mitigation Measures MM-BIO-1** through **MM-BIO-4** (as identified for the proposed GPU) in addition to regulatory compliance, impacts to special status species or habitats, riparian habitat, sensitive communities, and federally protected wetlands under Alternative 1 may be potentially significant and unavoidable and greater than the proposed GPU.

CULTURAL RESOURCES

Since the Planning Area is predominantly built out, as with the proposed GPU, future new development under the current (1992) General Plan is likely to occur as infill or redevelopment. Similar to the proposed GPU, since demolition or other material impairment of a historical resource and destruction of an archaeological resource from ground disturbance during construction activities over the course of current General Plan buildout cannot be precluded, impacts on historical resources and archaeological resources, respectively, under Alternative 1 would be significant and unavoidable.

ENERGY

Alternative 1 would reduce the amount of development expected when compared to the proposed GPU. Accordingly, this alternative would result in a lower demand for electricity, natural gas, and petroleum-based fuel. As with the proposed GPU, any individual development project implemented under the current (1992) General Plan would be required to comply with applicable energy efficiency standards, including the requirements of Title 24 standards and the California Green Building Standards (CALGreen) Code. However, unlike the proposed GPU, this alternative would not result in a new Sustainability Element, which aims to reduce energy consumption in the Planning Area by requiring that all new development exceeds the State and local energy conservation requirements, including requiring new and existing buildings to exceed the CALGreen Code by 10 percent and meet net zero requirements by 2040. Regardless, impacts to the wasteful, inefficient, or unnecessary consumption of energy and consistency with plans for renewable energy and energy efficiency under Alternative 1 would be less than significant and similar to the proposed GPU.

GEOLOGY AND SOILS

As with the proposed GPU, individual development projects under the current (1992) General Plan would be required to prepare site-specific geotechnical investigations to evaluate seismic, liquefaction, ground settlement, paleontological resources, and/or soil expansion hazards. Similar to the proposed GPU, all future development projects within the Commercial District under this alternative would be subject to the requirements of the Hazard Management Overlay Zone, the grading standards and building code established in the Rolling Hills Estates Municipal Code

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(RHEMC), as well as the California Building Code (CBC). Therefore, similar to the proposed GPU, impacts related to landslides and unstable geologic units or soil would be less than significant.

GREENHOUSE GAS EMISSIONS

Alternative 1 would reduce the amount of development expected when compared to the proposed GPU. Accordingly, this alternative would result in a lower demand for electricity, natural gas, and petroleum-based fuel and a corresponding reduction in greenhouse gas (GHG) emissions. As with the proposed GPU, any individual development project implemented under the current (1992) General Plan would be required to comply with the latest and most stringent energy and water conservation codes and requirements, including the requirements of Title 24 standards and the CALGreen Code. However, unlike the proposed GPU, this alternative would promote compact development integrated into the City's mixed-use Commercial District, enhancing the synergistic nature of the land uses in the Commercial District and offering opportunities for walking, cycling, and other alternative forms of transportation to and from destinations within the Commercial District. In general, impacts related to GHG emissions under Alternative 1 would be less than significant and less than the proposed GPU.

LAND USE AND PLANNING

Under Alternative 1, the benefits of providing additional mixed-use and development intensity opportunities in the Planning Area, particularly in the Commercial District, would not occur. Therefore, although significant impacts would not result under Alternative 1, this alternative would not increase residential intensity and provide mixed-use opportunities in a commercial corridor to align with SCAG's regional policies for integrating land use and transportation. Nevertheless, no conflicts with adopted plans and policies would occur under this alternative. Therefore, land use impacts would be slightly greater under this alternative when compared to the proposed GPU but would remain less than significant.

NOISE

Since the Planning Area is predominantly built out, as with the proposed GPU, future new development under the current (1992) General Plan is likely to occur as infill or redevelopment. Similar to the proposed GPU, new development under the current General Plan would result in additional noise from construction and operational (mobile and stationary sources) activities. As with the proposed GPU, construction activities would be required to comply with the City's noise regulations contained in the RHEMC. Also similar to the proposed GPU, all mobile and stationary noise source impacts under Alternative 1 would be reduced to a less-than-significant level by complying with the City's Noise Ordinance.

However, similar to the proposed GPU, future new development under the current General Plan could result in significant short-term construction vibration impacts. Without the benefit of implementing **Mitigation Measures MM-NOI-1** and **MM-NOI-2** (as identified for the proposed GPU), construction vibration impacts under Alternative 1 may be potentially significant and unavoidable and would be greater than the proposed GPU.

POPULATION AND HOUSING

Given the time that has elapsed since the current (1992) General Plan was adopted, Alternative 1 does not reflect the most current population, employment, and housing numbers or projections or

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provide quantitative population, employment, and housing projections for the year 2040. In contrast, the proposed GPU reflects existing population, employment, and housing conditions for the year 2021 and provides projections to year 2040. Compared to the buildout projections of the current (1992) General Plan, the proposed GPU projections show a more realistic planning framework of how the City is likely to be built out, which, based on reasonable assumptions to address emerging issues and community priorities to ensure compliance with State law and to revise implementing policy frameworks to focus on goals and policy objectives, would result in more residential and less non-residential development. However, as with the proposed GPU, Alternative 1 would also concentrate forecasted growth in the Commercial District but less than envisioned in the proposed GPU. Similar to the proposed GPU, Alternative 1 would not induce substantial population growth that is inconsistent with regional growth plans. Therefore, similar to the proposed GPU, population and housing impacts under Alternative 1 would be less than significant.

PUBLIC SERVICES AND RECREATION

Under Alternative 1, development would occur in the Planning Area as permitted by the current (1992) General Plan. Under this alternative, impacts associated with public services, including fire protection, police protection and law enforcement, schools, parks and recreation, and library services, would be less compared to those resulting from the proposed GPU since there would be less residential development at full buildout. Fewer residential developments would decrease the generation of new residents, which would, in turn, reduce demands for public services and recreation. As with the proposed GPU, impacts under Alternative 1 on public services and recreation would be less than significant but would be less than the proposed GPU due to the reduced demands.

TRANSPORTATION

As discussed in Section 4.16 Transportation of this PEIR the proposed GPU would result in significant transportation impacts related to VMT. Specifically, under the low-range buildout scenario, the proposed GPU would exceed the residential VMT per capita significance threshold (16.8 compared to a threshold of 15.1) and the work VMT significance threshold (20.1 compared to a threshold of 17.1). In the high-range buildout scenario, the proposed GPU would exceed only the residential VMT per capita significance threshold (16.4 compared to a threshold of 15.1). Notably, the high-range buildout scenario results in lower VMT per capita/employee/service population than the low-range buildout scenario in all three VMT categories, indicating that higher levels of development, particularly in the Commercial District, cause less VMT impacts as a result of a combination of shorter trip lengths and travel mode shifts.

Under Alternative 1, development would occur in the Planning Area as permitted by the current (1992) General Plan. Buildout under Alternative 1 is expected to be at or below the low end of the buildout scenarios considered for the proposed GPU. Given the pattern of increasing VMT impacts as buildout projections decrease, Alternative 1 is expected to slightly worsen the proposed GPU's significant VMT impacts.

TRIBAL CULTURAL RESOURCES

Since the Planning Area is predominantly built out, as with the proposed GPU, future new development under the current (1992) General Plan is likely to occur as infill or redevelopment. Similar to the proposed GPU, since the potential loss of tribal cultural resources may not be mitigated through data recovery and collection methods, as the value of a tribal cultural resource

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lies in cultural values and religious beliefs of associated tribes, significant impacts to tribal cultural resources from buildout of the current General Plan cannot be precluded. Therefore, similar to the proposed GPU, impacts on tribal cultural resources under Alternative 1 would be significant and unavoidable.

UTILITIES AND SERVICE SYSTEMS

Under Alternative 1, development would occur in the Planning Area as permitted by the current (1992) General Plan. Under this alternative, impacts associated with utilities and service systems, including water supply, wastewater, solid waste, and energy and telecommunications infrastructure, would be less compared to those resulting from the proposed GPU since there would be less residential development at full buildout. Fewer residential developments would decrease the generation of new residents, which would, in turn, reduce demands for utilities and service systems. As with the proposed GPU, impacts under Alternative 1 on utilities and service systems would be less than significant but would be less than the proposed GPU due to the reduced demands.

WILDFIRE

Since the Planning Area is predominantly built out, as with the proposed GPU, future new development under the current (1992) General Plan is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, the majority of future development associated with buildout of the current General Plan would be located within the Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. In addition, similar to the proposed GPU, future development under the current General Plan would be required to comply with all applicable California Fire Code requirements, applicable provisions in the RHEMC, as well as Los Angeles County Fire Department (LACoFD) design standards and oversight requirements for construction, access, water mains, fire flows, hydrants, construction materials, and fuel modification. Individual projects under the current General Plan would be reviewed by the City and LACoFD to determine site-specific wildfire risks and design/fuel modification requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, as with the proposed GPU, compliance with regulatory requirements would encourage fire prevention and fire-resistant developments, which, in turn, would reduce wildfire risks to a less-than-significant level. Therefore, similar to the proposed GPU, impacts related to wildfire associated with Alternative 1 would be less than significant.

5.4.2 ALTERNATIVE 2: PROJECT WITHOUT LOCAL DENSITY BONUS ALTERNATIVE

Under Alternative 2, no local density bonus would be included for the Commercial General land use designation. As a result, the base residential density in the Commercial District would be 30 dwelling units per acre, which with the State's affordable housing density bonus opportunity would provide for a maximum density of 45 dwelling units per acre.¹ Because no local density bonus would be allowed, certain community benefits would not be incentivized.

¹ Derived from a base density of 30 dwelling units per acre allowed by the proposed Mixed-Use Overlay plus 15 units allowed by the 50-percent State density bonus.

AESTHETICS

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to scenic vistas as the proposed GPU. There are several publicly accessible locations in the Planning Area that provide scenic vistas, including views of the Pacific Ocean and the Los Angeles Basin. There are no State scenic highways within the Planning Area; however, there are City-designated scenic corridors within the Planning Area. Similar to the proposed GPU, future development under Alternative 2 does not involve any components that would change the scenic features associated with the City-designated scenic corridors or the undeveloped natural open space areas within the Planning Area. In addition, future development under Alternative 2 would continue to be subject to the requirements of the City's Neighborhood Compatibility Ordinance and View Protection Ordinance, as well as the zoning code and other ordinances regarding aesthetic quality. Therefore, similar to the proposed GPU, impacts under Alternative 2 regarding scenic vistas and those related to conflict with applicable zoning and other regulations governing scenic quality would be less than significant.

AIR QUALITY

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar air quality impacts to the proposed GPU. During construction of future development under Alternative 2, regional and localized emissions could still exceed the SCAQMD daily significance thresholds, resulting in significant and unavoidable impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in non-attainment, and exposure of sensitive receptors to substantial pollutant concentrations, similar to the proposed GPU. Therefore, similar to the proposed GPU, air quality impacts under Alternative 2 during construction of future development projects could be significant and unavoidable.

Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU and total air pollutant emissions would be similar to those presented in **Table 4.2-8**, Summary of 2040 Estimated Emissions Inventory Under the Low-Range Buildout Scenario, in Section 4.2, Air Quality, of this PEIR,. As with the proposed GPU, given the volume of air pollutants attributable to buildout of Alternative 2, operational impacts would be conservatively considered significant and unavoidable regarding consistency with the AQMP and cumulatively considerable net increase of pollutants for which the project region is in non-attainment. Similar to the proposed GPU, operational impacts to sensitive receptors under Alternative 2 would be less than significant.

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BIOLOGICAL RESOURCES

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. However, since the Planning Area is predominantly built out, as with the proposed GPU, future new development under Alternative 2 is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, future development would avoid most of the sensitive biological resource areas within the Planning Area, including the George F. Canyon Nature Preserve and the Linden H. Chandler Preserve, and those that are immediately adjacent to the Planning Area, including Hesse Community Park and the Vista del Norte Reserve in the City of Rancho Palos Verdes and the Agua Amarga Reserve in the City of Palos Verdes Estates. Therefore, the potential to impact sensitive or special status species, riparian habitat, sensitive natural communities, federally protected wetlands, and wildlife corridors under Alternative 2 would be similar to the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. Overall, similar to the proposed GPU, impacts related to biological resources associated with Alternative 2 would be less than significant upon compliance with current regulatory requirements and required **Mitigation Measures MM-BIO-1** through **MM-BIO-4** (as identified for the proposed GPU).

CULTURAL RESOURCES

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. However, since the Planning Area is predominantly built out, as with the proposed GPU, future new development under Alternative 2 is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, since demolition or other material impairment of a historical resource and destruction of an archaeological resource from ground disturbance during construction activities over the course of buildout of the Planning Area under Alternative 2 cannot be precluded, impacts on historical resources and archaeological resources, respectively, under Alternative 2 would be significant and unavoidable even with the application of **Mitigation Measures MM-CUL-1** through **MM-CUL-7** (as identified for the proposed GPU).

ENERGY

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to energy use and conservation as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. As with the proposed GPU, individual development projects implemented under Alternative 2 would be required to comply

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with applicable energy efficiency standards, including the requirements of Title 24 standards and the CALGreen Code. Therefore, similar to the proposed GPU, impacts under Alternative 2 regarding energy use and conservation would be less than significant.

GEOLOGY AND SOILS

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to geology and soils as the proposed GPU. As with the proposed GPU, individual development projects implemented under Alternative 2 would be subject to the requirements of the Hazard Management Overlay Zone, the grading standards and building code established in the RHEMC, as well as the CBC. As with the proposed GPU, compliance with all applicable regulations and requirements would ensure that the implementation of future development projects under Alternative 2 would not directly or indirectly cause potential substantial adverse effects, including to risk of loss, injury, or death involving landslides; and would ensure that future development as a result of Alternative 2 would not be located on a geologic unit that is unstable, or that would become unstable, and potentially result in landslide. Therefore, similar to the proposed GPU, impacts related to landslides and unstable geologic units or soil would be less than significant.

GREENHOUSE GAS EMISSIONS

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to GHG emissions as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU and total GHG emissions would be similar to those presented in **Table 4.7-2**, Rolling Hills Estates General Plan Update (2040) GHG Emissions Inventory Under the Low-Range Buildout Scenario, in Section 4.7, Greenhouse Gas Emissions, of this PEIR. As with the proposed GPU, Alternative 2 would result in a net reduction in total annual GHG emissions the Planning Area and a net reduction in annual GHG emissions on a per-service-population-basis. Similarly, as with the proposed GPU, individual development projects implemented under Alternative 2 would be consistent with the 2017 Scoping Plan, the 2020-2045 RTP/SCS, and the City's CAP, as they would comply with the latest and most stringent energy and water conservation codes and requirements and would be compact development integrated into the City's mixed-use Commercial District, enhancing the synergistic nature of the land uses in the Commercial District and offering opportunities for walking, cycling, and other alternative forms of transportation to and from destinations within the Commercial District. Therefore, similar to the proposed GPU, impacts under Alternative 2 regarding GHG emissions would be less than significant.

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LAND USE AND PLANNING

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to land use and planning as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. As with the proposed GPU, individual development projects would not result in significant impacts related to consistency with land use plans. Compliance with all applicable regulations and requirements would ensure that land use impacts of future development projects under Alternative 2 related to consistency with applicable plans, policies, and regulations would be less than significant. Therefore, similar to the proposed GPU, impacts under Alternative 2 regarding consistency with applicable plans, policies, and regulations would be less than significant.

NOISE

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to noise and vibration as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. As with the proposed GPU, construction of individual development projects under Alternative 2 would be required to comply with the City's noise regulations contained in the RHEMC. Similar to the proposed GPU, all mobile and stationary noise source impacts under Alternative 2 would be reduced to less-than-significant levels by complying with the City's Noise Ordinance.

Similar to the proposed GPU, future new development under the current General Plan could result in significant short-term construction vibration impacts. However, implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2** (as identified for the proposed GPU) would reduce construction vibration impacts to a less-than-significant level. Therefore, similar to the proposed GPU, construction vibration impacts under Alternative 2 would be less than significant with mitigation.

POPULATION AND HOUSING

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to

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population and housing as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. Therefore, similar to the proposed GPU, Alternative 2 would not induce substantial unplanned population growth in an area, either directly through new housing or indirectly by increasing employment or displacing a substantial number of existing people or housing such that the construction of replacement housing would be necessary elsewhere. As such, similar to the proposed GPU, impacts under Alternative 2 regarding population and housing would be less than significant.

PUBLIC SERVICES AND RECREATION

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to public services, including fire protection, police protection and law enforcement, schools, parks and recreation, and library services, as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. Therefore, similar to the proposed GPU, impacts under Alternative 2 on public services and recreation would be less than significant.

TRANSPORTATION

As discussed in Section 4.16 Transportation of this PEIR the proposed GPU would result in significant transportation impacts related to VMT. Specifically, under the low-range buildout scenario, the proposed GPU would exceed the residential VMT per capita significance threshold (16.8 compared to a threshold of 15.1) and the work VMT significance threshold (20.1 compared to a threshold of 17.1). In the high-range buildout scenario, the proposed GPU would exceed only the residential VMT per capita significance threshold (16.4 compared to a threshold of 15.1). Notably, the high-range buildout scenario results in lower VMT per capita/employee/service population than the low-range buildout scenario in all three VMT categories, indicating that higher levels of development, particularly in the Commercial District, cause less VMT impacts as a result of a combination of shorter trip lengths and travel mode shifts.

Alternative 2 would not include the proposed GPU's local density bonus program and, therefore, would not allow the same maximum level of buildout as the proposed GPU. However, buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the

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proposed GPU. Therefore, like the proposed GPU, the VMT impacts of Alternative 2 would be significant and unavoidable.

TRIBAL CULTURAL RESOURCES

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. However, since the Planning Area is predominantly built out, as with the proposed GPU, future new development under Alternative 2 is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, since the potential loss of tribal cultural resources may not be mitigated through data recovery and collection methods, as the value of a tribal cultural resource lies in cultural values and religious beliefs of associated tribes, significant impacts to tribal cultural resources from buildout of Alternative 2 cannot be precluded. Therefore, impacts on tribal cultural resources under Alternative 2 would be significant and unavoidable even with the application of **Mitigation Measures MM-CUL-4** through **MM-CUL-7** (as identified for the proposed GPU).

UTILITIES AND SERVICE SYSTEMS

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. Although Alternative 2 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to utilities and service systems, including water supply, wastewater, solid waste, and energy and telecommunications infrastructure, as the proposed GPU. Buildout of Alternative 2 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Buildout of Alternative 2 is anticipated to be on the lower end of the buildout range considered for the proposed GPU. Therefore, similar to the proposed GPU, impacts under Alternative 2 on utilities and service systems would be less than significant.

WILDFIRE

Alternative 2 would not include the proposed GPU's local density bonus program. As such, Alternative 2 would not allow the same maximum level of buildout as the proposed GPU. However, since the Planning Area is predominantly built out, as with the proposed GPU, future new development under Alternative 2 is likely to occur as infill or redevelopment. Accordingly, similar to the proposed GPU, the majority of future development associated with buildout of the current General Plan would be located within the Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. In addition, similar to the proposed GPU, future development under Alternative 2 would be required to comply with all applicable California Fire Code requirements, applicable provisions in the RHEMC, as well as LACoFD design standards and oversight requirements for construction, access, water mains, fire flows, hydrants, construction materials, and fuel modification. Individual projects under this alternative would be reviewed by the City and LACoFD to determine site-specific wildfire risks and design/fuel modification requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, as with the proposed GPU, compliance with regulatory requirements would encourage fire prevention and fire-resistant developments, which, in turn, would reduce wildfire

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risks to a less-than-significant level. Therefore, similar to the proposed GPU, impacts related to wildfire associated with Alternative 2 would be less than significant.

5.4.3 ALTERNATIVE 3: PROJECT WITHOUT MIXED-USE OVERLAY ON COMMERCIAL OFFICE ALTERNATIVE

Under Alternative 3, the Mixed-Use Overlay would not be applied to parcels that are designated as Commercial Office. As a result, 52 dwelling units (under the low range scenario) and 78 dwelling units (under the high range scenario) would not be allowed to be developed on the parcel designated Commercial Office (Academy Center development at the southwest corner of Palos Verdes Drive North and Crenshaw Boulevard).

AESTHETICS

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to scenic vistas as the proposed GPU. There are several publicly accessible locations in the Planning Area that provide scenic vistas, including views of the Pacific Ocean and the Los Angeles Basin. There are no State scenic highways within the Planning Area; however, there are City-designated scenic corridors within the Planning Area. Similar to the proposed GPU, future development under Alternative 3 does not involve any components that would change the scenic features associated with the City-designated scenic corridors or the undeveloped natural open space areas within the Planning Area. In addition, future development under Alternative 3 would continue to be subject to the requirements of the City's Neighborhood Compatibility Ordinance and View Protection Ordinance, as well as the zoning code and other ordinances regarding aesthetic quality. Furthermore, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on aesthetics related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Therefore, impacts under Alternative 3 regarding scenic vistas and those related to conflict with applicable zoning and other regulations governing scenic quality would be less than significant and similar to the proposed GPU.

AIR QUALITY

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would slightly reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar air quality impacts to the proposed GPU. During construction of future development under Alternative 3, regional and localized emissions could still exceed the SCAQMD daily significance thresholds, resulting in significant and unavoidable impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in non-attainment, and exposure of sensitive receptors to substantial pollutant concentrations, similar to the proposed GPU. Therefore, air quality impacts under Alternative 3

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during construction of future development projects could be significant and unavoidable and similar to the proposed GPU.

Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU. Total air pollutant emissions would be with the range of those presented in **Tables 4.2-8** and **4.2-9** in Section 4.2, Air Quality, of this PEIR, which present summaries of 2040 estimated emissions under the low-range and high-range buildout scenarios, respectively. As with the proposed GPU, given the volume of air pollutants attributable to buildout of Alternative 3, operational impacts would be conservatively considered significant and unavoidable regarding consistency with the AQMP and cumulatively considerable net increase of pollutants for which the project region is in non-attainment. Similar to the proposed GPU, operational impacts to sensitive receptors under Alternative 3 would be less than significant

BIOLOGICAL RESOURCES

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would slightly reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts on biological resources to the proposed GPU since the only difference involves the parcel designated Commercial Office (Academy Center development) at the southwestern corner of Palos Verdes Drive North and Crenshaw Boulevard, where no sensitive biological resources exist. Accordingly, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on biological resources related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Similar to the proposed GPU, future development would avoid most of the sensitive biological resource areas within the Planning Area, including the George F. Canyon Nature Preserve and the Linden H. Chandler Preserve, and those that are immediately adjacent to the Planning Area, including Hesse Community Park and the Vista del Norte Reserve in the City of Rancho Palos Verdes and the Agua Amarga Reserve in the City of Palos Verdes Estates. Therefore, the potential to impact sensitive or special status species, riparian habitat, sensitive natural communities, federally protected wetlands, and wildlife corridors under Alternative 3 would be similar to the proposed GPU. Overall, similar to the proposed GPU, impacts related to biological resources associated with Alternative 3 would be less than significant upon compliance with current regulatory requirements and required **Mitigation Measures MM-BIO-1** through **MM-BIO-4** (as identified for the proposed GPU).

CULTURAL RESOURCES

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would slightly reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result the same impacts on cultural resources as the proposed GPU since the only difference involves the parcel designated Commercial Office (Academy Center development) at the southwestern corner of Palos Verdes Drive North and Crenshaw Boulevard, where

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redevelopment could also occur and result in potential impacts to historical and archaeological resources. Accordingly, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on cultural resources related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Overall, similar to the proposed GPU, since demolition or other material impairment of a historical resource and destruction of an archaeological resource from ground disturbance during construction activities over the course of buildout of the Planning Area under Alternative 3 cannot be precluded, impacts on historical resources and archaeological resources, respectively, under Alternative 3 would be significant and unavoidable even with the application of **Mitigation Measures MM-CUL-1 through MM-CUL-7** (as identified for the proposed GPU).

ENERGY

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to energy use and conservation as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on energy use and conservation related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. As with the proposed GPU, individual development projects implemented under Alternative 3 would be required to comply with applicable energy efficiency standards, including the requirements of Title 24 standards and the CALGreen Code. Therefore, similar to the proposed GPU, impacts under Alternative 3 regarding energy use and conservation would be less than significant.

GEOLOGY AND SOILS

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to geology and soils as the proposed GPU. As with the proposed GPU, individual development projects implemented under Alternative 3 would be subject to the requirements of the Hazard Management Overlay Zone, the grading standards and building code established in the RHEMC, as well as the CBC. As with the proposed GPU, compliance with all applicable regulations and requirements would ensure that the implementation of future development projects under Alternative 3 would not directly or indirectly cause potential substantial adverse effects, including to risk of loss, injury, or death involving landslides; and would ensure that future development as a result of Alternative 3 would not be located on a geologic unit that is unstable, or that would become unstable, and potentially result in landslide. Therefore, similar to the proposed GPU, impacts related to landslides and unstable geologic units or soil would be less than significant.

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GREENHOUSE GAS EMISSIONS

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to GHG emissions as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on energy use and conservation related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Total GHG emissions would be within the range of those presented in **Tables 4.7-2** and **4.7-3** in Section 4.7, Greenhouse Gas Emissions, of this PEIR, which present summaries of 2040 estimated GHG emissions under the low-range and high-range buildout scenarios, respectively. As with the proposed GPU, Alternative 3 would result in a net reduction in total annual GHG emissions the Planning Area and a net reduction in annual GHG emissions on a per-service-population-basis. Similarly, as with the proposed GPU, individual development projects implemented under Alternative 3 would be consistent with the 2017 Scoping Plan, the 2020-2045 RTP/SCS, and the City's CAP, as they would comply with the latest and most stringent energy and water conservation codes and requirements and would be compact development integrated into the City's mixed-use Commercial District, enhancing the synergistic nature of the land uses in the Commercial District and offering opportunities for walking, cycling, and other alternative forms of transportation to and from destinations within the Commercial District. Therefore, similar to the proposed GPU, impacts under Alternative 3 regarding GHG emissions would be less than significant.

LAND USE AND PLANNING

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to land use and planning as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on land use and planning related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. As with the proposed GPU, individual development projects would not result in significant impacts related to consistency with land use plans. Compliance with all applicable regulations and requirements would ensure that land use impacts of future development projects under Alternative 3 related to consistency with applicable plans, policies, and regulations would be less than significant. Therefore, similar to the proposed GPU, impacts under Alternative 3 regarding consistency with applicable plans, policies, and regulations would be less than significant.

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NOISE

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to noise and vibration as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on noise and vibration related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. As with the proposed GPU, construction of individual development projects under Alternative 3 would be required to comply with the City's noise regulations contained in the RHEMC. Similar to the proposed GPU, all mobile and stationary noise source impacts under Alternative 2 would be reduced to less-than-significant levels by complying with the City's Noise Ordinance.

Similar to the proposed GPU, future new development under the current General Plan could result in significant short-term construction vibration impacts. However, implementation of **Mitigation Measures MM-NOI-1** and **MM-NOI-2** (as identified for the proposed GPU) would reduce construction vibration impacts to a less-than-significant level. Therefore, similar to the proposed GPU, construction vibration impacts under Alternative 3 would be less than significant with mitigation.

POPULATION AND HOUSING

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related to population and housing as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on population and housing related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Therefore, similar to the proposed GPU, Alternative 3 would not induce substantial unplanned population growth in an area, either directly through new housing or indirectly by increasing employment or displacing a substantial number of existing people or housing such that the construction of replacement housing would be necessary elsewhere. As such, similar to the proposed GPU, impacts under Alternative 3 regarding population and housing would be less than significant.

PUBLIC SERVICES AND RECREATION

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in

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similar impacts related public services, including fire protection, police protection and law enforcement, schools, parks and recreation, and library services, as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on public services and recreation related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Therefore, similar to the proposed GPU, impacts under Alternative 3 on public services and recreation would be less than significant.

TRANSPORTATION

As discussed in Section 4.16 Transportation of this PEIR the proposed GPU would result in significant transportation impacts related to VMT. Specifically, under the low-range buildout scenario, the proposed GPU would exceed the residential VMT per capita significance threshold (16.8 compared to a threshold of 15.1) and the work VMT significance threshold (20.1 compared to a threshold of 17.1). In the high-range buildout scenario, the proposed GPU would exceed only the residential VMT per capita significance threshold (16.4 compared to a threshold of 15.1). Notably, the high-range buildout scenario results in lower VMT per capita/employee/service population than the low-range buildout scenario in all three VMT categories, indicating that higher levels of development, particularly in the Commercial District, cause less VMT impacts as a result of a combination of shorter trip lengths and travel mode shifts.

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office and, therefore, would not allow the same maximum level of buildout as the proposed GPU. However, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU, in which both the low and high range buildout scenarios anticipate buildout densities considering known development/redevelopment interest and development trends, rather than simply considering maximum allowable uses and densities, which would be purely hypothetical. Since buildout of Alternative 3 would be with the range of the buildout scenarios considered for the proposed GPU, the VMT impacts of Alternative 3 would be substantially similar to those of the proposed GPU. Like the proposed GPU, the VMT impacts of Alternative 3 would be significant and unavoidable.

TRIBAL CULTURAL RESOURCES

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would slightly reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result the same impacts on tribal cultural resources as the proposed GPU since the only difference involves the parcel designated Commercial Office (Academy Center development) at the southwestern corner of Palos Verdes Drive North and Crenshaw Boulevard, where redevelopment could also occur and result in potential impacts to tribal cultural resources. Accordingly, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on tribal cultural resources related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Overall, similar to the proposed GPU, since the potential loss of tribal cultural resources may not be mitigated through data recovery and collection methods, as the value of a tribal cultural resource lies in cultural

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values and religious beliefs of associated tribes, significant impacts to tribal cultural resources from buildout of Alternative 3 cannot be precluded. Therefore, impacts on tribal cultural resources under Alternative 3 would be significant and unavoidable even with the application of **Mitigation Measures MM-CUL-4** through **MM-CUL-7** (as identified for the proposed GPU).

UTILITIES AND SERVICE SYSTEMS

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts related utilities and service systems, including water supply, wastewater, solid waste, and energy and telecommunications infrastructure, as the proposed GPU. Buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects on utilities and service systems related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. Therefore, similar to the proposed GPU, impacts under Alternative 3 on utilities and service systems would be less than significant.

WILDFIRE

Alternative 3 would not apply the Mixed-Use Overlay to the parcels designated for Commercial Office. As such, Alternative 3 would not allow the same maximum level of buildout as the proposed GPU on those parcels but would be the same as the proposed GPU on the level of development in the Commercial District. Although Alternative 3 would slightly reduce the amount of development expected when compared to the proposed GPU, future development under this alternative would result in similar impacts regarding wildfire to the proposed GPU since the only difference involves the parcel designated Commercial Office (Academy Center development) at the southwestern corner of Palos Verdes Drive North and Crenshaw Boulevard. Accordingly, buildout of Alternative 3 would be within the range of the buildout scenarios evaluated for the proposed GPU and would not differ in the effects regarding wildfire related to the buildout of the Commercial District, as identified for the proposed GPU, where the majority of development/redevelopment in the Planning Area is anticipated. The majority of future development associated with buildout of the current General Plan would be located within the Commercial District, which has comparably less grasses and vegetation that could act as wildfire fuel than most of the Planning Area. In addition, similar to the proposed GPU, future development under Alternative 3 would be required to comply with all applicable California Fire Code requirements, applicable provisions in the RHEMC, as well as LACoFD design standards and oversight requirements for construction, access, water mains, fire flows, hydrants, construction materials, and fuel modification. Individual projects under this alternative would be reviewed by the City and LACoFD to determine site-specific wildfire risks and design/fuel modification requirements applicable to the development being proposed and to ensure compliance with these requirements. Overall, as with the proposed GPU, compliance with regulatory requirements would encourage fire prevention and fire-resistant developments, which, in turn, would reduce wildfire risks to a less-than-significant level. Therefore, similar to the proposed GPU, impacts related to wildfire associated with Alternative 3 would be less than significant.

5.0 ALTERNATIVES TO THE GENERAL PLAN UPDATE

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 5-1 presents a summary of the impact conclusions for each alternative relative to the impact statements for the topic areas evaluated in this PEIR. As shown in this table, while Alternative 1 would reduce the proposed GPU's significant operational air quality impact to a less than significant level, it would cause new significant impacts related to biological impacts and vibrations. While Alternatives 2 and 3 would not avoid or reduce any of the proposed GPU's impacts to a less than significant level, unlike Alternative 1, they would not cause any new significant impacts. While the impact conclusions for Alternatives 2 and 3 are the same, Alternative 2 would have slightly less impacts overall since it has a smaller maximum buildout potential. Therefore, Alternative 2 is considered the environmentally superior alternative.

**Table 5-1
Comparison of Alternatives**

Sections	Alternative 1: No Project Alternative	Alternative 2: Project without Local Density Bonus Alternative	Alternative 3: Project without Mixed-Use Overlay on Commercial Office Alternative
Aesthetics	Similar	Similar	Similar
Air Quality (Construction) ^a	Similar ^b	Similar ^b	Similar ^b
Air Quality (Operation) ^a	Less Than ^b	Similar ^b	Similar ^b
Air Quality (Sensitive Receptors) ^a	Similar ^b	Similar ^b	Similar ^b
Biological Resources	Greater Than ^b	Similar	Similar
Cultural Resources ^a	Similar ^b	Similar ^b	Similar ^b
Energy	Similar	Similar	Similar
Geology and Soils	Similar	Similar	Similar
Greenhouse Gas Emissions	Less Than	Similar	Similar
Land Use and Planning	Greater Than	Similar	Similar
Noise	Similar	Similar	Similar
Vibration	Greater Than ^b	Similar	Similar
Population and Housing	Similar	Similar	Similar
Public Services and Recreation	Less Than	Similar	Similar
Transportation ^a	Similar ^b	Similar ^b	Similar ^b
Tribal Cultural Resources ^a	Similar ^b	Similar ^b	Similar ^b
Utilities and Service Systems	Less Than	Similar	Similar
Wildfire	Similar	Similar	Similar
Notes:			
^a Indicates a significant unavoidable impact under the proposed GPU.			
^b Indicates a significant unavoidable impact under the alternative.			
Source: Michael Baker International, 2021.			

6.0 OTHER CEQA CONSIDERATIONS

6.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less-than-significant level. As evaluated in Sections 4.1 through 4.22 of this PEIR, future development under the proposed GPU may result in a significant unavoidable impact related to the following issues:

- **Air Quality (Consistency with the AQMP):** The proposed GPU would be inconsistent with the SCAQMD AQMP as buildout of the proposed GPU could exceed current SCAG population and employment estimates and would cumulatively contribute to the nonattainment designations of the Basin. Incorporation of mitigation measures into future development projects during construction and operation would contribute to reduced criteria air pollutant emissions associated with buildout of the proposed GPU. In addition, goals and policies included in the proposed GPU would promote increased capacity for alternative transportation modes and implementation of transportation demand management strategies, thereby reducing mobile source emissions. However, since implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, no mitigation measures are available that would reduce total air quality emissions from buildout of the proposed GPU to a less-than-significant level. Furthermore, the population and employment assumptions of the AQMP would still be exceeded until such time the AQMP is revised and incorporates updated projections that consider the proposed GPU. Therefore, air quality impacts, both individually and cumulatively, related to the implementation of the AQMP are considered significant and unavoidable.
- **Air Quality (Exceedance of Regional Thresholds during Construction and Operation):** Construction activities and long-term emissions associated with future development under the proposed GPU could generate air pollutant emissions that exceed the SCAQMD's significance thresholds and would cumulatively contribute to the nonattainment designations of the Basin. Implementation of the mitigation measures would reduce criteria air pollutant emissions from construction-related activities and future development project operations. However, since implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, it cannot be determined with certainty that the mitigation measures would reduce impacts below SCAQMD's thresholds in all cases. Therefore, construction and operational impacts, both individually and cumulatively, related to the increase of criteria pollutants for which the Basin is non-attainment are conservatively considered significant and unavoidable.
- **Air Quality (Sensitive Receptors):** Construction activities associated with future development under the proposed GPU could generate short-term emissions that may cause localized air quality impacts. Implementation of the mitigation measures would reduce criteria air pollutant emissions from construction-related activities and the associated localized impacts. However, since construction activities could occur close to existing sensitive receptors, construction emissions generated by future development projects have the potential to exceed SCAQMD LSTs and it cannot be determined with certainty that the mitigation measures would reduce impacts below SCAQMD's thresholds in all cases. Therefore, localized impacts to sensitive receptors are conservatively considered significant and unavoidable.

6.0 OTHER CEQA CONSIDERATIONS

- **Historical Resources:** Generally, compliance with City General Plan policies, provisions of the Rolling Hills Estates Municipal Code (RHEMC), and State and federal regulations pertaining to the alteration, demolition, and relocation of historical resources, in addition to mitigation measures identified in Section 4.4, Cultural Resources, of this PEIR, would reduce impacts to historical resources to a less-than-significant level. However, in the event that one or more future projects cannot avoid demolition of a historical resource or alteration of a historical resource in a manner that would materially impair the resource and because documentation, memorialization, and data recovery do not mitigate impacts to a less-than-significant level, a significant impact would occur even with the implementation of mitigation measures. While implementation of the mitigation measures, as well as compliance with all applicable regulations pertaining to historical resources, would reduce impacts of the buildout of the proposed GPU on historical resources to the maximum extent feasible, since demolition or other material impairment of a historical resource over the course of buildout of the proposed GPU cannot be precluded, impacts, both individually and cumulatively, are considered significant and unavoidable.
- **Archaeological Resources:** Implementation of mitigation measures identified in Section 4.4, Cultural Resources, of this PEIR, as well as compliance with all applicable regulations pertaining to archaeological resources, would reduce impacts of the buildout of the proposed GPU on archaeological resources to the maximum extent feasible; however, since destruction of an archaeological resource over the course of buildout of the proposed GPU cannot be precluded and because documentation, memorialization, and data recovery do not mitigate impacts to a less-than-significant level, impacts, both individually and cumulatively, are considered significant and unavoidable.
- **Transportation (VMT Impacts):** Both the low-range and high-range buildout scenarios do not meet the City's significance threshold for the residential vehicle miles traveled (VMT) per capita metric, and the low-range buildout scenario does not meet the City's significance threshold for the work VMT per employee metric. As a result, the proposed GPU would be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts related to VMT would be significant. After considering all viable Transportation Demand Management (TDM) strategies to reduce the VMT impact of the proposed GPU under both buildout scenarios, the proposed GPU would still result in a significant and unavoidable VMT impact.
- **Tribal Cultural Resources:** Implementation of the mitigation measures identified in Section 4.17, Tribal Cultural Resources, of this PEIR, and adherence to all applicable regulations pertaining to tribal cultural resources would reduce potential impacts of the buildout of the proposed GPU on tribal cultural resources; however, the potential loss of tribal cultural resources may not be adequately mitigated through data recovery and collection methods, as the value of a tribal cultural resource lies in cultural values and religious beliefs of associated tribes. Since significant impacts to tribal cultural resources from future projects building out the Planning Area under the proposed GPU cannot be precluded, impacts, both individually and cumulatively, are considered significant and unavoidable.

6.2 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROJECT

According to CEQA Guidelines Sections 15126(c) and 15126.2(d), an EIR is required to address any significant irreversible environmental changes that would occur should a proposed project be implemented. As stated in CEQA Guidelines Section 15126.2(c):

6.0 OTHER CEQA CONSIDERATIONS

Uses of non-renewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the Project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

6.2.1 USE OF NON-RENEWABLE RESOURCES

Future development projects under the proposed GPU would necessarily consume limited, slowly renewable and nonrenewable resources. This consumption would occur during the construction phase of future development projects and would continue throughout their operational lifetime.

Construction of future development projects would require commitment of resources that are non-replenishable or may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: certain types of lumber and other forest products; aggregate materials used in concrete and asphalt, such as sand, gravel and stone; metals, such as steel, copper, and lead; petrochemical construction materials, such as plastics; and water. Furthermore, non-renewable fossil fuels, such as gasoline and oil, would also be consumed in the use of construction vehicles and equipment, as well as the transportation of goods and people to and from a development site. However, use of such resources would not be unusual as compared to other construction projects in the region and would not substantially affect the availability of such resources. Accordingly, these nonrenewable resources would not be used in a wasteful or inefficient manner.

Water, while an important natural resource, is not considered to be a non-renewable resource. Water is regularly replenished by the natural hydrological cycle. Because the Palos Verdes Peninsula and most of California are subject to recurring drought cycles, water is regarded as a limited resource that requires strong conservation measures to maintain adequate water supplies for normal and emergency applications.

Future development projects under the proposed GPU would be carried out in accordance with local and State regulations concerning building codes and safety and energy efficiency, including Title 24 requirements. To ensure the integrity of the built structures, nonrenewable resources, primarily in the form of fossil fuels, natural gas, and fuel oils for construction equipment and vehicles, would be used during construction of future development projects.

6.2.2 EXTENSION OF ROADS AND OTHER INFRASTRUCTURE

Rolling Hills Estates is primarily a built-out City with limited vacant parcels. Implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Peninsula Center Commercial District, where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers. By focusing development in under-utilized areas of the Commercial District, the proposed GPU relieves pressure to develop in open space and lower density areas to avoid changing the semi-rural and suburban character of well-established neighborhoods in the Planning Area. Accordingly, implementation of the proposed GPU would not result in the extension of roads or other infrastructure to an area not currently served by such roads and other infrastructure. Therefore,

6.0 OTHER CEQA CONSIDERATIONS

implementation of the proposed GPU would not provide access to a previously inaccessible area and commit future generations to such uses.

6.2.3 POTENTIAL ENVIRONMENTAL ACCIDENTS

Construction activities associated future development projects under the proposed GPU could release hazardous materials into the environment through potential upset and accident conditions; refer to Subsection 6.4, Effects Found Not to be Significant, below, for a discussion of hazard and hazardous materials. All potential demolition, grading, and excavation activities would be subject to all applicable regulations pertaining to the use, handling, and disposal of hazardous materials to ensure that hazardous materials are not released into the environment. In addition, there is the potential that individual future development projects would use and store limited amounts of potentially hazardous materials. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable regulations and standards in place for hazardous materials. Compliance with all applicable regulations and standards would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

6.2.4 JUSTIFICATION FOR IRRETRIEVABLE COMMITMENT OF RESOURCES

Future development projects under the proposed GPU would require an investment of both renewable and non-renewable resources. However, as discussed above and in Section 4.5, Energy, of this PEIR, future development project resulting from the implementation of the proposed GPU would not involve wasteful or inefficient methods of consuming energy during construction or over the long-term operating life. None of the building materials anticipated for these future development projects would be unique, rare, in short supply, or require creation of new resource extraction sites or new manufacturing and delivery channels.

Implementation of the proposed GPU would provide an opportunity for Rolling Hills Estates to maintain its rural feel and equestrian identity while (1) becoming a more vibrant and connected community; (2) becoming a model for sustainable practices; (3) being admired for its local environment, natural semi-rural setting, and recreational amenities, including trails, parks, and open spaces; and (4) providing safe places for people of all ages to gather, play, and learn.

Based on these considerations, the irretrievable commitment of renewable and non-renewable resources is justified.

6.3 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(e) requires an EIR to discuss the ways a proposed project could foster economic or population growth or the construction of additional housing, directly or indirectly, in the surrounding environment. Growth-inducing impacts include the removal of obstacles to population growth (e.g., the expansion of a wastewater treatment plant allowing more development in a service area) and the development and construction of new service facilities that could significantly affect the environment individually or cumulatively. In addition, pursuant to CEQA, growth must not be assumed as beneficial, detrimental, or of little significance to the environment. Growth can be induced by (1) direct growth associated with a project, and (2) indirect growth created by demand generated by a project or the creation of surplus infrastructure not utilized by a project.

6.0 OTHER CEQA CONSIDERATIONS

Future development anticipated by the proposed GPU would increase demands for public services (i.e., fire and police protection, schools, parks and recreational facilities, and libraries) and utility and service systems (water, wastewater, solid waste, and energy and telecommunications infrastructure). The Planning Area is already served by essential public services and utilities; please refer to Section 4.11, Public Services—Fire Protection, through Section 4.21, Utilities and Service Systems—Energy and Telecommunications Infrastructure, of this PEIR. Future individual development projects would negotiate cooperative agreements between service agencies/utility providers to address the development's incremental increased demands on public services and utilities. The City's existing network of public services and utilities and service systems, including fire, police, water, wastewater, and solid waste services, would be able to accommodate the anticipated growth and would not need to be upgraded or expanded. Thus, implementation of the proposed GPU would not result in a removal of an impediment to growth by establishing an essential public service or utility or service system.

Regional access to the Planning area is provided via State Route 1 (SR-1 or Pacific Coast Highway), SR-107 (Hawthorne Boulevard), SR-213 (Western Avenue), and Interstate 110 (I-110 or Harbor Freeway). Local access is provided by various arterial roadways that intersect the Planning Area, including Palos Verdes Drive North, Palos Verdes Drive East, Crenshaw Boulevard, Silver Spur Road, Indian Peak Road, and Crest Road. Future roadway improvements would not provide new access to any portion of the Planning Area since both regional and local access is already provided by an existing roadway network. Therefore, implementation of the proposed GPU would not remove an existing impediment to growth through the provision of new access to an area.

While Rolling Hills Estates is primarily a built-out City with limited vacant parcels, implementation of the proposed GPU would introduce land use intensification in certain portions of the Planning Area, primarily in the Peninsula Center Commercial District. This Commercial District is where the most intense land uses and most dense development currently occur in the City, with subregional-serving commercial centers and where roads, water, sewer, storm drain, and other infrastructure are already in place. The proposed GPU assumes that some of these commercial uses would be replaced by new multi-family/mixed-use residential development, reducing the amount of commercial square footage in the Commercial District that would range from approximately 132,655 to 221,091 square feet and resulting in a corresponding reduction in employment in the Commercial District. By focusing development in under-utilized areas of the Commercial District, the proposed GPU relieves pressure to develop in open space and lower density areas to avoid changing the semi-rural and suburban character of well-established neighborhoods in the Planning Area.

Although buildout of the proposed GPU could result in the development of additional residential uses, comprising primarily of multifamily dwelling units and accessory dwelling units (ADUs), ranging from 878 units to 2,158 units over existing conditions in the Planning Area (i.e., corresponds to approximately 1,688 to 4,219 new residents, respectively), future development under the proposed GPU is anticipated to occur gradually through 2040 and would be largely based on market demand, allowing for development of necessary services and infrastructure commensurate with the proposed growth. The proposed GPU would concentrate development in an area already served by infrastructure to reduce the impacts of future development on the environment. In addition, new development would be built to current standards, which would generally improve surface water quality and result in more efficient use of energy and water.

The proposed GPU is anticipated to accommodate a portion of the anticipated population growth in the region in an efficient manner consistent with State, regional, and City policies. The proposed

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GPU would be consistent with the projected growth forecast for the Los Angeles region and regional policies to reduce urban sprawl. The proposed GPU accounts for the anticipated population growth in the Planning Area and establishes goals and policies to accommodate such growth.

6.4 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines states that an EIR shall contain a brief statement indicating the reasons that various possible significant effects of a project were determined not to be significant and, therefore, not discussed in detail in the EIR. The City of Rolling Hills Estates issued a Notice of Preparation (NOP) for the proposed GPU on May 21, 2021, which, based on an Initial Study prepared by the City on May 14, 2021, identified the probable environmental effects of the proposed GPU that are to be addressed in the EIR. In the Initial Study, certain impacts of the proposed GPU were found to be less than significant. Accordingly, the effects determined not to be significant are not required to be included in the primary analysis sections of this PEIR. A summary of the determination for each environmental issue that was found not to have a significant environmental effect is included below.

6.4.1 AESTHETICS

SCENIC RESOURCES WITHIN STATE SCENIC HIGHWAYS

The City's current General Plan does not identify any State scenic highways within or in the vicinity of the Planning Area. Similarly, there are no State-designated or eligible highways in the Planning Area that are identified in the California Department of Transportation's State scenic highway program. The closest officially designated State scenic highway, which extends approximately 2.5 miles, is the southern end of State Route 27 (Topanga Canyon State Scenic Highway) in unincorporated Los Angeles County, just west of the community of Pacific Palisades in the City of Los Angeles, which is approximately 21 miles northwest of the Planning Area. Additionally, the closest route on the list of scenic highways eligible for official designation is the northern end of State Route 1 (Pacific Coast Highway) in Long Beach near State Route 19 (Lakewood Boulevard), which is approximately 10 miles east of the Planning Area and extends over 35 miles south to San Juan Capistrano in Orange County. Therefore, the proposed GPU would have no impact related to scenic resources or State scenic highways, and no further analysis of this issue is required in this PEIR.

LIGHT AND GLARE

The proposed GPU would result in intensification of uses in certain portions of the Planning Area that would introduce new sources of nighttime illumination for architectural highlighting, parking, signage and security purposes, as well as new sources of potential glare from window glass. However, new light sources, including landscape lighting, architectural lighting, and other outdoor lighting would be shielded and/or focused onto the future development site in accordance with lighting requirements set forth in the Rolling Hills Estates Municipal Code (RHEMC Chapter 17.42). Accordingly, new light sources are expected to be more ambient in nature and would only be used to provide the necessary illumination for general nighttime visibility (such as outdoor dining) and safety. Future development of residential structures and non-residential uses under the proposed GPU would also generate new sources of light that would be visible. As with all light sources, light emanating from new residential buildings and new non-residential uses (primarily in the Commercial District) is generally low-level, and, as such, the overall increase in nighttime lighting

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in the Planning Area would be negligible to have any significant effect on nighttime sky views. With compliance to the RHEMC, lighting impacts generated by future development under the proposed GPU would be less than significant. Similarly, future development under the proposed GPU would incorporate low-reflectivity glass windows and architectural materials, which would reduce the potential for substantial glare effects from reflected sunlight. Therefore, potential glare of reflected sunlight from new building façades would not substantially alter the character of the Planning Area, and impacts related to glare would be less than significant. As such, no further analysis of this issue is required in this PEIR.

6.4.2 AGRICULTURAL AND FORESTRY RESOURCES

Rolling Hills Estates is a suburban/urban area of Los Angeles County, which has limited space for productive agricultural uses or forestlands, as designated in its current Land Use Element and in the Rolling Hills Estates Zoning Code. The City does not contain any land designated by the Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the Farmland Mapping and Monitoring Program, Williamson Act contract land, forestlands, or forest-related resources for timberland production, or agriculturally zoned lands. Therefore, the proposed GPU would not conflict with zoning for agricultural use or forest-related resources. Therefore, the proposed GPU would have no impact on agricultural and forestry resources, and no further analysis of this issue is required in this PEIR.

6.4.3 AIR QUALITY (ODORS)

Residential development and commercial uses do not typically generate objectionable odors that affect a substantial number of people. Although some industrial land uses, such as wastewater treatment plants, food processing, compost facilities, and other industrial processes, have the potential to generate other emissions, such as those leading to objectionable odors, implementation of the proposed GPU would not result in the development of these uses within the Planning Area. Therefore, the proposed GPU would have no impact related to odors, and no further analysis of this issue is required in this PEIR.

6.4.4 CULTURAL RESOURCES (HUMAN REMAINS)

Most of the Planning Area is developed with suburban and urban land uses and has been subject to previous ground disturbance and grading. Therefore, the potential for uncovering human remains is low. However, any future development within the Planning Area that requires excavation to depths greater than existing foundations may have the potential to disturb existing but undiscovered human remains. If human remains were discovered during ground disturbance, any development under the proposed GPU would be required to comply with California Health and Safety Code Section 7050.5, which requires the project to halt until the county coroner has made the necessary findings as to the origin and disposition of the remains in accordance with Public Resources Code Section (PRC) 5097.98. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission (NAHC). PRC Section 5097 specifies the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC. Implementation of the proposed GPU would be required to comply with provisions of State law regarding discovery of human remains. Accordingly, compliance with such regulation would ensure that impacts to human remains are less than significant. As such, no further analysis of this issue is required in this PEIR.

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6.4.5 GEOLOGY AND SOILS

FAULT RUPTURE AND GROUND SHAKING

The Planning Area is located in the seismically active region of Southern California. Numerous active and potentially active faults with surface expressions (fault traces) have been mapped adjacent to, within, and beneath the Planning Area. Active earthquake faults are faults where surface rupture has occurred within the last 11,000 years. Surface rupture of a fault generally occurs within 50 feet of an active fault line. However, the Planning Area is not located within a designated Alquist-Priolo Earthquake Fault Zone.¹ The nearest Alquist-Priolo Earthquake Fault Zone is the Long Beach Fault, approximately 12 miles east of the Planning Area.² Therefore, the potential for future surface rupture at any location within the Planning Area is very low. In addition, any future development within the Planning Area would be required to comply with construction requirements in applicable State and local building codes to ensure habitable structures are built to a level such that they can withstand acceptable seismic risk. As such, implementation of the proposed GPU would not exacerbate existing environmental conditions from ground rupture from known earthquake faults. Accordingly, the proposed GPU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, and no impacts would occur.

As with any location in Southern California, the Planning Area is susceptible to strong seismic ground shaking in the event of a major earthquake. Future development under the proposed GPU would need to be constructed to withstand potential peak accelerations as defined by the California Building Code (CBC). In addition, the design of individual structures would be subject to review by the City's Building and Safety Department, including review by the City Geologist and the City Engineer. With the required compliance with the CBC, no future development under the proposed GPU is expected to result in significant impacts related to strong seismic ground shaking. Compliance with the CBC and City Building Code would ensure that impacts related to seismic ground shaking would be less than significant.

No further analysis of these issues is required in this PEIR.

LIQUEFACTION

According to the seismic hazard zones maps prepared by the California Geological Survey (CGS) for the Redondo Beach and Torrance Quadrangles, the Planning Area is not in a liquefaction hazard zone, with the exception of a very small area between the Palos Verdes Reservoir and Green Hills Memorial Park, which is immediately adjacent to the Rolling Hills Estates city limits. However, no change is anticipated in this small area, currently designated as Open Space, under the proposed GPU. Accordingly, the proposed GPU would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, and no impacts would occur. As such, no further analysis of this issue is required in this PEIR.

LOSS OF TOPSOIL

During construction of future development within the Planning Area, the soils on the construction site may become exposed and, thus, subject to erosion. However, any future development project would

¹ California Department of Conservation, California Geological Survey, AQ Zapp: California Earthquake Hazards Zone Application, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed January 21, 2021.

² California Department of Conservation, California Geological Survey, AQ Zapp: California Earthquake Hazards Zone Application, <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed January 21, 2021.

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be required to comply with existing regulations that reduce erosion potential, including South Coast Air Quality Management District (SCAQMD) Rule 403, which would reduce the potential for wind erosion. Similarly, water erosion during construction would be substantially reduced by complying with the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The NPDES Construction General Permit (mandatory for construction sites that disturb more than one acre of land) requires the construction of a project to incorporate best management practices (BMPs) to reduce erosion and prevent eroded soils from washing off-site. Any development project under one acre would also be required to implement construction BMPs to minimize erosion and the discharge of pollutants off-site pursuant to the City's stormwater ordinance. Accordingly, the potential to increase erosion during any construction activity would be substantially reduced through required compliance with existing regulations. Upon completion of any future development within the Planning Area, the development site would be covered by structures, landscaping, pavement, and other hard surfaces. Therefore, because development of any site within the Planning Area would reduce erosion potential compared to existing conditions and would be required to comply with SCAQMD Rule 403 and NPDES requirements, any future development within the Planning Area would not result in substantial wind or water soil erosion or the loss of topsoil. As such, impacts related to erosion or the loss of topsoil would be less than significant, and no further analysis of this issue is required in this PEIR.

EXPANSIVE SOILS

Since there are a number of segments of riverine wetlands running through the Planning Area, expansive soils have the potential to occur within the Planning Area. However, the design of individual structures would be subject to review by Los Angeles County Building and Safety staff, which provide building and safety services to the City by contract. With the required compliance with the CBC, no future development under the proposed GPU is expected to result in significant impacts related to expansive soils. Compliance with the CBC and City Building Code would ensure that impacts related to expansive soils would be less than significant, and no further analysis of this issue is required in this PEIR.

SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS

Any future development within the Planning Area would be required to connect to the existing public sewer system with the exception of the potential development of accessory dwelling units (ADUs) in single-family neighborhoods that utilize existing on-site systems, including septic tanks or alternative wastewater disposal systems. Given that these septic tanks or alternative wastewater systems already exist and function in those areas, the soils are not incapable of supporting such systems. Prior to the issuance of a building permit, property owners would be required to demonstrate that their on-site system meets the capacity requirements to adequately serve the addition of an ADU on their property. As such, impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would be less than significant, and no further analysis of this issue is required in this PEIR.

6.4.6 HAZARDS AND HAZARDOUS MATERIALS

SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT

Future development projects under the proposed GPU would include both residential and nonresidential uses. Residential uses would be similar to those that have been previously built although they could be at a higher density at certain locations. Future residential development would

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not result in significant impacts involving the routine transport, use, or disposal of hazardous materials or wastes. Future commercial development that replaces or expands existing commercial uses could require the routine transport, use, storage, and disposal of hazardous materials, similar to existing uses. All such future development would be required to comply with existing regulations regarding the use of hazardous materials and wastes and would continue to be subject to oversight by the Los Angeles County Fire Department and other regulatory agencies, as applicable. In addition, numerous existing regulations are in place at the federal, State, and local levels to require precautionary measures in the design of vehicles that transport hazardous substances; the routes they are allowed to travel; design, operations, and monitoring of facilities that use large quantities of hazardous substances; proper disposal of hazardous materials and wastes; and oversight by federal, State, and local regulatory agencies to ensure adherence to these regulations. The proposed GPU would have no effect on those existing regulatory standards and would not authorize any kinds of activities that are more likely than existing activities in the City to be at risk for an accidental release of hazardous substances or wastes. No further analysis of these issues is required in this PEIR.

HAZARDOUS EMISSIONS WITHIN ONE-QUARTER MILE OF SCHOOLS

Several schools within the Palos Verdes Peninsula Unified School District are located within, or within 0.25 mile of, the Planning Area, as well as a number of private schools. Future development under the proposed GPU would not introduce any new land use that might generate hazardous or acutely hazardous air emissions. Additionally, implementation of the proposed GPU would not change existing protocols and procedures for proper handling of hazardous or acutely hazardous materials, substances, or waste. Future development under the proposed GPU would be required to comply with federal, State, and local regulations regarding transport and handling of hazardous materials. As such, impacts related to the use, handling, transport, and generation of hazardous or acutely hazardous emissions within a quarter mile of an existing school would be less than significant, and no further analysis of this issue is required in this PEIR.

LOCATION ON A SITE LISTED AS A HAZARDOUS MATERIALS SITE

Based on a review of EnviroStor, the California Department of Toxic Substances Control's (DTSC) data management system for tracking site cleanup, permitting, enforcement, and investigation efforts, no sites included on a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5 were found active or open for investigation for the potential future development sites identified under the proposed GPU. Several cases of leaking underground storage tanks were identified in the Peninsula Shopping Center/Promenade on the Peninsula areas; however, each of those cases have been remediated and closed.³ The former Palos Verdes Landfill was also identified as being on the National Priorities List, the priority list of hazardous waste sites in the U.S. eligible for long-term remedial investigation and remedial action (i.e., cleanup) financed under the federal Superfund program; however, implementation of the proposed GPU would not result in the development of the former Palos Verdes Landfill with other land uses. In addition, any future development under the proposed GPU would be required to comply with existing regulations regarding hazardous materials and wastes and would continue to be subject to oversight by the Los Angeles County Fire Department and other regulatory agencies, as applicable. Therefore, compliance

³ California Department of Toxic Substances Control, EnviroStor Database, https://www.envirostor.dtsc.ca.gov/public/map/?global_id=19490181, accessed March 15, 2021.

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with existing regulations would ensure that this impact would be less than significant, and no further analysis of this issue is required in this PEIR.

LOCATION NEAR AN AIRPORT

The nearest public use airport to the Planning Area is Zamperini Field in the City of Torrance, which is located approximately 0.5 mile to the north. However, implementation of the proposed GPU would not result in a safety hazard or excessive noise for people residing or working in the Planning Area. Future development under the proposed GPU would not introduce any new uses to the Planning Area but would result in the intensification of mixed-use and residential uses in certain portions of the Planning Area that would not interfere airport uses. Accordingly, no impact related to airport use would occur as a result of the implementation of the proposed GPU, and no further analysis of this issue is required in this PEIR.

6.4.7 HYDROLOGY AND WATER QUALITY

VIOLATION OF WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS

Future development projects under the proposed GPU, specifically on sites that are one acre or larger, would be subject to the requirements of the NPDES Construction General Permit, Los Angeles County Municipal Permit, and the RHEMC, which require application of erosion and sedimentation control best management practices (BMPs) during construction and preparation of a stormwater pollution prevention plan (SWPPP) for proper water quality management. Any development project under one acre would be required to implement construction BMPs to minimize erosion and the discharge of pollutants off-site. Erosion control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. Each development project would be required to prepare a Wet Weather Erosion Control Plan, which will identify BMPs, and be designed to prevent erosion and construction pollutants from entering the City's storm drain and receiving waters. By requiring implementation of a Wet Weather Erosion Control Plan and BMPs during construction activities, the City ensures that these activities would not violate standards or degrade water quality. As part of its normal project approval and construction oversight activities, the City monitors compliance with these requirements.

With the required compliance with the NPDES Construction General Permit, Los Angeles County Municipal Permit, and the RHEMC, future development projects under the proposed GPU would result in less-than-significant impacts related to a violation of water quality standards or waste discharge requirements or substantial degradation of surface water or groundwater quality. No further analysis of these issues is required in this PEIR.

GROUNDWATER RECHARGE

The Planning Area is primarily developed with impervious surfaces, with a few vacant/undeveloped parcels identified as potential sites for future development. Consequently, the potential for groundwater recharge through percolation of stormwater or landscaping water is currently low. Future development under the proposed GPU would not significantly change the Planning Area's groundwater recharge ability and would not substantially impede percolation of water into the underlying substrate at a level beyond current conditions. In addition, future development projects under the proposed GPU would not directly use any groundwater to serve future uses. While the proposed GPU would result in an increase in a mix of uses in the Planning Area, these uses are not expected to result in a substantial depletion of groundwater resources. Accordingly, implementation

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of the proposed GPU would not substantially decrease groundwater supplies or interfere with groundwater recharge. Therefore, related impacts would be less than significant, and no further analysis of this issue is required in this PEIR.

SUBSTANTIAL ALTERATION OF DRAINAGE PATTERNS

Construction of any future development project under the proposed GPU may involve removal of existing structures and associated hardscape, as well as the disturbance and removal of soil. These activities have the potential to temporarily alter existing drainage patterns on construction sites and immediately surrounding areas by exposing underlying soils, modifying flow direction, and making the construction site temporarily more permeable. However, any future development project, particularly those to be developed on sites that are one acre or larger, would be subject to the requirements of the NPDES Construction General Permit, Los Angeles County Municipal Permit, and the RHEMC. In accordance with the requirements of these permits, development projects would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows and ensure that stormwater or construction watering runoff does not impact off-site drainage facilities or receiving waters. Therefore, through compliance with all NPDES Construction General Permit requirements, as well as compliance with applicable City grading permit regulations, construction activities associated with future development projects under the proposed GPU would not substantially alter the construction site's drainage patterns in a manner that would result in flooding on- or off-site or exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

As a special provision, the Los Angeles County Municipal Permit mentioned above requires permittees to implement Low Impact Development (LID) design principles. Accordingly, while there may be an increase in imperviousness of a development site, this increase would not substantially increase the amount of runoff from the site. Flows would be accommodated by the existing stormwater treatment and conveyance system. In addition, implementation of BMPs required by the Los Angeles County Municipal Permit would target the pollutants that could potentially be carried in stormwater runoff. Therefore, with the incorporation of LID BMPs, construction and operation of any future development project under the proposed GPU would not cause flooding, create runoff volumes that would exceed the capacity of existing infrastructure, or result in substantial additional sources of polluted runoff. Therefore, related impacts would be less than significant, and no further analysis of this issue is required in this PEIR.

FLOOD HAZARD

The entire Planning Area is shown on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Nos. 06037C1919G and 06037C1940F as located in Zone X, which is defined as "areas determined to outside the 0.2 percent annual chance floodplain." Accordingly, implementation of any future development project under the proposed GPU would not result in the placement of uses within a 100-year or 500-year flood zone to impede or redirect flood flows. In addition, the Planning Area is not within a flood hazard, tsunami, or seiche zone and, as such, would not risk release of pollutants due to inundation of any future development site. Therefore, no impact related to flood flows or release of pollutants due to inundation would occur, and no further analysis of these issues is required in this PEIR.

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WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN

The County of Los Angeles and the Los Angeles County Flood Control District, as well as the cities of Rolling Hills Estates, Palos Verdes Estates, and Rancho Palos Verdes, collaborated on the development of an Enhanced Watershed Management Program (EWMP) to address the water quality priorities for the Palos Verdes Peninsula watersheds. Both construction and operation activities associated with future development projects under the proposed GPU could generate additional water pollutants that could adversely affect stormwater quality and the water quality in downstream Machado Lake. Construction-related activities can release sediments from exposed soils into local storm drains. In addition, construction waste materials, such as chemicals, liquid products, and petroleum products, may make their way into local storm drains. However, as indicated above, future development projects would be subject to the requirements of the NPDES Permit, the Los Angeles County Municipal Permit, and the RHEMC. Pursuant to these requirements, BMPs would be instituted to effectively offset these potential sources of water pollution. As such, implementation of any future development project under the proposed GPU would not introduce new pollutants or an increase in pollutants that would conflict or obstruct the EWMP or any water quality control plans for the Palos Verdes Peninsula Watershed. In addition, implementation of the proposed GPU would not substantially decrease groundwater supplies or interfere with groundwater recharge; as such, implementation of any future development project under the proposed GPU would not introduce new pollutants or an increase in pollutants that would conflict or obstruct a sustainable groundwater management plan. Impacts would be less than significant, and no further analysis of these issues is required in this PEIR.

6.4.8 LAND USE AND PLANNING (PHYSICAL DIVISION OF AN ESTABLISHED COMMUNITY)

Implementation of the proposed GPU would involve development of vacant land or under-developed parcels, intensification of existing land uses in certain portions of the Planning Area, and the introduction of new land uses to certain portions of the Planning Area. Land use changes proposed in the Planning Area are intended to tie into the existing uses and surrounding neighborhoods. Development would occur within existing urban areas and infill sites, which is not expected to divide an established community. As such, no impact related to the physical division of an established community would occur, and no further analysis of this issue is required in this PEIR.

6.4.9 MINERAL RESOURCES

According to the California Geological Survey's 2010 Update of Mineral Land Classification, a portion of Rolling Hills Estates is designated Mineral Resource Zone 2, due to the presence of construction aggregate resources in the vicinity of Chandler Quarry. However, the update identifies that the majority of the resource zone has been lost due to urbanization or land filling. The land formerly occupied by the Chandler Quarry is now a mix of country club and housing uses, with no further mineral extraction occurring.

There are no mineral resource extraction or processing operations in the Planning Area. Since the portion of the Planning Area designated as Mineral Resource Zone 2 is no longer used for mineral extraction and has been repurposed for commercial recreation and residential uses, it is considered extremely unlikely that there might be a future proposal to remove existing land uses in order to establish an operation to extract mineral resources. Therefore, the proposed GPU would not adversely affect the availability of a known mineral resource or a locally important mineral resource

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recovery site, and no impacts would occur. As such, no further analysis of these issues is required in this PEIR.

6.4.10 NOISE (AIRPORTS)

The nearest public use airport to the Planning Area is Zamperini Field in the City of Torrance, which is located approximately 0.5 mile to the north. Implementation of the proposed GPU would not cause any noise-related impacts from aircraft operating to or from Zamperini Field. Therefore, the proposed GPU would not expose people to excessive airport related noise and would have no associated impacts, and, as such, no further analysis of this issue is required in this PEIR.

6.4.11 POPULATION AND HOUSING (DISPLACEMENT)

The proposed GPU would allow for the development of both housing and commercial uses, as well as the intensification of certain land uses within the Planning Area. However, implementation of the proposed GPU is not expected to displace any existing housing; rather, it would increase the number of dwelling units in the Planning Area by allowing higher intensity residential uses and mixed-use development. As a result, impacts related to displacement would be less than significant, and no further analysis of these issues is required in this PEIR.

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Andrew Salas, Chairperson

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